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The Effects of Lunch Eligibility and School Size on the Literacy Achievement of African American Males Communication

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EFFECTS OF SCHOOL LUNCH ELIGIBILITY AND SCHOOL SIZE ON THE LITERACY ACHIEVEMENT OF AFRICAN AMERICAN MALES

by

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EFFECTS OF SCHOOL LUNCH ELIGIBILITY AND SCHOOL SIZE ON THE LITERACY ACHIEVEMENT OF AFRICAN AMERICAN MALES

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Dissertation

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DEDICATION

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ABSTRACT

by
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Title: The Effects of Lunch Eligibility and School Size on the Literacy Achievement of African American Males Communication (Under the direction of Dr. Lynette Busceme)

The purpose of this research was to examine the effects of lunch eligibility and school size on the literacy achievement of African American males. While researching the effects of lunch eligibility and school size on the literacy achievement of African American males, this scholar observed that a correlation between historical viewpoints and the academic performance of African American males were intertwined in the findings and research of some experts. Therefore, this researcher was compelled to intimately explore the literature as it related to the literacy achievement of African American males and how it evolved throughout history. During the development of historical and cultural analysis, the researcher correlated the observations of scholars who asserted their findings concerning the influence of the past on the present literacy performance of African American males, while simultaneously searching for a reference to their socioeconomic status or the size of the schools they attended. Some literature included the impact of poverty on the literacy achievement of students in general, and explicitly, on the literacy achievement of African American males. However, the

literature failed to specifically address the literacy performance of African American males who qualify for free or reduced-cost lunch in comparison to those who do not.

Although the findings on poverty were significant, the findings on school size were inconclusive. Researchers, Ready and Lee (2006) studied the impact of class size on the literacy achievement of elementary level students, and Schneider (2016) scrutinized the small school movement that took place in New York City; however, no study directly addressed the effects of school size as it relates to the literacy achievement of African American males. This lack of research concerning the effects of lunch eligibility and school size as it relates to the literacy achievement of African American males makes this research unique and valuable. The findings of which can be used to positively impact educational procedures related to the literacy achievements of all students.

The results of this study indicated the existence of a substantial gap in literacy achievement between African American males in Grades 4, 6, and 8 who were eligible for free or reduced-cost lunches and African American males who were not eligible for free or reduced-cost lunches. Non-eligible students scored significantly higher than did eligible students. These findings aligned with Fantuzzo (2009) who asserted that the third grade African American males of Philadelphia from homes of low socioeconomic status were at risk for academic struggles. In addition, there was a general indication that the size of the schools they attended was not a significant factor in the literacy achievement of African American males in Grades 6 and 8. However, the data did reflect a significant interaction between the size of schools and lunch eligibility among Grade 4 African American males. Thus, indicating that the size of the school was a significant factor when coupled with school lunch eligibility.

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CHAPTER I

INTRODUCTION

Literacy plays a significant role in the education of African American males. Dating from the 1800s until the present day, African American males have used literary societies to develop a haven for individual, economic, political, and spiritual self-worth (Hughes-Hassell, Kumasi, Rawson, & Hitson, 2012; Tatum, 2009). Though many researchers theorize that the origin of the literary academic struggles of African American males is rooted in low-income settings (Aikens & Barbarin, 2008; Ghosh, 2013; Reform Support Network, 2015), there is a shortage of research concerning the literacy achievement of African American males and school size. Nevertheless, discussions concerning the academic performance of African American males are not original. However, the approach of examining their literacy achievement by comparing them to one another based on lunch eligibility and school size is inimitable.

Although there is a deficit of research comparing African American males to each other, research that compares them to their remaining peers is plentiful. In a study that examined the beginning childhood stages and education of Hispanics, African Americans, and Euro-Americans, Magnuson and Waldfogel (2005) found that minorities are more likely to attend a daycare but are also more likely to be taught by less educated adults than are their Euro-American peers. In a later study, Waldfogel (2012) asserted that an achievement gap exists between African American males and their counterparts

before they enter school. She also maintained that because of these differences in reading levels, it is imperative that research includes out-of-school explanations for the literacy deficit including, but not limited to, socioeconomic status (as determined by school lunch eligibility), ethnicity, and race. Rickard (2005) provided an Arkansas report as evidence that the discrepancy continues to grow once they enter kindergarten and exists throughout high school. As revealed in Fantuzzo's (2009) study of third-grade students in Philadelphia, not only is there an academic disparity between African American students and Euro-American students, there is also documented disparity between the literacy achievement of African American males and African American females (Fantuzzo, 2009). A report written in support of community libraries (Hughes-Hassell et al., 2012) indicated that, based on national testing, African American girls score six percentage points higher than African American boys. This suggests that there is some underlying factor disproportionately impacting the achievement of African American males and that further research is needed to identify these causal factors.

Why do these gaps exist, and how should they be addressed? In his research, titled *The Achievement Gap and the Schools We Need*, Noguera (2012) advocated that the most relevant answers to closing the achievement gap can be discovered by observing schools that are experiencing success. Noguera cited Brocton High school, the largest high school in Massachusetts, as a noteworthy example of a school that is primarily serving minority students from a low socioeconomic level, where more than 90% passed the state test that spring, and 80% of the high school students demonstrate proficiency. This is especially significant considering Brocton has over 4,100 students, and the Massachusetts state test is reputed to be one of the most challenging state tests in the nation. Additionally, this

school ranked in the top 90% when considering all high schools in Massachusetts. Noguera credited their systematic approach to serving students as the cause of their success. Replicating these methodical approaches could lead to growth in the literacy performance of African American males on a larger scale.

On a national level, the literacy achievement of African American males is important for several reasons. According to Fiester and Smith (2010), fourth-grade students eligible for free or reduced-cost lunches, who score below proficiency in reading, are at an increased risk of becoming low performing high school students who are at a greater risk of dropping out, a decision that can adversely impact their lifetime earnings. Because of these outcomes, schools are unable to produce a sufficient number of qualified graduates to fulfill the needs of the country's employers. Additionally, Fiester and Smith noted that American companies are negatively impacted by the difficult task of finding skilled, knowledgeable, laborers. Furthermore, they contend that low achieving graduates who are unprepared for postsecondary coursework create significant financial burdens for institutions by requiring extensive corrective coursework. Subsequently, Fiester and Smith also asserted that this academic deficit translates into America's inability to compete economically with other nations. Thus, the implications are far reaching for the country's job market and the economy of the next generation.

When examining the progression of the literacy deficit of African American males, researchers studied primary level students. A closer look at third-grade literacy proficiency revealed that although students are learning to read from kindergarten through first grade, once they reach the fourth grade, the emphasis changes to reading to learn (Oakland Unified School District, 2011). A study by Marks (2013) indicated that no

more than 12% of fourth-grade African American boys were appropriately skilled in reading. Holly (2011) commented that in 1990, when considering standardized test performance of first and second graders, research of over 105,000 students in Prince George's County in Maryland revealed that African American males achieved at similar levels in reading and math when compared to children of other ethnicities. However, Holly noted that by fourth grade, there is a drastic drop in performance. According to Thompson (2011), by the time most African American males reach eighth grade, a mere 14% perform at or above proficiency. This finding implied that millions of youth are unable to comprehend or assess content, specify significant aspects of the text, or justify suppositions gathered from a given work. Thus, the assumption is that as African American males progress in grade level, their academic performance diminishes in comparison to their peers.

More specifically, academic statistics of African American males in Arkansas reveal declines in literacy proficiency as well. For instance, in Arkansas, the rate of proficient or above designations for African American students decreased from 49% in fourth grade to 19% in sixth grade (Rickard, 2005). Although the eighth-grade literacy status of African American students' proficiency increased to 28%, those in Arkansas ranked 46 out of 50 nationwide compared to 32 out of 50 for Euro-American students. Among 11th graders, for every three achieving Euro-American student, there was only one achieving African American student. Many studies explore the reasons for this continual discrepancy in the achievement of African American students and particularly African American males and their peers (Noguera, 2012; Rickard, 2005; Wood & Jocius,

2013). This study will only examine the literacy achievement of the African American male population in Arkansas as it relates to school size.

Statement of the Problem

The purposes of this study were fourfold. First, the purpose of this study was to determine the effects by school lunch eligibility of students in small schools versus large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores for African American male fourth-grade students. Second, the purpose of this study was to determine the effects by school lunch eligibility of students in small schools versus large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores for African American male sixth-grade students. Third, the purpose of this study was to determine the effects by school lunch eligibility of students in small schools versus large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores for African American male eighth-grade students. Fourth, the purpose of this study was to determine the effects by school lunch eligibility of students in small schools versus large schools on literacy achievement measured by the Arkansas End of Course (EOC) Literacy Exam scores for African American male 11th-grade students.

Background

Two areas of research regarding the literacy achievement of African American males informed this study: school lunch eligibility and school size. Significant research was available concerning the existing disparity between the levels of proficiency of African American students when contrasted to their counterparts, especially as it relates to household income, reported on school free and reduced-cost lunch applications. There

are also studies that address the literacy achievement of African American males compared to females. There is little, if any, research comparing the achievement of African American male students who qualify to receive free or reduced-cost school lunches versus African American male students who do not receive free or reduced-cost school lunches.

In addition, recent research findings indicated that school size is a significant factor impacting student achievement. However, research disaggregating data on literacy achievement among African American males by school size was scarce and tended to digress into a discussion of class size and graduation rates. Therefore, the researcher examined the literacy achievement of African American males in Grades 4, 6, 8, and 11 in conjunction with the roles of school lunch eligibility and school size. The researcher compared the scores of students qualified to receive free or reduced-cost school lunches with those who were not qualified to receive free or reduced-cost lunches and the scores of students from small schools with the scores of students from larger schools.

School Lunch Eligibility, Literacy Achievement and the African American Male

Is lunch eligibility connected to the literacy achievement of African American male students? The research did not indicate a comparison of the achievement of African American male students who were eligible to receive free or reduced-cost lunches to those who were not eligible to receive free or reduced-cost lunches. However, Noguera (2012) stated that over the past 30 years, billions of dollars had been spent to implement various approaches to improve literacy achievement. Based on her study of six middle and low socioeconomic fifth-grade students, McClain (1999) found that students could experience literacy achievement, despite their low-income setting. Noguera (2012)

specifically mentioned approaches such as providing staff development, refurbishing the curriculum, launching the latest technology, and creating smaller schools. However, none of these measures have produced the anticipated results desired for students who qualify for a free or reduced school lunch. Thus, researchers continue to examine the origins of and demonstrated resolutions for closing the achievement gap between African American male students and their peers.

Contemporary research continued to explore this issue. For example, in his study, *Urban Schools and the Black Male*, Noguera (2013) cited negative labeling as a major form of discrimination. Before Noguera, Fantuzzo (2009) advocated addressing what is behind the achievement gap. His study noted that 70% of Philadelphia's third-grade students live in poverty, 66% of them were African American, and one in every three of the African American students were African American males. Furthermore, Fantuzzo examined third graders and found many factors that accompanied free or reduced-cost lunch eligibility such as homelessness, lead poisoning, premature births, insufficient parental care, low birth weight, child abuse, underage parents, and intellectual and disciplinary problems at school. Noguera (2012) advocated a comprehensive strategy, which directly addresses discrimination among poorer students, and stated that it is the only means to achieve long-term academic success. Although Fantuzzo (2009) remained hopeful, he argued that it is imperative that these needs be addressed. Thus, researchers presented the theory that prejudicial treatment of poorer students and the condition of poverty itself, as indicated by lunch eligibility, does influence the academic performance of students who live in poverty-stricken environments.

Effects of Large Schools Versus Small Schools

Some researchers have proposed that school size may impact student achievement. In his study, Noguera (2013) found that the setting where African American males were most frequently labeled negatively was large urban schools. With no specific mention of African American males, Ready and Lee (2006) discussed the size of schools and classrooms and how size influenced student performance in kindergarten through first grade. According to Ready and Lee, school size has been the topic of discussion for more than a few decades. More importantly, they noted that in the realm of politics, research, and businesses, billions of dollars have been devoted to creating smaller classrooms and schools by both the private and public sector. Although the financial investment in smaller schools is significant, Ready and Lee found it more interesting that elementary schools in their study did not differentiate between the impact of smaller classrooms and the impact of smaller schools. Although there were studies addressing classroom size, there was limited research addressing school size.

In reference to elementary schools and size, the researcher was able to find only one significant study. Therefore, the research of Ready and Lee (2006) was significant in providing insight into the effects of class and school size on academic performance in general. For example, in a randomized class-size experiment, Ready and Lee found that large elementary classes in grades K-1 had a negative effect on student performance. After evaluating all student related factors, they found that school size had an influence, though minor, on student learning. Moreover, Ready and Lee found that schools with more than 800 students obtained a smaller quantity of literacy skills, whereas the opposite was true for schools with less than 275 students showing a higher quantity of literacy

skills. To the contrary, during the early 2000s, although Ready and Lee reported minimal changes that they attributed to class and school size, New York City reported notable positive outcomes from their small school endeavor during the previous 10 years (New Visions for Public Schools, 2012). These studies included primary and secondary schools.

At least one randomized research study addressed school size associated with academic success. In their study, the Manpower Demonstration Research Corporation, a private research firm funded by the Bill and Melinda Gates Foundation, developed rigid randomized research to assess the endeavors directing the small schools' movement in New York City. Not only did they decrease the achievement gap, but they achieved higher graduation rates as well. In addition, New Visions for Public Schools (2012) maintained that the success of this effort surpassed any similar endeavor in present day urban education. Ready and Lee (2006) studied primary classrooms and found minor influences in achievement based on size. However, the New Visions for Public Schools study focused on high schools and reported major academic progress due to smaller high schools (New Visions for Public Schools, 2012). Thus, the results of the primary school study differed from the results of the secondary school study.

More specific details were mentioned in the research concerning the influence of school size on the secondary level. Based on the findings of the New Visions for Public Schools (2012) study, the New York City Department of Education, in agreement with Mayor Bloomberg and former Chancellor, Joel Klein, voted to substitute large, low graduation rate, high schools with smaller high schools. As an associate of the New York Department of Education, New Vision's role was to develop and nurture small schools.

On average, these schools enrolled fewer than 600 students. Additionally, they encouraged intellectual thoroughness and individual connections. They believed that interdependent liaisons fostered relationships that enhanced teachers' skills in evaluating student needs (New Visions for Public Schools, 2012). Furthermore, in 2010, a public report, released by Manpower Demonstration Research Corporation confirmed a 7% growth in the graduation rate of students who received a New York Regents diploma, a diploma that New York students earned after taking specified classes and passing the Regents assessment. They experienced an almost 10% increase in the graduation rate of African American males. In addition, other minority groups showed a 43% decrease in the gap between their performance and that of their Euro-American peers. A positive outcome of the small school movement was that the number of students graduating with a Regents diploma increased by thousands. A current study used to analyze the consistent achievement of the small school graduates of 2010 and 2011 confirmed that the students continued their success at the post-secondary education level (New Visions for Public Schools, 2012). This research focused more on how school size influenced the graduation rate than its influence on literacy achievement.

From the opposite end of the spectrum, research on literacy achievement in grades as low as third grade connected proficiency levels to graduation rates. Although graduation rate is not the equivalent of literacy achievement, there is a direct correlation (Oakland Unified School District, 2011). For example, in a review of research, Hudson (2012) found that it is four times less likely that a third grader who reads below grade level will graduate on schedule compared to his more affluent and proficient counterparts. He cited an *Education Week* article by Samuels (2015) who referenced

Donald Hernandez, a professor of sociology, which juxtaposed graduation rates and the reading performance of approximately 4,000 students. In his article, Hernandez asserted that students who are unable to read proficiently by Grade 3 increase the probability of not graduating by age 19 four times compared to those who read on level. He added that students from a low socioeconomic status are nine times more likely to not graduate by the age of 19 than students who are simply non-proficient in third-grade reading (Hudson 2012). This research adds a new dimension to the significance of literacy achievement.

Based on a review of existing studies, there appears to be a need to examine the educational context of African American males. Two contributing factors may be the level of income of the families from which they come and the size of the school in which they are enrolled. This study examines the effects of these two factors on literacy achievement.

Hypothesis

Although research has long supported the idea that families whose income is below the poverty line are likely to show lower levels of literacy achievement, few studies have attempted to compare the literacy achievement of African American males who qualify for the free or reduced-cost lunch program with those who do not qualify for the free or reduced-cost lunch program. The original review of the literature indicated that the size of schools directly affects the literacy achievement of students in general. However, studies were scarce concerning school size and the literacy achievement of African American males, with none conducted solely within the state of Arkansas. This lack of studies strengthened the need to examine the relationship between school size and

the literacy achievement of African American males. Therefore, the researcher developed the following hypotheses.

1. No significant difference will exist by school lunch eligibility, between fourth-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores.
2. No significant difference will exist by school lunch eligibility, between sixth-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores.
3. No significant difference will exist by school lunch eligibility, between eighth-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores.
4. No significant difference will exist by school lunch eligibility, between 11th-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas 11th Grade End of Course Literacy Exam scores.

Description of Terms

Achievement Gap. Noguera (2012) defined achievement gap as the term commonly used to describe the disparities in academic outcomes and variations on measures of academic ability that tend to correspond to the race and class backgrounds of students.

Arkansas Augmented Benchmark Exam. The benchmark exam is defined as a standards-based or criterion-referenced exam, which measures specific skills defined by the state of Arkansas (Arkansas Department of Education, 2013).

Eleventh Grade End of Course (EOC) Literacy Exam. The EOC Literacy Exam is defined as a standards-based test given upon completion of 11th grade literacy instruction to measure specific skills defined by the state of Arkansas (Arkansas Department of Education, 2013).

Large schools. Ready and Lee (2006) defined large primary schools in Arkansas as schools having 800 students or more. This researcher defined large schools in general as schools having 600 students or more.

Literacy Achievement. The researcher defined literacy achievement as the level of skills obtained in literacy as determined by the Arkansas Augmented Benchmark Exam or 11th Grade EOC Literacy Exam scores.

Small schools. Ready and Lee (2006) defined small primary schools as schools having 275 students or less. The New York Department of Education (New Visions for Public Schools, 2012) defined small high schools as those serving less than 600 students. This researcher defined small schools as schools having less than 600 students.

School Lunch Eligibility. The researcher defined school lunch eligibility as the categories by which students were identified based on whether or not they qualified to receive free or reduced-cost school lunch, which was determined by school district personnel using the United States Department of Agriculture (2017) guidelines. Based on this eligibility, a student was designated as being of low socioeconomic status within state and federal reports.

Significance

Research Gaps

A review of the literature revealed that the literacy achievement levels of African American males as it related to whether or not these students were eligible to receive a free or reduced-cost lunch was not addressed. Thus, this study explored explicit data related to the achievement of African American males in Grades 4, 6, 8, and 11 who received a free or reduced-cost lunch as compared to their counterparts who did not qualify for these services. Additionally, the literature addressed school size in relation to literacy achievement, but studies did not address specific details of how school size affected the literacy achievement of African American males in Grades 4, 6, 8, and 11. This study contributes to the ongoing research by addressing, more distinctly, the literacy performance of African American males in Grades 4, 6, 8, and 11 within large and small schools in Arkansas.

Possible Implications for Practice

This study examined the literacy achievement data of African American males by school lunch eligibility and school size. The completion of this study produced data that can be used to develop strategies that result in an increase in the literacy achievement of African American males. The recommendations based on the results will be of interest to educators looking for avenues to increase student performance. Learning institutions, economic development committees, and advocates for stronger communities may find that the information provides significant insight into the needs of these students. Based on the findings of this study, educators may consider implementing new strategies.

Process to Accomplish

Design

A causal comparative strategy was used in this study. Each hypothesis was a 2 x 2 factorial between-groups design. The independent variables for Hypotheses 1-4 were school lunch eligibility (qualified for free or reduced-cost lunch versus not qualified to receive these services) and school size (large versus small). The dependent variable was the literacy achievement of African American males.

Sample

The population was African American males, Grades 4, 6, 8, and 11 in school districts across the state of Arkansas. The students of Arkansas were chosen because of the lack of research in this geographical area concerning the literacy achievement of African American males who receive free or reduced cost lunches versus African American males who do not qualify for free or reduced cost lunches. Also, the students of Arkansas were chosen because of the lack of research in this geographical area concerning the literacy achievement of African American males who attend small schools versus African American males who attend large schools. Most data addresses the statistics of the lack of achievement among African American males compared with other groups, rather than within this group, particularly when associated with school lunch eligibility.

Students from public schools across the state of Arkansas comprised the accessible population in this study. Students were designated as being enrolled in a large or small school based on reports provided by the Arkansas Department of Education. Participant schools were located in five regions of Arkansas: central, northeast,

northwest, southeast and southwest. Schools in central Arkansas were approximately 17% African American males. Schools in northeast Arkansas were approximately 10.5% African American males. Schools in northwest Arkansas were approximately 1.5% African American males. Schools in southeast Arkansas were approximately 22.5% African American males, and schools in southwest Arkansas were approximately 15% African American males. This study used data collected from the final administration of the Arkansas Augmented Benchmark and EOC Exams in Arkansas.

Instrumentation

For this quantitative study, the researcher collected and analyzed numerical data obtained from state literacy assessments. The data reflected assessments taken during the 2012-2013 school year. This was an ex-post facto study because both the effect and the hypothesized cause had already occurred.

Data Analysis

The researcher used a 2 x 2 factorial analysis of variance (ANOVA) using student school lunch eligibility and size of schools, as reported by schools, as the independent variables and literacy achievement measured by state assessments taken at four grade levels as the dependent variable. To test the null hypotheses, the researcher used a two-tailed test with a .05 level of significance.

CHAPTER II

REVIEW OF RELATED LITERATURE

While researching the effects of lunch eligibility and school size on the literacy achievement of African American males, the researcher noted that there were authors who intermingled their research on literacy performance with the historical and contemporary factors they observed to be foundationally linked to the literacy achievement of African American males. For example, Kirkland (2011) noted that in the beginning, his research of African American males and literacy was composed of statistics, intellectual scrutiny, and references. However, after losing three African American male relatives in one year, he began to rethink his approach. It was then that he realized that much of the current research lacks perspective because it looks only at external factors and ignores the inner-life of the African American male—a factor that, while difficult to quantify, has a significant impact on their literacy achievement. Even though this research does not address the inner-life, it is an attempt to understand two of the many contextual factors that contribute to it.

With the continued emphasis on high-stakes testing, the literacy achievement of students depends on improving the performance of all students, especially those who are targeted as statistically significant subpopulations for demographic tracking. One of the demographic groups repeatedly identified as underserved is African American males. This statistically significant data trend supports a responsibility for education

professionals to identify the origin of this lingering deficiency. The first question that must be asked is what historical setting has created the contextual and causal circumstances that might contribute to this deficit in literacy performance among African American males. Second, one must conduct a historical, cultural analysis to determine the connection between history and why the contemporary gaps between African American males and their peers remain. Third, one must consider what variables affect the academic performance of these individuals, since there are numerous African American males who are breaking the statistical trend and excelling far beyond their peers. The two variables that were specifically explored in this study were whether or not the males were eligible for the free or reduced-cost lunch program and the size of the schools they attended. An extensive review concerning school size and its connectivity to literacy achievement was conducted, though nothing specific to African American male performance in the area of literacy was found in print. Some highlights of school size research and the small schools' movement are discussed. Likewise, the literacy performance of African American males in comparison to each other as it relates to their eligibility to receive a free or reduced-cost lunch as a point of study seems to be non-existent in the literature, as reviewed by this researcher. However, there is much research available regarding the effects of poverty on academic success. Studies specific to literacy were reviewed, and there is a discussion relative to the achievement of males in general and how living in low-income homes often affects student outcomes.

These factors, when considered in light of the history of the African American community, will offer plausible explanations for the questions above regarding the academic performance associated with literacy within the African American male

population. A complete investigation of this subpopulation necessitates a look at the cultural context in which African American males are born, before slavery and extending to the present day.

Ancient Africa: Virtually Oral or Not

Before there were African Americans, there were Africans. Buthelezi (2015), noted, Africa is frequently described as a place whose chief method of communication is verbal. For example, Ong (1982) depicted ancient Africa as virtually an oral continent. This is a recurring categorization which upholds the idea that individuals in rustic sub-Saharan Africa primarily functioned by way of an oral language. This perception promotes opinions that scripting in Africa originated with Christian evangelists beginning in the 1800s (Buthelezi, 2015). Lured by the promise of riches, European explorers arrived in the 1800s and found a desolate outpost with no evidence of wealth (Baxter, 2005). At this time there was migration of Europeans who began inhabiting enormous segments of Africa (Buthelezi, 2015). However, the question as to whether there was a written language in ancient Africa remains unanswered?

Ancient Documents of Africa

Research on documents written in Arabic has been traced as far back as the 1200s (Buthelezi, 2015; Flow Communications, 2017). These manuscripts demonstrate the extensive expansion of inscriptions in various regions of Africa. More specifically, distinguished documents of Timbuktu, Mali, home of the richest person recorded, Malian Emperor Mansa Musa (Ortiz, 2012), are the treasure of the mainland. Awareness of these texts increased tremendously when the South African regime underwrote the creation of a facility in Timbuktu to preserve the manuscripts that were being housed in private

residences throughout Mali's northern region (Buthelezi, 2015). The libraries are noteworthy storehouses of intellectual creations in West Africa and the Sahara (Flow Communications, 2017). The Tombouctou Manuscripts Project is piloting continuing exploration of writings and lettering in the western, eastern, and southern parts of Africa (Buthelezi, 2015). These historical documents call into question the theory that males of African descent are inherently less capable of literacy than those of other ethnicities.

Historical Schools of Africa

One does not often read that Africa is the site of the first and many of the oldest universities on earth. Yet, Baxter (2005) asserted that in addition to ancient manuscripts, Timbuktu is known as the home of one of the oldest educational institutions in the world. Sankore University, a structure of the 1400s, has been an international destination for learning and research for centuries. Likewise, for over 1,000 years, explained Bava and Pliez (2009), the University of Al Azhar has played a primary role in the manufacturing and distribution of Islamic literature in Africa. It continues to be linked to a tradition of travel by African Muslims, who move among sub-Saharan Africa and the Arab domain. Baxter (2005) noted that during the 13th century, there were 100,000 individuals in Timbuktu, and one fourth of them were pupils or instructors. More significantly, Bava and Pliez (2009) asserted that in the 21st century, the University of Al Azhar, established during the 10th century (Zoepf, 2005), endures as an institution of education for lecturers for provincial edifices that communicate spiritual information in western regions of Africa. Older than Azhar University (970 A.D.), Arbaoui (2012) established Al Karaouine University dating back to the ninth century (859 A.D.). Documented by the Guinness Book of World Records as the first institution of higher education in the world

to grant degrees, the United Nations Educational, Scientific and Cultural Organization recognized Al-Karaouine as a legitimate university from its original establishment. This academic legacy, paired with a documented literacy tradition, again affirms the African American male's capacity for literacy achievement.

The African American Experience with Education in the United States

Despite the enormous gulf of information that exists concerning the disparity between the cultured African and the illiterate slave, little research has been done to show how this historical context impacts the contemporary struggles faced by a myriad of African American males. Before slavery in the United States ended in the late 1800s, there were approximately four million slaves who endured a wide range of deplorable circumstances. According to the regulations of most states in the South, it was against the law to teach slaves to read (DuBois, 1915; Freedman, 1999; Federal Writer's Project, 1941; West & West, 1935). Nevertheless, individuals described as "a kind master or mistress," (West & West, 1935, p. 349) provided reading lessons to slaves who worked inside their houses (DuBois, 1915; West & West, 1935). Because some house slaves experienced a 1:1 teacher student ratio and a socioeconomic advantage over field slaves, a noticeable division took root between slaves who were taught to read and those who were not.

This division was an early form of inequality. Thus, the past left many African Americans with the sentiment that schooling or education will not be equal to that of Euro-Americans. More specifically, African American students who attend poor urban schools normally do not trust that they will be prepared with the *right education* (Ogbu, 1990; Wise, 2011). These divisive actions were acknowledged in research by Bond

(1966, 1969), Kluger (1977), and Weinberg (1977). This suspicion of educational institutions is partially derived from African American insights into historically inequitable conditions (Ogbu, 1990; Wise, 2011). These conditions existed both in pre and post segregation era schools that serve predominantly African American communities.

Social Justice, Schools, and African American Males

Because of the political and legal climate of the 20th century, many demographic groups were historically underrepresented in the decision-making process that influenced educational policy. As one of the historically marginalized groups, African Americans often found their schools and curriculum to be ineffectual in meeting the needs of their community. This legacy can still be observed in the clear disparity that exists between African Americans and their grade-alike peers of other races as demonstrated by performance on standardized tests.

Systemic Racism

Trust is a basic asset in a teacher-student relationship. Nevertheless, there are not only feelings of mistrust concerning education among African Americans, but there is also concern about protection in general from those whose job it is to safeguard all Americans each day. Russo (2015) asserted that it would be a natural assumption to imagine that the correlations among the Black Lives Matter (BLM) movement and teaching students are few to none. However, the publishing of *Between the World and Me,* by Ta-Nehisi Coates (2015), has brought tremendous, widespread publicity to the trauma of being an African American male youth in this country. In speaking of the 1955 lynching of 14-year-old Emmett Till, Tyson (2017) wrote, “We cannot transcend our past

without confronting it" (p. 203). While working on his Ph.D., he researched the murder of an African American male, Henry Marrow, and wrote a book detailing his findings (Tyson, 2004). After reading Tyson's book, Carolyn Bryant Donham decided to contact Tyson to confess that she had falsely accused 14-year-old Emmett Till of touching her (Tyson, 2017). Thus, his killing was based on a lie. This is a prime example of racially motivated murders that have gone unpunished in America. How can African American males place trust in educational institutions to shape their minds when the same government that funds these institutions funds a justice system that is suspected of disavowing their humanity?

Should this conversation take place in the classroom? In reference to BLM, Russo (2015) suggested that the notion of connecting education and other aspects of a pupil's life is not original. He further stated that it is the predictable understanding of instructors that students are unable to grasp concepts while hungry or struggling with vision. Additionally, Sparks (2014) asserted that scanty dinners and crumbling housing projects, chronic illnesses and depressed or angry parents could interfere with a child's ability to learn. Russo (2015) further explained that the BLM effort merely transfers the idea a little more by questioning the ability of African American males of low socioeconomic status to flourish while dealing with the threat of organized violence that has infiltrated their environment at school and within their neighborhoods. This fear of systemic racism has sharpened the racial divide in America.

Struggles of the African American Male and the Education System

There are those who see the BLM movement as presenting a teachable moment. Russo (2015) contended that if BLM and an explicitly educationally directed electronic,

grassroots movement, called EduColor, flourishes in increasing a positive view of educators of color, it might contribute to the end of the gridlock among leaders and analyzers who continue to struggle to improve instruction. Sawchuk (2015b) stressed that the deaths of Trayvon Martin, Eric Gardner, Michael Brown, and Freddie Gray, as well as the anniversary of Bloody Sunday, serve as examples of the excruciating impact of the clash between African American males and the police. While legislators and instructors have been wary concerning the research of the existing conflict of cultural impartiality among K-12 schools, Russo (2015) further contended that there are onlookers who view BLM as a significant contribution to the dispute involving the restructuring of schools emphasizing answerability, efficiency, and choice. This is the conceptual foundation of EduColor.

The concept is to get people talking about racial issues. For more than 100 years, argued Ogbu (1990), beginning with their rejection from so called *public schools,* African Americans have been challenged by sub standard instruction in separated and combined educational facilities. Tatum (2005) asserted that African American males possess a growing distrust that schooling can assist them in obtaining freedom from their low, economic condition. Countless African American males are convinced that their destiny has been decided and that defeat is unavoidable. Ogbu (1990) stressed that in a study involving talks about human cultures and society during research in Stockton, California, African Americans candidly voiced their suspicion of non-private educational establishments. In research of integrated secondary level students, Slawski and Scherer (1978) discovered that African Americans from the area were inclined to associate poor test scores of African American males to the learning facilities' incompetence to

understand African American male culture using methods that were not helpful in educating them. This is distinctly different from the experience of Euro-American parents and their children, who are inclined to assess their education and compliance with rules as needed, wanted, and well-matched with their own goals (Ogbu, 1990). This disparity in perceptions has potential to influence academic performance among African American males.

Where did this discrepancy in views begin? According to Hooks (2004), underprivileged African American males have continuously been subjected to and singled out for an improper education. Civil Rights lawyer, Fred Gray (2002), asserted that the *separate but equal* doctrine was one of the greatest historical fabrications following slavery. He further stated that the inequality amid Euro-American and African American learning institutions was enormous in all aspects, beginning with the state of facilities, to instructor's wages; from the condition of books to the inaccessibility of transportation; from access to libraries to time spent in the classroom. Paralleling Hooks (2004), over 70 years ago, Woodson (1933) commented on the absence of the study of Africa, intellectuals, or positive images in the books with which African American scholars were educated and subsequently educated their students. Gilbert and Gilbert (1998) further asserted that impoverished African American males are observed as being academically substandard and incompetent to grasp intellectually demanding literature because disadvantaged Asians and Euro-Americans often receive higher scores on literacy exams. Thus, Gilbert and Gilbert (1998) and Tatum (2005) concluded that the challenges the African American males have with literacy in the classroom could be the result of the views that their instructors have concerning the relationship among race, socioeconomic

status, and education. Researchers have long studied the correlation between these variables.

Literacy Deficiency Theories

There are other factors under consideration when researching the achievement of African American males. In the 1960s and 1970s, two morphological theories emerged. A shift from past philosophies, these theories were designed to provide an explanation for the lack of success among African Americans in learning to read (Ogbu, 1990). An examination of one idea, introduced by Simons (1976), presents the supposition that the academic underperformance of African American students, particularly in reading, is the result of being born into an environment that is predominantly verbal. Secondly, Baratz (1969) and Stewart (1969) asserted that a deficit in the literacy performance of African American students stems from the disparity amid their grammar and the customary English grammar of the transcript used by the instructor. In the early 1970s, Philips' (1972) premise provided the theoretical context for research that indicated that educators and minority students who emerge from diverse cultures possess different methods of conversing, as well as deducing connotations, which result in misinterpretations while reading. These literacy deficiency theories may not withstand the scrutiny of more seasoned researchers.

Nevertheless, some observations build upon these philosophies. For example, Cook-Gumperz and Gumperz (1979) asserted that the evolution from dialogue to scripting, as a developmental standard for education, necessitates a transformation from the informative approach of a speaking environment to the attaining of exegetical skills designed to decipher intricate writings. This conversion necessitates foundational

modifications to the way children interpret formal and informal occurrences in the progressions of daily life. Thus, in the pursuance of decreasing reliance on explicit information, students must acquire the ability to decontextualize written material. Contrary to Cook-Gumperz and Gumperz (1979), Tatum (2005) criticized an instructor whom he observed teaching pupils to recite from a decontextualized script since they were not given a clear plan. In essence, this linguistic transition of decontextualizing entails dependence on the accumulative acquisition of information instead of on what is relayed in a single text. Cook-Gumperz and Gumperz (1979) emphasized the importance of this method of decontextualizing. However, Tatum (2005) was critical of the teacher who engages students in reciting material that has no obvious relevance. The variance in philosophies concerning the significance of the ability of students to decontextualize information and how it influences their literacy achievement or lack thereof, reveals the convolutions of determining best practices for addressing literacy performance.

Challenges

When endeavoring to engage students, particularly African American males, in education, schools are often faced with the challenges that arise from poverty, choosing an appropriate curriculum, and transforming the quality of instruction. For example, Sawchuk (2015a) cited Alabama's growth in reading scores and the Alabama Reading Initiative that they credit for their success. However, he noted that, although many states eventually duplicated Alabama's instructional reading program, the initial days of changing the way teachers teach to accommodate the Alabama Reading Initiative were shaky. Both Tatum (2005) and Noguera (2008) stressed the importance of teachers' willingness to embrace a curriculum that will assist them in increasing the literacy

performance of African American males. Blad (2015) asserted that when compared to a Euro-American student born in East Oakland, an African American child born on the West side was seven times more likely to be born into poverty, four times less likely to be reading on grade level by fourth grade, and nearly six times more likely to drop out of school. These examples reflect the challenges of poverty, developing curriculum, and providing instruction for African American students.

Associated with Poverty

Should low-income students be taught differently from everyone else? According to Payne (2005), low socioeconomic students are progressively entering school with no understanding of learning or intellectual approaches. Yet, she asserted, schools cannot simply place them all in classes designed to teach students with disabilities. Ogbu (1990) explained that there are multiple aspects to consider when examining the literary skills of low-income minorities in comparison to more affluent Euro-American students. More specifically, he noted that the majority of subgroups are not proficient in literacy and that many of them lack the ability to read on a practical level. He also asserted that they often experience difficulty when attempting simple tasks such as applying for jobs or preparing tax forms. Moreover, he suggested that the children of these subpopulations, as a group, are developmentally delayed in comparison to their more advantaged contemporaries in literacy and math as indicated by state exam scores. In her study, Ghosh (2013) suggested that children from low socioeconomic status do not achieve at the same level as children of higher socioeconomic status on kindergarten reading assessments. Her findings indicated that high socioeconomic parents facilitate and involve their pre-school children more often in literacy type dialogue than low socioeconomic parents. Also, this study

implies that high socioeconomic parents have conversations with their children concerning literacy in less formal settings compared to parents of low socioeconomic who engage in literacy conversations in more formal scenarios such as memorization of the alphabet. Although Ogbu's (1990) views generally correlate with Ghosh (2013) and Simons (1976), he disagreed with Simons that the cause of these difficulties is due to the lack of ability to transfer from an oral heritage. These varying opinions demonstrate the complexities of layers to be considered when educating African American males.

Associated with Curriculum

Curriculum is a cornerstone upon which to reflect when considering the academic achievement of African American males. Tatum (2005) emphasized that because the African American involvement in America encompassed over 80 years of authorized apartheid which followed 200 years of captivity, with the consequent deleterious result of these practices, the coordination of course work for this segment of society is repeatedly trapped in a deadlock. He noted, however, that debates concerning the purpose and the fundamentals of course work for African Americans are not a contemporary conflict. For example, Washington (1901) contrasted DuBois (1903) because the former favored a concrete, hands-on education for African Americans and the progression of abilities that would assist them in entering the financial, economic playing field. This philosophy was in contrast to the latter, who stressed the necessity for a rising movement that would support African Americans in their quest to realize societal, lawful, and civil rank in America. Some scholars viewed these men as having conflicting views, but a careful examination of their work revealed that they complemented one another.

Today, as it was in the past there were differing opinions concerning what curriculum was most suited for African Americans. The views of Washington (1901) and Du Bois (1903) were founded on the supposition that the African American involvement in America was of a contrasting quality from that of the remainder of the population. One end of the continuum was a practical positioning highlighting the expansion of skills. On the opposite end of the spectrum was the advancement of intelligence. This generated a predicament for a myriad of schools who were accountable for educating African Americans (Tatum 2005). Since the advancement of intelligence was not emphasized, this dilemma has continued throughout the 21st century.

Associated with Instruction

Many scholars used the terms *curriculum* and *instruction* interchangeably. However, the researcher refers to the curriculum as what is taught, and instruction as how it is taught. In reference to how African American males are taught, Tatum (2005) asserted that educators might feel overwhelmed when attempting to transform literacy instruction to go beyond achievement. According to Sawchuk (2015a), the literacy coaches of Selma Alabama's Southside Primary school agreed that convincing teachers to alter how they teach could be challenging. Although state scores boasted an increase of fourth-grade African American reading scores that exceeded their national counterparts, teachers were originally opposed to reading coaches and insisted on an answer to why they were being evaluated. Throughout Alabama, literacy coaches credit the increase in literacy achievement to small group instruction. Even though small group instruction is repeatedly mentioned, the review of the literature revealed a shortage of information concerning literary instruction for African American males.

Smaller Schools Movement and Student Success

At the end of the 20th Century and beginning of the 21st Century, major initiatives took place to transform larger schools into smaller ones. Schneider (2016) pondered how the blazing initiative to create smaller schools lost its momentum. More than 10 years ago, humanitarians and pioneers of guiding principles, such as Meier (1989), trusted that they had discovered the answer to achievement among students and pooled their shared influence in support of an endeavor to reshape the countries oversized secondary schools. These high schools were transformed from larger schools to smaller schools, and over a billion dollars were spent in the process. Nevertheless, as rapidly as it started, the endeavor was professed unsuccessful and came to a sudden finish (Schneider 2016). These cycles continue to plague educational settings.

The smaller school initiative was met with great enthusiasm. Years later, studies indicated that smaller educational institutions produced significantly mixed results. For example, they were believed to have increased the number of graduates. Yet, Schneider (2016) argued that a consideration remains as to the actual efficacy of the small school endeavors. He further asserted that the initiative was not a total failure or success. He added that numerous prominent establishments such as the Carnegie Corporation, the Annenberg Foundation, and the Bill and Melinda Gates Foundation in conjunction with the U. S. Department of Education, by way of the Smaller Learning Communities awards, readily financed the small schools' initiative with minimal thought toward the countless remaining aspects that influenced the value of their schools. This was because supporters supposed that by fashioning the poorest larger educational facilities to

resemble the more affluent schools, they could yield identical results. However, one size does not fit all in reference to school reform.

A careful look at testing data should reveal the true benefits or lack thereof of smaller schools. Schneider (2016) asserted that constructing smaller schools was not necessarily an unproductive concept. Meier (1989) emphasized that smaller educational facilities are not the solution, but communities devoid of them, lack enthusiasm for academic reform. Conversely, Schneider (2016) contended, as a comprehensive approach, the plan could not escape failure. Furthermore, the philosophy that comprehensive duplication of a specific construction would produce identical educational results was not wise. Like Elmore (2011), Schneider (2016) does not believe that there is a one-size-fits-all answer to school reform. In essence, he concluded that simply focusing on the dimensions of an educational facility is an inadequate instrument which fails to address the majority of the essentials of pedagogy. School size does not address every dimension of the need for school reform.

The question still remains concerning whether or not small schools were problematic. In a qualitative study, of six fifth-grade students, from two, low-achieving, primary schools, McClain (1999) found that although these participants were of low socioeconomic status, qualified for free or reduced cost lunch, and lived in a small Southern city, there was no identified set of conditions necessary for a child to become a successful reader. In 2014, research completed by an organization of independent research, Manpower Demonstration Research Corporation, concluded that the percentage of students completing high school in small schools in New York City increased by 9.5% among each student group. This was incredible growth that also facilitated greater

registration in institutions of higher education. Even thou the smaller educational facilities were usually occupied by students of disadvantaged low socioeconomic status. All smaller schools are not created equal. Demographics may vary greatly.

Thus, opinions may differ on the advantages of smaller schools. Nevertheless, both Schneider (2016) and Meier (1989) agreed that smaller schools facilitate occasions for students to become more acquainted with each other, faculty, and staff. Moreover, they found that the closeness of less populated facilities nurtures faith in God, compassion, and caring interactions. Meier, the guardian of the initiative for small schools, repeatedly stressed these points concerning the benefits of small schools. Conversely, she argued that larger educational facilities function from the standpoint of need that stems from governmental standards. She further contended that students who attend larger schools are unable to grasp independent ideas due to an environment that fails to find merit in personal success. Moreover, she asserts that larger schools are not conducive to the celebration of victories or recovering from downfalls. Nor do they facilitate commemorations of sorrow, or retort with outrage or acknowledgments as the issue necessitates. Nonetheless, she explained that small schools are only a portion of a multifaceted enigma. There are many layers to consider in the overall scheme of school reform.

This dilemma is seen even among the small schools' initiative. For example, Morrison (2015) noted that when the leading staff of the previous Mayor Michael R. Bloomberg expanded the number of city schools from 1,200 to over 1,800; it led in part to a major waning of libraries in 2015. Although the goal was to construct smaller, more caring educational settings, when the larger facilities shut down, the smaller schools

failed to employ librarians and designated the large school libraries for non-library purposes. This is just one example of a counter reaction of the restructuring of schools that perhaps negatively affects the literacy of poorer neighborhoods.

Achievement Gap

Another aspect of restructuring educational facilities, as well as the reorganization of curriculum, is consideration of the role that ethnicity assumes in school reform. Despite overwhelming evidence of a strong correlation between race and academic performance, there is considerable confusion among researchers about how and why such a correlation exists (Noguera, 2008). Orfield and Eaton (1996) emphasized the increase in ethnic isolation as did Williams (1996). Later, Noguera and Akom (2000) underscored the extensive cultural discrepancies in educational attainment throughout schools in America. Noguera (2008) further asserted that obvious disproportions in subsidy, value, and planning are also typical among learning institutions across this country. He credits the work of scholars, Fordham and Ogbu, as having the greatest influence on these issues. Restructuring is constantly taking place in education, and part of this process is the need to define the role of race as it relates to the African American male student.

Relationships between Achievement and Individuality of African American Males

Although logic would assume that students experience low test performance due to a lack of understanding, various theories exist concerning why African American males are often first in this category. Fordham and Ogbu (1986), Ogbu (1987), and Fordham (1996) maintained that African American children from every financial status developed *oppositional identities* that influence them to assess education as a type of required adaptation to principles traditionally held by Euro-Americans. Contrarily, Tatum

(2003) asserted that a character of dissent, which rejects educational success, is not unavoidable despite a discriminatory culture. Over 30 years ago, Fordham and Ogbu (1986) asserted that African Americans pupils, as well as other *nonvoluntary minorities*, including Native Americans, Chicanos, Puerto Ricans, and more individuals who have been dominated by Euro-American people of European descent, associated educational achievement with *acting White*. Tatum (2003) maintained that if students are introduced to descriptions of African Americans who have obtained educational success during their youth, they will not have to describe academic success as an attainment for Euro-Americans. Fordham and Ogbu (1986) asserted that the approval of self-deprecation facilitated a reduction in educational quests and impeded the likelihood of educational achievement. Noguera (2008) suggested that in this structure, the limited number of pupils who desired to experience educational success, sacrificed a great deal to obtain it. He further maintained that African American students who reached above average scores might be identified by their associates as turncoats and sellouts and were sometimes bullied to either preserve bonds with their friends or succeed. This clarifies why an African American student of average economic means, such as his son, Joaquin, underachieved educationally despite monetary benefits. Capitalizing on these insights could provide needed understanding for educators.

Stereotypes

When conducting an in-depth observation of the academic struggles of African American males, it is inevitable that stereotypical brands must be considered. In his research on the impact of cultural typecasting on educational achievement, Steele (1997) delivered a persuasive interpretation of the cause for the contradiction he called the

identity-achievement paradox. While conducting his study on pupil outlooks concerning state exams, he elaborated on their extraordinary vulnerability to predominant typecasts associated with academic aptitude. He further asserted that when sensing the danger of typecasting, the sureness and testing achievement of at-risk students was deleteriously affected. He found that the vulnerability of these students to the danger of being stereotyped originated not from inner fears concerning their aptitude but from fears of being connected with a particular area and the subsequent anxiety they experienced concerning being typecast as deficit in it. In keeping with this research, Steele denoted that the incapacitating consequences of typecasting possibly perpetuated anxiety not only when taking standardized exams but in correlation with educational achievement in general. This perspective of a response to stereotyping being based on outward interactions rather than inward doubts is somewhat unique.

Other Minorities

Views about the academic capacity of individual races have long been in place. In agreement with Steele's observations, Noguera (2008) asserted that America has profoundly entrenched labels that associate ethnicity with educational capacity. Thus, he theorized that students became cognizant of these labels as they matured within the educational setting. In essence, his supposition is that there were often strong assumptions made in schools that Euro-American students automatically perform higher than African American students and that Asian students automatically perform higher than Latino students. In correlation to the theories of Gilbert and Gilbert (1998), Noguera (2008) asserted that this caliber of labeling influenced standards set by instructors for

their pupils as well as goals that pupils set for themselves. Reversing this trend of thought remains a challenge.

Even among the highly knowledgeable individuals, in posession of blatant facts, stereotypes can override pure logic. According to Lee (1996), at numerous educational institutions, there is an opinion that Asians have an innate intellectual distinction, particularly in math. This typecast is founded on the subsequent philosophies: Asians are intrinsically intelligent, they have a resilient labor standard, they are submissive and reverent to their bosses, and different from other non-majority people, they do not grumble concerning prejudicial treatment. Such views facilitate the idea of the *model minority*. This theory alleviates the responsibility that Euro-Americans may feel for past acts of racism.

Males Versus Females

There is rationale for studying males versus females in the area of literacy achievement, although a different kind of stereotype involves comparisons of the two. Consideration of males and reading performance was motivated by statistics signifying that males score lower on reading exams in contrast to females (Tatum 2005). Contrary to traditional beliefs, more contemporary research referencing stereotypical myths perpetuated among genders, stated that it is more likely that girls view boys as having higher intellectual capabilities than themselves as early as the age of six (Bian, Leslie, & Cimpian, 2017). However, the study also concluded that boys were hesitant to convey that males excelled academically. Miller (2017) suggested that stereotypes are relevant due to the probable and eventual impact on the academic curiosity and success of these

students. Awareness of these stereotypes presents the opportunity to redirect future misconceptions.

Stereotypes are so deeply embedded in American culture that it is evident even among primary level students. After conducting an empirical study, Hartley and Sutton (2013) established that primary level students' academic performance was indeed influenced by the stereotypes that were presented to them. For example, when the students were told that girls perform at a higher academic level than boys, the male students' scores decreased on a succession of exams. Once researchers stated that girls and boys perform equally, the achievement of the males excelled. These findings support Miller's (2017) assertion that consistent, tangible academic discrepancies exist in America today. Some of these discrepancies may be founded on research, others on perceptions. A more exhaustive observation of the anatomy neuro anatomy of males versus females may also reveal that there are developmental differences between the brains of males and females.

Because research is ongoing, groundbreaking discoveries are continuously occurring. For example, according to innovative research by Miller and Halpern (2014), cerebral dissimilarities do exist between genders during infancy. Furthermore, they asserted that cognitive ability diminished for certain attempts while remaining neutral or growing for others. In a study from the Brown Center on American Education, Walker (2015) asserted that even though females typically outperform males in reading, there has been a decrease in the gap. However, the question remains as to why a gap continues to exist. Two of the hypotheses proposed by the author were: First, females may be innately designed for reading superiority compared to males. Secondly, traditional signals in

various nations may infer that literacy is not manly. More significantly, what Walker found baffling was that by the time boys reached manhood, the gap had evaporated. This is information that should be integrated into future educational reform. As stated by Miller and Halpern (2014), statistics are multifaceted and are contingent on the physiognomies of the endeavor. Enormous global databases reveal how ethnic influences such as financial affluence and impartiality in treatment between genders impacts genders inversely. Comprehending how natural and environmental dynamics interrelate may accentuate mental capacity as well as assist in resolving urgent cultural dilemmas such as academic gender gaps. They suggest that findings contrasting the intellectual capacity of males and females necessitate reevaluation. Thus, the need for further research is indicated. While this researcher did not examine the literacy achievement of males compared to females, understanding that there are typically differences in performance seemed important to note as a rationale for solely studying males versus the general African American population.

Successful African American Students

Although there are inherent physiological differences among the races, there are psychological challenges that some African American males were able to overcome. Noguera (2008) asserted that his study of acting White did not support the hypothesis of Fordham and Ogbu (1986). He further stated that while conducting a study of a large northern California high school, he found that, although there were top performing minority pupils who experienced rejection by their contemporaries, there were those, such as himself, who learned to acclimate by embracing various individualities. He added that there were minorities who aggressively and purposely contested ethnic typecasts and

searched to re-conceptualize their cultural individualities by demonstrating the potential to thrive academically and simultaneously possess self-gratification. As it is with people in general, African American males who have a strong sense of self usually rise above stereotypical typecasts to become productive citizens.

Effective Schools

Productive students often come from productive schools. Studies by Sizemore (1988) and Murphy and Hallinger (1995) of successful educational facilities, regardless of size, revealed the presence of definitive features: comprehendible goals, fundamental values contained in challenging course work, elevated standards, a determination to teach every child, a nonviolent and organized educational atmosphere, resilient relationships with guardians, and a solution-finding attitude. One such example is highlighted by Brawner (2015) who noted that principals, teachers, facilitators, students, and parents were ecstatic about the progress they experienced at Marvell-Elaine Elementary School, a predominantly African American population, located in a small farming community. This facility received an A on the 2014 state issued school report card after obtaining a high-performance rating. However, argued Noguera (2008), despite the fact that his study revealed that measures used to define success depended nearly entirely on statistics reflected on state exams and discounted additional standards, there is no lack of consensus that these facilities steadily harvested upper ranks of educational success amid non-majority pupils. Additionally, for 30 years, studies by scholars such as Sizemore (1988) on successful educational institutions for African American pupils referred to empathetic interactions that occurred among educators and pupils and the philosophy of compassion and answerability that permeated these educational facilities as other

indispensable components of their achievement. Thus, the promotion of human relationships, which may be better facilitated within small schools, played a vital role in the academic success of students.

Conclusion

While researching the effects of lunch eligibility and school size on the literacy achievement of African American males, the researcher observed that there were scholars who combined their research on literacy performance with the historical and present-day factors which they perceived to be foundationally associated with the literacy achievement of African American males. There were researchers who discerned the deficiency of insight projected upon the causal comparative studies and the need for examining African American males more deeply to identify the scholarly thesis that lies within them concerning the significant, underlying science surrounding their literary behavior. A more extensive investigation of the literature led to the discovery that it does not explore the literacy performance of African American males in comparison to each other as it relates to their eligibility to receive a free or reduced-cost lunch. Neither did the research contain categorical evidence concerning the correlation between the literacy achievement of African American males and school size as it relates to students in Grades 4, 6, 8, and 11. There appears to be a need to test precise variables related to the literacy performance of African American males in Grades 4, 6, 8, and 11 who received a free or reduced-cost lunch as compared to their peers who were not eligible for these services. Additionally, this researcher uncovered a gap in the literature concerning the literacy achievement of African American males in Grades 4, 6, 8, and 11, specifically within large and small schools in Arkansas.

The literacy achievement of every student is contingent upon improving the performance of all students, particularly those who are targeted as statistically significant subpopulations for demographic tracking. Among the demographic groups recurrently identified as underachieving and underserved are African American males. This statistically significant data trend places inherent accountability upon educators to pinpoint the source of this ongoing deficiency. Thus, researchers must ask what historical constructs were used to shape the contingent and causal circumstances that are possibly contributing to this shortfall in literacy performance among African American males. Second, one must conduct a historical, cultural analysis to determine the association between history and the possible causes of lingering gaps between African American males and their peers. Third, one must reflect on what variables were involved in success stories, since there are African American males who are defying the statistical trend and excelling far beyond their peers. This third area of interest is the focus of the current study.

In pursuance of the response to these inquiries, the influence of two significant factors on prevailing academic achievement should be measured: the socioeconomic background of African American males and the size of schools in which they are being educated. For the mainstream of schools, the most readily available and quantifiable measure of socioeconomic standing is eligibility of free or reduced-cost lunch. Therefore, this was the operative standard by which socioeconomic level was measured in this study. Moreover, enrollment records were used as the measure of school size. These factors, when reflected upon in light of the history of the African American community, may suggest credible explanations for the aforementioned questions concerning the academic

performance disparity between African American male students who are eligible for free or reduced-cost lunch and those who are not, as well as African American male students who attend small schools and those who attend large schools. A thorough examination of this subpopulation incorporates observation beyond the years of slavery.

CHAPTER III

METHODOLOGY

The literature review indicated that there are studies in which school lunch eligibility and its proposed effects on student achievement have been explored. However, little if any research has been conducted to examine the specific population of African American males who participate in the federal school lunch program compared to those who do not, as associated with literacy achievement. Similar results were found with regard to how school size might affect the literacy performance of African American males, in general, as measured by state assessments. Therefore, in a causal comparative study, this researcher examined the effects of school lunch eligibility and school size on the literacy achievement of African American males. The data from the Arkansas Augmented Benchmark Exam and the EOC Literacy Exam of African American males in Grades 4, 6, 8, and 11, which was administered during the 2012-2013 school year in public schools in Arkansas, was collected and Grades 4, 6 and 8 were statistically analyzed; the data set provided for Grade 11 was determined to be incomplete. In line with this purpose, the researcher previously generated the following hypotheses:

1. No significant difference will exist by school lunch eligibility, between fourth-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores.

2. No significant difference will exist by school lunch eligibility, between sixth-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores.
3. No significant difference will exist by school lunch eligibility, between eighth-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores.
4. No significant difference will exist by school lunch eligibility, between 11th-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas 11th Grade End of Course Literacy Exam scores.

This chapter includes an explanation of the research design, sample, instrumentation, data collection procedures, analytical methods, and summary of the limitations.

Research Design

The causal-comparative, non-experimental method was used for this research. The data for this study included standardized test scores for African American males in Grades 4, 6, 8, and 11 in public schools in Arkansas. As stated by Johnson and Christensen (2008), causal-comparative research techniques are suitable when the investigating scholar depends on the gathering of quantitative data, such as achievement data. This is also true where the researcher does not randomly assign the population to any particular group. Neither does the researcher influence the independent variable(s). Gay, Mills, and Airasian (2009) also noted the pertinence of a causal-comparative study

when the drive of the research is to examine the cause and effect relationships ex post facto. For this research, a General Linear Model of 2 x 2 factorial ANOVAs was used to test the four hypotheses in this study. The independent variables for each test were school lunch eligibility and school size, and the dependent variable was literacy achievement.

Sample

Three stratified random samples (one per Grades 4, 6, and 8) of African American male students' scores from public schools in Arkansas were used for this study. As reported by Gay et al. (2009), stratified random sampling methods are suitable when a scholar pursues the safeguard of an even depiction of the significant smaller groups contained in the larger sample. For this study, Arkansas schools from which data were acquired were selected by grade orientation and student demographics. The inclusion standard for scores in the sample was that they were designated as being from African American males within the school constituency amid the grade levels being assessed. Scores, which did not meet these criteria, were not chosen. Student data from those who did not test within the districts during the selected periods were omitted from the selection. Data from students who did not finish the reading portion of the ACTAAP Augmented Benchmark Exam and the EOC Literacy Exam during the designated years were omitted from the study as well. Moreover, all student data from those who were excused from testing due to placement in special education and or limited English proficiency were also omitted from this study.

By means of this technique, all African American male students in Grades 4, 6, 8, and 11 from each school were selected. In accordance with the assertion of Johnson and Christensen (2008), including an equal number of students in each of the groups to be

assessed is of extreme significance when utilizing ANOVA models. This method was followed within each grade. For example, when considering Grade 4, there were scores from 50 African American males from small schools who did not qualify for free or reduced cost lunches. This sample was the smallest from the four subsets of Grade 4 data; therefore, it was determined that 50 scores should be randomly selected from the remaining three subsets. This made for equal numbers of scores across the samples.

Table 1 includes the highest number of students that could be found among all categories in Grades 4, 6, and 8, and subsequently, the number of randomized students included in the analysis for that particular grade. Grade 11 was not included since the highest number of African American scores found in all categories was 10. Based on the scores in other data sets, it was determined that Grade 11 data files were somehow corrupted when provided by the Arkansas Department of Education. Data for this study were received from the Arkansas Department of Education in spreadsheet format, with student names redacted. Each spreadsheet dataset contained the raw scores of African American males on the reading assessment for the 2012-2013 school year in Grades 4, 6, 8, and 11. In addition, the datasets included demographic variables such as grade, school lunch status, and the number of students enrolled. There was no need to specify race or gender since all students were African American males. The demographic data served to distinguish scores by grade, school lunch eligibility, and school size for the purpose of this study. To safeguard privacy, the researcher gathered no information that would isolate or identify students individually.

Table 1

Number of Students Selected Randomly by Grade From Small Schools and Large Schools in the Categories of Eligible and Non-eligible for Free or Reduced-Cost Lunch Program

Grade	Small/Non-Eligible	Small/Eligible	Large/Non-Eligible	Large/Eligible
4	50	50	50	50
6	119	119	119	119
8	120	120	120	120

While Grades 6 and 8 had comparable numbers, Grade 4 had more than 50% fewer scores in the dataset with the lowest number of results. Small elementary schools in Arkansas are rural schools in very small communities of primarily Euro-Americans, so perhaps this may account for the smaller number of scores from African American males at the lower grades. Students in Grades 6-8 may attend schools of less than 600, but with a denser population of African Americans.

Hypothesis 4 stated that no significant difference will exist by school lunch eligibility, between 11th-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas 11th Grade EOC Literacy Exam scores. However, upon scrutiny, it was determined that the Grade 11 sample was incomplete when received; therefore, that group was eliminated from further analysis. Thus, eliminating further discussion of Hypothesis 4. Therefore, this study only addressed Hypotheses 1, 2, and 3.

Instrumentation

The chief instrument used in this study was the Arkansas Augmented Benchmark Examination for Grades 4, 6, and 8. The Arkansas Augmented Benchmark Examination

is a component of the ACTAAP. Scores from this instrument were used as operational definitions (measures) of literacy achievement respectively. In Arkansas, outcomes from the Arkansas Augmented Benchmark Examination are used to calculate the adequate yearly progress of schools as required by the No Child Left Behind Act (2002). In keeping with this directive, Arkansas Augmented Benchmark Examination tests are usually given over a span of four days to students in Grades 3-8. Students are allotted roughly two and a half hours each day to finish the test. For literacy, the exam contains multiple-choice and open response type questions. Student performance is conveyed as raw scores that represent the number of open-ended response items correct, and multiple-choice items correct. The raw scores are then interpreted according to four levels of performance categories: Advanced, Proficient, Basic, and Below Basic. These categories are founded on Pearson's established scaled score ranges for each grade level that relate to a particular level of performance. The range varies from one grade to another. These scaled scores and performance groupings are used to compare annual progress in each subject (Pearson 2010). The researcher attended only to the raw scores within the analysis.

The reliability of the Arkansas Augmented Benchmark Examination, as stated by the Arkansas Department of Education (2013), is established by its design which employs a mutual outline for each administration, creating a safeguard since each administration of the test is alculated by the same formula. Furthermore, test publishers specify that to further guarantee reliability of the test scores, post paralleling is used to amend for any variances in rigor that transpire amid altered forms of the test (Pearson, 2010). The provider asserts that the post-equating procedure is conducted by utilizing a mutual

element of non-equivalent clusters involving stratagem. The primary associating set encompasses expertly designed multiple-choice items. Thus, the calculation of relating items on the 2012-2013 test forms is large and facilitates a healthy association to be established among previous test forms. Precision rates are respectfully elevated at .89 or higher for each grade and subject. Created by Audrey Qualls in 1995, this method, which was made official by the Technical Advisory Committee, is founded on the Stratified Alpha technique. In this methodology, Pearson advocated that reliability for every kind of question was appraised individually and then added to other types of question consistencies to produce a more precise approximation of the general reliability. This process provides accurate accountability for the discrepancies of each item in establishing reliability of the test. Pearson (2010) asserted that, by initially approximating a distinct reliability for each type of question and then uniting those reliabilities, the differences in every kind of entry on the test is properly evaluated. This type of examination ensures reliability.

Along with reliability there is the obligation to provide validity. Even though it is necessary to secure reliability when evaluating an instrument, validity is possibly of even greater importance (Joint Committee on Standards for Educational and Psychological Testing of the AERA, APA, & NCME, 1999). Validity, as defined by Messick (1989), is a combined appraisal decision of the extent to which experimental data and hypothetical justifications undergird the competence and suitability of interpretations and activities founded on test scores or other types of assessments. Suen (1990) asserted that content validity is the manner in which articles in a test accurately replicate the item area or the concept. Thus, content validity offers significant evidence in validation of area

significance and a distinct depiction of the items in the test (Messick, 1989). Pearson (2010) emphasized that an authentic assessment does not erratically join tasks and inquiries. Instead, each question or task necessitates a connection to the outcome. This association of the tasks on an assessment is designated as the internal structure of the assessment. These processes guarantee validity.

The validity of the chosen instrument is sound. The Arkansas Department of Education (2013) established the validity and reliability of the Arkansas Augmented Benchmark Examination. They affirmed that the Arkansas Augmented Benchmark Examination tests have "…technically sound levels of reliability, validity, and fairness, based on the extensive research that underlies both the criterion-referenced test and norm-referenced test item sets" (p. 6). The same may be assumed for the EOC Literacy Exam. Content-related evidence, internal construction evidence, and other evidences of impartiality for each test support these avowals to validity. For example, associations for the internal construction between the reporting strands for subtests of the Arkansas Augmented Benchmark Examination are stated to range from 0.50 to 0.99 (Pearson, 2010). In addition, at the time of administration, each Arkansas Augmented Benchmark Examination test was arranged to coincide with the proper grade level criteria of the Arkansas State Content Educational Standards in literacy (Arkansas Department of Education, 2013). These elements confirm the soundness of the instrument.

Data Collection Procedures

Authorization was approved by the Arkansas Department of Education for data access to be used in institutional research. Specifically, the researcher sent an email to the Research & Technology Data Reporting Department describing in detail the need for data

from the 2012-2013 school year. The request explained the need for the data to include all African American males in Grades 4, 6, 8, and 11 in public schools across Arkansas. This appeal to the state also included a need for disaggregated data that labeled these students by school lunch eligibility. It specified the need to have students identified as qualifying for free or reduced-cost lunches or not qualifying, which was signified as paid. The request also specified that the state only include African American males from schools with a total of 30 African American males or more. The researcher was informed by the state that all requests for school level aggregate counts that can possibly be used to identify individual students or student level data must go through a process of approval by the Data Steward Review Committee. The researcher was also informed that once the vote by committee is complete, requests go to Arkansas Department of Education leadership for review. Approval was received from both the Data Steward Review Committee and state leadership. Following submission of approval to proceed by the university's Institutional Review Board, student scores in literacy for the years 2012-2013, respectively, were released for analyses. The state's cumulative African American male literacy achievement data, by grade level, were sent directly to the scholar in the form of a Microsoft Excel spreadsheet. All data were coded as necessary to protect the privacy of contributing schools. The researcher drew data samples of de-identified scores from a pool of African American males in Grades 4, 6, 8 and 11. Students did not actively participate in the study.

Ultimately, the researcher needed data on all African American male scores in public schools in Arkansas in Grades 4, 6, 8, and 11 in order to obtain a sufficient number of scores from students attending small schools. The researcher had to build a field

identifying each student as attending small schools, identified as having an enrollment of less than 600 students, or attending large schools, identified as having 600 students or more.

Analytical Methods

The Statistics Package for the Social Sciences (SPSS 21.0) was used for data analyses. Before running statistical tests, data were scrutinized and examined to confirm accuracy and to validate that the assumptions were met for the tests of significance. Explicitly, the assumptions for running mixed factorial ANOVA General Linear Models such as a normal distribution, homogeneity of variances, and sphericity were checked (Sirkin, 2006). Also, Sirkin (2006) asserted that ANOVA is extremely flexible and can be used to compare more than two means. Therefore, a mixed factorial ANOVA was deemed suitable for the four hypotheses because it is believed to be robust, even when there are violations to some of the assumptions.

For Hypothesis 1 lunch eligibility (Grade 4 African American males who qualified for free or reduced cost lunch versus those who did not) and size of schools (Grade 4 African American males who attended schools of 600 or more students versus those who attended schools of less than 600 students) were the independent variables, and literacy achievement was the dependent variable. For Hypothesis 2, lunch eligibility (Grade 6 African American males who qualified for free or reduced cost lunch versus those who did not) and size of schools (Grade 6 African American males who attended schools of 600 or more students versus those who attended schools of less than 600 students) were the independent variables, and literacy achievement was the dependent variable. For Hypothesis 3, lunch eligibility (Grade 8 African American males who

qualified for free or reduced cost lunch versus those who did not) and size of schools (Grade 8 African American males who attended schools of 600 or more students versus those who attended schools of less than 600 students) were the independent variables, and literacy achievement was the dependent variable. Lastly, for Hypothesis 4, lunch eligibility (Grade 11 African American males who qualified for free or reduced cost lunch versus those who did not) and size of schools (Grade 11 African American males who attended schools of 600 or more students versus those who attended schools of less than 600 students) were the independent variables, and literacy achievement was the dependent variable.

Limitations

Despite meticulous attention given to research design, samples, instrumentation, data collection procedures, and analytical methods, limitations to the research are inevitable. Non-experimental research usually involves several limitations that are beyond the control of the researcher (Johnson & Christensen, 2008). Such limitations can adversely influence the internal validity of the study (Patten, 2012). Notwithstanding this probable threat to the internal validity of nonexperimental research, such designs are commonly utilized in the social sciences, particularly where true experimental manipulations of the independent variables may present logistical and ethical challenges (Johnson & Christensen, 2008). Consequently, it is left for the end users of such research to determine whether or not such limitations are compelling enough to diminish the findings of the study.

In addition to its non-experimental design, the design of this study did not effectively account for other variables that might potentially have an effect on student

achievement. Another limitation to this study was the fact that the researcher did not directly measure student achievement. Therefore, the accuracy of these measures was dependent totally upon the accuracy of the benchmark tests and the accuracy of each district's record keeping, specifically regarding school lunch eligibility status. Although it can be assumed that the process of such data collection is typically meticulous, the possibility for human error in data collection and entry cannot be ruled out. Despite this, all data collected were checked, to the researcher's ability, for accuracy, and procedures were taken to ensure the data received from the schools were coded and transferred from MS Excel to SPSS without any additional errors.

CHAPTER IV

RESULTS

The purpose of this quantitative research study was to determine the effects of lunch eligibility and school size on the literacy achievement of African American males in public schools in Arkansas in Grades 4, 6, 8, and 11. Using IBM SPSS Version 21, a 2 x 2 Factorial ANOVA was run for three of the four null hypotheses. Due to data insufficiencies, the Grade 11 scores were not analyzed. Prior to running the statistical analyses, assumptions of normality and homogeneity of variances were checked. In addition, descriptive statistics and inferential results were reported.

Hypothesis 1

Hypothesis 1 stated that no significant difference will exist by school lunch eligibility, between fourth-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores. To test this hypothesis, a 2 x 2 factorial ANOVA was conducted. Before conducting ANOVA, the researcher screened the data for outliers and examined the data for the assumptions of independence of observations, normality, and homogeneity of variances. Table 2 displays the group means and standard deviations for Size by School Lunch Eligibility on Literacy Achievement.

Table 2

Descriptive Statistics for Size by School Lunch Eligibility on Grade 4 Literacy Achievement

Size	School Lunch Eligibility	*M*	*SD*	*N*
Small	Non-Eligible	712.07	138.08	42
	Eligible	581.69	189.05	42
	Total	646.88	177.13	84
Large	Non-Eligible	641.79	190.33	42
	Eligible	631.86	176.56	42
	Total	636.82	182.53	84
Total	Non-Eligible	676.93	169.01	84
	Eligible	606.77	183.55	84
	Total	641.85	179.38	168

To test the assumption of normality, histograms as well as Kolmogorov-Smirnov (KS) statistics were examined for each group with $p < .05$ for each group, indicating that the data were not normally distributed across all groups. The shape of the histogram for Grade 4 scores of those not eligible for the school lunch program in both small and large schools appeared normal. Results for the KS tests revealed no significant deviation from a normal distribution of scores for non-eligible students who attended small schools $D(42) = .200$, $p > .05$, as well as for non-eligible students who attended large schools $D(42) = .200$, $p > .05$. However, the assumption of normality was violated in literacy achievement distribution of scores of students eligible from small schools $D(40) = .027$, $p < .05$, as well as for those eligible from large schools $D(42) = .003$, $p < .05$. In reflection

of this violation, the histograms for the Grade 4 scores of students eligible for the school lunch program from small schools and large schools were slightly skewed to the right. Despite this violation, analysis of data using ANOVA was deemed appropriate as ANOVA is considered robust to mild violations of the assumption of normality (Field, 2005; Leech, Barrett, Morgan, & Leech, 2011). Furthermore, results of Levene's test revealed no violation of homogeneity of variances among the groups for literacy achievement, $F(3, 164) = 1.317$, $p = .271$. Results of the factorial ANOVA analysis are displayed in Table 3.

Table 3

Results of Factorial ANOVA for Literacy Achievement in Grade 4 by School Size and School Lunch Eligibility

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Size	4250.15	1	4250.15	0.14	.710	0.001
Lunch Eligibility	206711.01	1	206711.01	6.77	.010	0.040
Size*Lunch Eligible	152342.15	1	152342.15	4.99	.027	0.030
Error	5010381.98	164	30551.11			

There was evidence to reject the null hypothesis of the interaction. The interaction between School Size and School Lunch Eligibility was significant, $F(1, 164) = 4.99$, $p = .027$, $ES = 0.030$. According to Cohen (1988), this is a small effect size. Due to this interaction, a simple effects analysis was conducted. Figure 1 shows the four groups

created by the two independent variables in the first hypothesis (Non-eligible students in small schools, eligible students in small schools, non-eligible students in large schools, and eligible students in large schools).

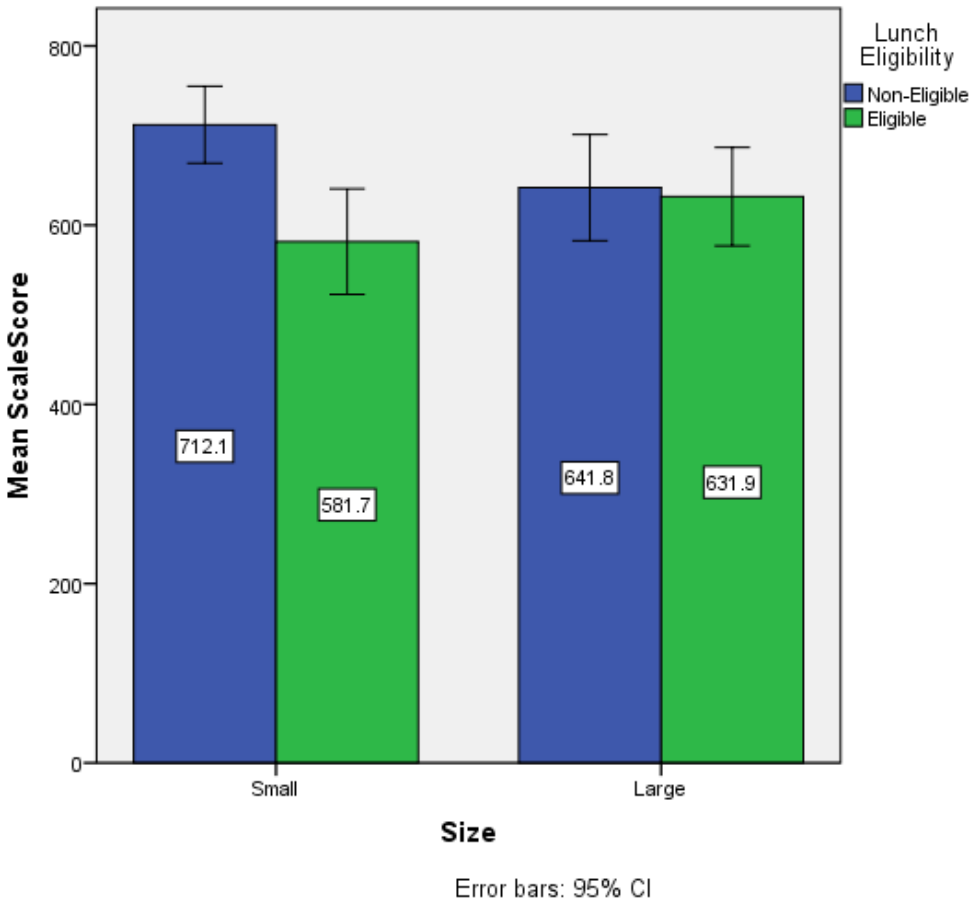

Figure 1. Mean literacy achievement by school lunch eligibility and school size.

Four pairings were analyzed by the simple main effects procedure for the scores of the fourth-grade students. School Size was first examined across each level of School Lunch Eligibility. In the first pairing, even though the non-eligible students in small schools (M = 712.07, SD = 138.08) scored higher compared to the non-eligible students

in large schools (M = 641.79, SD = 190.33), the difference between the groups was not statistically significant, $p > .05$. Similarly, in the second pairing, even though the eligible students in small schools (M = 518.69, SD = 189.05) scored lower compared to the eligible students in large schools (M = 631.86, SD = 176.56), the difference between the groups was not statistically significant, $p > .05$. Next, School Lunch Eligibility was examined across each level of School Size. In the third pairing, the difference between non-eligible students in small schools (M = 712.07, SD = 138.08) and eligible students in small schools (M = 518.69, SD = 189.05) was statistically significant, $p < .05$. However, in the fourth pairing, even though the non-eligible students in large schools (M = 641.79, SD = 190.33) scored higher compared to the eligible students in large schools (M = 631.86, SD = 176.56), the difference was not statistically significant, $p > .05$.

The interaction effect for Size and Lunch Eligibility combined was significant, $F(3, 164) = 1.32$, $p = .027$. Therefore, there was enough evidence to reject the null hypothesis for the interaction effects. Furthermore, when analyzing the main effect for Lunch Eligibility on Literacy Achievement, the mean score for eligible students (M = 606.77, SD = 183.55) was significantly lower compared to the non-eligible student group's mean score (M = 676.93, SD = 169.01). Therefore, the main effect for Lunch Eligibility was significant, $F(1, 164) = 6.77$, $p = .010$, $ES = 0.040$. However, the main effect for Size on literacy achievement was not significant, $F(1, 164) = 1.32$, $p = .710$, $ES = 0.001$.

Hypothesis 2

Hypothesis 2 stated that no significant difference will exist by school lunch eligibility, between sixth-grade African American male students in small schools

compared to large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores. To test this hypothesis, a 2 x 2 factorial ANOVA was conducted. Before conducting ANOVA, the researcher screened the data for outliers and examined the data for the assumptions of independence of observations, normality, and homogeneity of variances. Table 4 displays the group means and standard deviations for literacy achievement by lunch eligibility and school size.

Table 4

Descriptive Statistics for Size by School Lunch Eligibility on Grade 6 Literacy Achievement

Size	School Lunch Eligibility	*M*	*SD*	*N*
Small	Non-Eligible	693.49	174.40	119
	Eligible	553.68	167.66	119
	Total	623.58	184.51	238
Large	Non-Eligible	679.60	196.99	119
	Eligible	600.51	161.48	119
	Total	640.05	184.05	238
Total	Non-Eligible	686.54	185.78	238
	Eligible	577.10	165.92	238
	Total	631.82	184.27	476

To test the assumption of normality, histograms as well as Kolmogorov-Smirnov (KS) statistics were examined for each group with $p < .05$ for each group, indicating that the data were not normally distributed across all groups. The shape of the histogram for

Grade 6 scores, of those not eligible for the school lunch program who attended small schools, as well as large schools, were somewhat skewed to the right. Results for the KS tests revealed significant deviation from a normal distribution of scores for non-eligible students who attended small schools $D(119) = .044$, $p < .05$, as well as for non-eligible students who attended large schools $D(119) = .004$, $p < .05$. Therefore, the assumption of normality was violated in literacy achievement distribution of non-eligible students from small schools, as well as for non-eligible students from large schools. Despite this violation, analysis of data using ANOVA was deemed appropriate as ANOVA is considered robust to mild violations of the assumption of normality (Field, 2005; Leech et al., 2011). The shape of the histogram for Grade 6 scores, of eligible students who attended small schools, as well as large schools, appeared normal. Results for the KS tests revealed no significant deviation from a normal distribution of scores for eligible students who attended small schools $D(119) = .200$, $p > .05$, as well as for eligible students who attended large schools $D(119) = .200$, $p > .05$. Furthermore, results of Levene's test revealed no violation of homogeneity of variances among the groups for literacy achievement, $F(3, 472) = 0.64$, $p = .588$. Results of the factorial ANOVA analysis are displayed in Table 5.

Table 5

Results of Factorial ANOVA for Literacy Achievement in Grade 6 Students by School Size and School Lunch Eligibility

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Size	32282.35	1	32282.35	1.05	.307	0.002
Lunch Eligibility	1425416.61	1	1425416.61	46.20	.000	0.089
Size*Lunch Eligible	109695.54	1	109695.54	3.56	.060	0.007
Error	14561907.97	472	30851.50			

There was no evidence to reject the null hypothesis of the interaction. The interaction between Size and Lunch Eligibility was not significant, $F(1, 472) = 3.56$, $p = .060$, $ES = 0.007$. According to Cohen (1988), this is a small effect size.

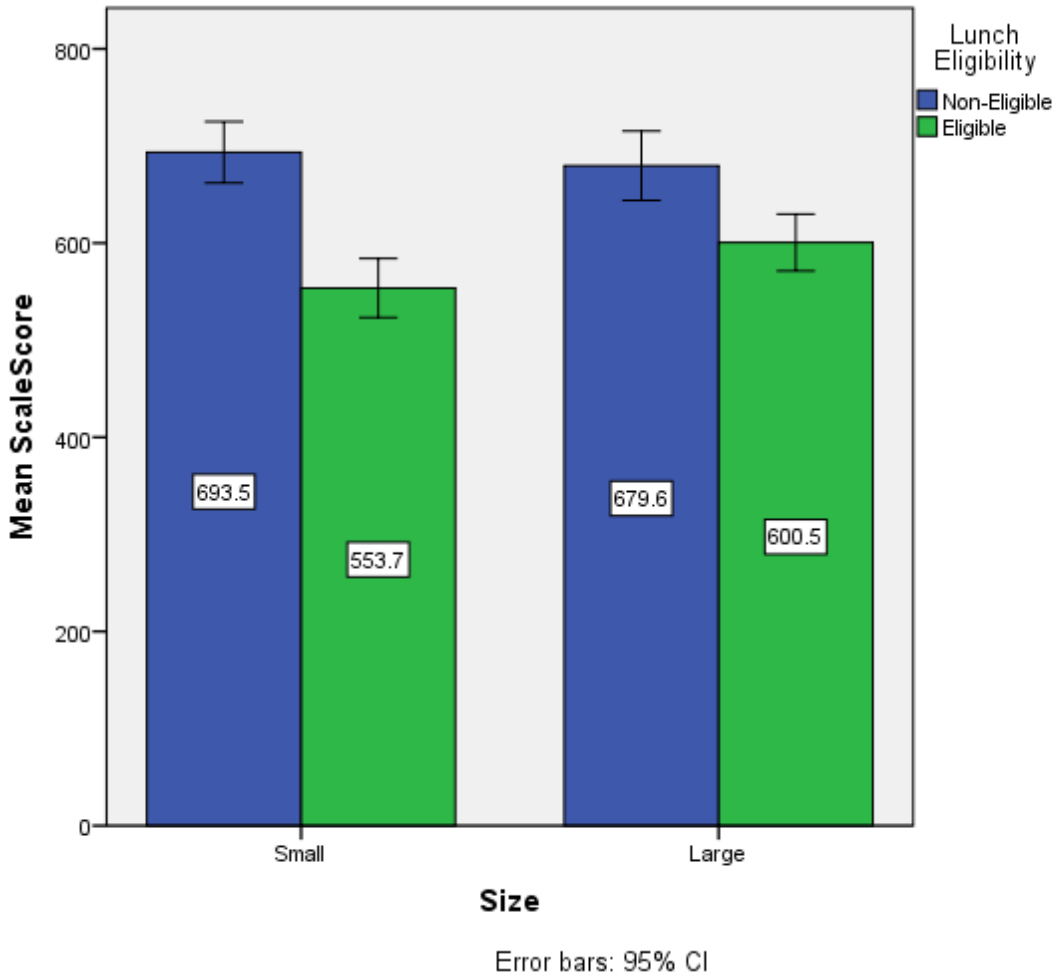

Figure 2. Mean literacy achievement by lunch eligibility and school.

Of the four groups created by the two independent variables in the first hypothesis (non-eligible students in small schools, eligible students in small schools, non-eligible students in large schools, and eligible students in large schools), the results of the simple effects analysis did not indicate a significant difference between non-eligible students in small schools and non-eligible students in large schools. However, the results of the simple effects analysis indicated a significant difference between eligible students in small schools and eligible students in large schools.

For further scrutiny, the researcher examined the means of the scores from each group. The Grade 6 non-eligible student scores from small schools' sample mean (M = 693.49, SD = 174.40) was somewhat higher compared to the Grade 6 non-eligible student scores from large schools' sample mean (M = 679.60, SD = 196.99), p = .542. Between the two non-eligible student groups, the non-eligible students from small schools demonstrated a moderately higher literacy achievement score compared with non-eligible students from large schools. In addition, the Grade 6 eligible student scores from small schools' sample mean (M = 553.68, SD = 167.66) was lower compared to the Grade 6 eligible student scores from large schools' sample mean (M = 577.10, SD = 165.92), p = .040. Thus, the two eligible groups, in general, demonstrated a statistically lower literacy achievement score than the two non-eligible groups. In addition, eligible students from small schools demonstrated a statistically lower literacy achievement score than eligible students from large schools.

There was no significant interaction between Size and Lunch Eligibility, $F(1, 472) = 3.56$, p = .060. Therefore, there was not enough evidence to reject the null hypothesis for the interaction effects. However, when analyzing the main effect for Lunch Eligibility on Literacy Achievement, the mean of score for eligible students (M = 577.10, SD = 165.92) was considerably lower, compared to the non-eligible group's mean score (M = 686.54, SD = 185.78). Similar to Grade 4, the main effect for Lunch Eligibility was significant, $F(1, 472) = 46.20$, p = .000, ES = 0.089. Also, as in Grade 4, the main effect for Size on literacy achievement was not significant, $F(1, 472) = 1.05$, p = .307, ES = 0.002.

Hypothesis 3

Hypothesis 3 stated that no significant difference will exist by school lunch eligibility, between eighth-grade African American male students in small schools compared to large schools on literacy achievement measured by the Arkansas Augmented Benchmark Exam scores. To test this hypothesis, a 2 x 2 factorial ANOVA was conducted. Before conducting ANOVA, the researcher screened the data for outliers and examined the data for the assumptions of independence of observations, normality, and homogeneity of variances. Table 6 displays the group means and standard deviations for literacy achievement by lunch eligibility and school size.

Table 6

Descriptive Statistics for Size by School Lunch Eligibility on Grade 8 Literacy Achievement

Size	School Lunch Eligibility	*M*	*SD*	*N*
Small	Non-Eligible	743.56	164.41	120
	Eligible	659.35	163.86	120
	Total	701.45	169.14	240
Large	Non-Eligible	782.91	145.73	120
	Eligible	673.50	170.10	120
	Total	728.20	167.29	240
Total	Non-Eligible	763.23	156.27	240
	Eligible	666.42	166.81	240
	Total	714.83	168.57	480

To test the assumption of normality, histograms as well as Kolmogorov-Smirnov (KS) statistics were examined for each group with $p < .05$ for each group, indicating that the data were not normally distributed across all groups. The shape of the histogram for Grade 8 scores of non-eligible students who attended small schools, as well as large schools were somewhat skewed to the right. Results for the KS tests revealed significant deviation from a normal distribution of scores for non-eligible students who attended small schools $D(120) = .001$, $p < .05$, as well as scores for non-eligible students who attended large schools $D(120) = .004$, $p < .05$. Therefore, the assumption of normality was violated in literacy achievement distribution of scores for non-eligible students from small schools, as well as scores for non-eligible students from large schools. Despite this violation, analysis of data using ANOVA was deemed appropriate, as ANOVA is considered robust to mild violations of the assumption of normality (Field, 2005; Leech et al., 2011). The shape of the histogram for Grade 6 scores, of eligible students who attended small schools, as well as large schools, appeared normal. Results for the KS tests revealed no significant deviation from a normal distribution of scores of eligible students who attended small schools $D(120) = .200$, $p > .05$, as well as scores of eligible students who attended large schools $D(120) = .200$, $p > .05$. Furthermore, results of Levene's test revealed no violation of homogeneity of variances among the groups for literacy achievement, $F(3, 476) = 0.87$, $p = .457$. Results of the factorial ANOVA analysis are displayed in Table 7.

Table 7

Results of Factorial ANOVA for Literacy Achievement of Grade 8 Students by School Size and School Lunch Eligibility

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Size	85867.50	1	85867.50	3.30	.070	0.007
Lunch Eligibility	1124622.41	1	1124622.41	43.23	.000	0.083
Size*Eligible	19051.20	1	19051.20	0.73	.393	0.002
Error	12381934.88	476	26012.47			

There was no evidence to reject the null hypothesis of the interaction. The interaction between Size and Lunch Eligibility was not significant, $F(1, 476) = 0.73$, $p = .393$, $ES = 0.002$. According to Cohen (1988), this is a small effect size. Table 6 shows the means for Size by Lunch Eligibility on Literacy Achievement.

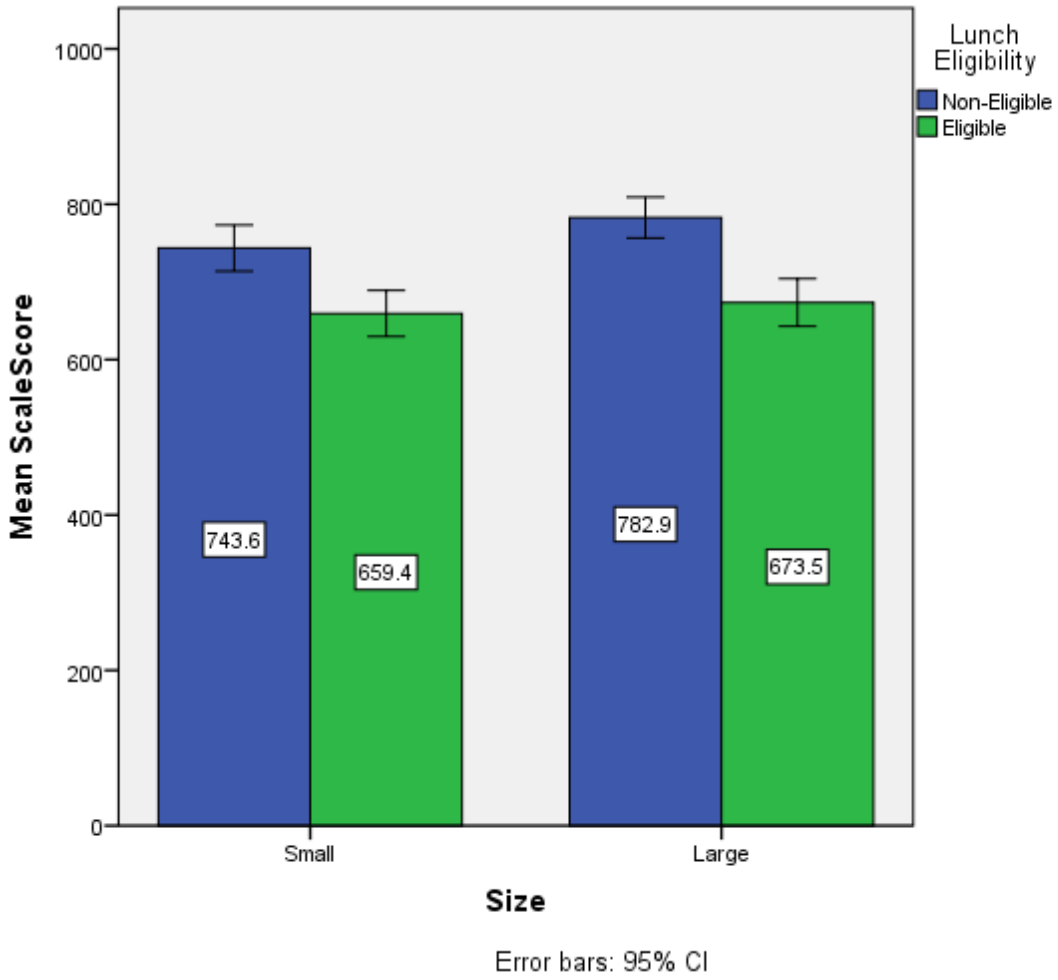

Figure 3. Mean literacy achievement by lunch eligibility and school.

Of the four groups created by the two independent variables in the first hypothesis (Non-eligible students in small schools, eligible students in small schools, non-eligible students in large schools, and eligible students in large schools), the results of the simple effects analysis did not indicate a significant difference between scores of non-eligible students from small schools and large schools. In addition, the results of the simple effects analysis did not indicate a significant difference between scores of eligible students in small schools and scores of eligible students in large schools.

For further scrutiny, the researcher examined the means of the scores from each group. The Grade 8 scores of non-eligible students from small schools' sample mean (M = 743.56, SD = 164.41) was slightly lower compared to the Grade 8 scores of non-eligible students from large schools' sample mean (M = 782.91, SD = 145.73), p = .059. In other words, between the two non-eligible student groups, the non-eligible students from small schools demonstrated a moderately statistically lower literacy achievement score when compared with non-eligible students from large schools. In addition, the Grade 8 scores of eligible students from small schools' sample mean (M = 659.35, SD = 163.86) was lower compared to the Grade 8 scores of eligible students from large school sample mean (M = 673.50, SD = 170.10), p = .497. Thus, the two eligible groups, in general, demonstrated a statistically lower literacy achievement score than the two non-eligible groups. Also, eligible students from small schools demonstrated a statistically lower literacy achievement score than eligible students from large schools.

There was no significant interaction between Size and Lunch Eligibility, F(1, 476) = 0.73, p = .393. Therefore, there was not enough evidence to reject the null hypothesis for the interaction effects. Yet, when analyzing the main effect for Lunch Eligibility on literacy achievement the mean score for those school lunch eligible (M = 666.42, SD = 166.81) was considerably lower, compared to the non-eligible group's mean score (M = 763.23, SD = 156.27). Once again, as in Grades 4 and 6, the main effect for Lunch Eligibility was significant, F(1, 476) = 43.23, p = .000, ES = 0.083. However, as in Grades 4 and 6, the main effect for Size on Literacy Achievement was not significant, F(1, 476) = 3.30, p = .070, ES = 0.007.

Summary

Three stratified random samples (one per Grades 4, 6, and 8) of African American male students' scores from public schools in Arkansas were used for this study. Three hypotheses were considered to determine if school size and school lunch eligibility significantly affected literacy achievement. The summary of the significant results is displayed in Table 8.

Table 8

Summary of Significant Results for Hypotheses 1-3

H	Results	*p*
1	A significant interaction effect of School Size and School Lunch Eligibility on Literacy Achievement for fourth-grade students	.027
1	A significant main effect of School Lunch Eligibility on Literacy Achievement for fourth-grade students	.010
2	A significant main effect of School Lunch Eligibility on Literacy Achievement for sixth-grade students	.000
3	A significant main effect of School Lunch Eligibility on Literacy Achievement for eighth-grade students	.000

For Hypothesis 1, there was a statistically significant interaction between school size and school lunch eligibility on literacy achievement for fourth-grade students. In the follow up simple main effects analysis of the four pairings, only the difference between non-eligible students in small schools and eligible students in small schools was statistically significant with the non-eligible students, on average, outscoring their peers. The main effect for School Lunch Eligibility on Literacy Achievement for fourth-grade students

was also significant. For Hypotheses 2 and 3, School Lunch Eligibility on Literacy Achievement was significant for the sixth- and eighth-grade students' scores, respectively. In both cases, the non-eligible students, on average, outscored their eligible peers.

CHAPTER V

DISCUSSION

The idea of all human beings being of equal importance, and thus, receiving an equal education should be a given. Yet, “The drama in the United States to create a plural and just society continues to unfold. Looking back on the Civil Rights Movement, on the quest for justice and equality in this nation, we should recognize that the struggle has not ended” (Gray, 2002, p. xvi). The Schott Foundation (2015) asserted that the legacies brought forward into 21st century America, such as its republic, wealth, resources, and societal structure, are irrefutably resilient due to the influences of African American males. While serving as husbands, fathers, sons, humanitarians, and members of the armed forces, more than 2 million African American males have obtained a degree from a university. Among these males, many have contributed substantially to the arts, sciences, education, and corporate America. Nonetheless, as emphasized by the Schott Foundation, despite these positive influences, a system of organized barriers continue to produce measured academic results for many African American males. This low achievement of African American males is prevalent throughout schools across the nation. The observation, interpretation, and correlation of the data and findings of this research may prove to be the catalyst that sparks efficacious decision-making producing the higher level of literacy performance among African American males and other non-voluntary minorities so long desired.

This chapter presents the researcher's conclusions based on an interpretation of the results for each of the three hypotheses. Next, possible implications are presented that place the results of this study into the larger context of the review of related literature. The Recommendation section includes both specific, concrete suggestions for practice to the stakeholders who might benefit from the findings of the study and direction for expanding, deepening, or clarifying knowledge in the study topic.

Conclusions

Three hypotheses of the four proposed in this study were tested by conducting a 2 x 2 factorial ANOVA. The data set provided for Grade 11 was determined to be incomplete and was not analyzed. For the remaining analyses, the independent variables were lunch eligibility and school size, and the dependent variable was the literacy achievement of African American males as measured by the Arkansas Augmented Benchmark Examination for Grades 4, 6, and 8. Analysis of the hypotheses included an examination of the combined interaction effects as well as main effects for the independent variables. The findings of this research indicated that poverty was the overall most significant factor in the low achievement of African American males in the area of literacy.

Hypothesis 1

An analysis of this hypothesis revealed a statistically significant interaction between the independent variables, lunch eligibility and school size, on literacy achievement. Four pairings were analyzed by the simple main effects procedure for the scores of the fourth-grade students. In the first pairing, even though the non-eligible students in small schools scored higher compared to the non-eligible students in large

schools, the difference between the groups was not statistically significant. Similarly, even though the eligible students in small schools scored lower compared to the eligible students in large schools, the difference between the groups was not statistically significant. In the third pairing, the difference between non-eligible students in small schools and eligible students in small schools was statistically significant. However, in the fourth pairing, even though the non-eligible students in large schools scored higher compared to the eligible students in large schools, the difference was not statistically significant. Thus, the null hypothesis for the interaction effect was rejected.

In the original analysis, the main effect for school size on literacy achievement was not significant. Although the mean for the small school size group was higher compared to the mean of the large school size group, the difference was not significant. Thus, the main effect hypothesis for school size was retained. However, the main effect of school lunch eligibility on literacy achievement was statistically significant. Those not eligible for free or reduced lunches significantly outscored their eligible counterparts. Thus, the main effect hypothesis for school lunch status was rejected. These findings indicated that, although size alone was not a significant variable when considering the literacy achievement of African American, fourth-grade males, school size was significant when combined with lunch eligibility. Furthermore, these findings indicated that poverty was the most significant factor influencing the literacy achievement of African American males

Hypothesis 2

The analysis for Hypothesis 2, school size and school lunch status on literacy achievement for sixth-grade students, revealed that there was no significant interaction

between the two independent variables. School size and school lunch status did not interact to influence literacy achievement for the African American males in Grade 6. Of the four subgroups in this analysis, the non-eligible African American males attending small schools group scored the highest on the Arkansas Augmented Benchmark Exam for Grade 6 Literacy, and the eligible African American males attending small schools group scored the lowest of the groups. Therefore, the interaction, null hypothesis was retained. Similar to the Grade 4 results, the main effect for school size on literacy achievement was not significant. Even though the mean for the large school size group was greater compared to the mean of the small school size group, the difference was not statistically significant. Therefore, the main effect hypothesis for school size was also retained. These findings indicated that the size of school was not a significant factor in connection to the literacy achievement of African American males in Grade 6.

However, similar to Grade 4, the main effect for lunch eligibility was significant. Those eligible for the school lunch program scored significantly lower compared to those not eligible. Unlike the results in Grade 4, the gap between the mean score for non-eligible African American males in small schools and large schools was much smaller. Furthermore, as in Grade 4, these findings indicated that poverty was the most significant factor influencing the literacy achievement of African American males. Also, the mean of scores for those who were eligible to participate in the lunch program was within the range of Basic scores, and the mean for those not eligible was within the Proficient range (Arkansas Department of Education, 2014). Therefore, the main effect hypothesis for school lunch eligibility was rejected.

Hypothesis 3

The analysis for Hypothesis 3, school size and school lunch status on literacy achievement for eighth-grade students, revealed that there was no significant interaction between the two independent variables. School size and school lunch status did not interact to influence literacy achievement for the African American males in Grade 8. Of the four subgroups in this analysis, the non-eligible African American males attending large schools group scored the highest on the Arkansas Augmented Benchmark Exam for Grade 8 Literacy, and the eligible African American males attending small schools group scored the lowest of the groups. Therefore, the interaction, null hypothesis was retained. Again, the main effect for school size on literacy achievement was not significant. Even though the mean for the large school size group was greater compared to the mean of the small school size group, the difference was not statistically significant. Therefore, the main effect hypothesis for school size was also retained. These findings indicated that the size of school was not a significant factor in connection to the literacy achievement of African American males in Grade 8.

However, similar to the results in Grades 4 and 6, the main effect for lunch eligibility was significant. Those eligible for the school lunch program scored significantly lower compared to those not eligible. Parallel to the Grade 6 results, the gap between the mean score for non-eligible African American males in small schools and large schools was much smaller compared to those in Grade 4. However, the gap between the mean for non-eligible African American males attending small schools and large schools in Grade 8 was larger compared to the gap between the mean score for non-eligible African American males attending small schools and large schools in Grade 6.

Furthermore, these findings indicated that poverty was the most significant factor influencing the literacy achievement of African American males. Like those in the sixth grade, the mean of scores for those who were eligible to participate in the lunch program was within the range of Basic scores, and the mean for those not eligible was within the Proficient range (Arkansas Department of Education, 2014). Based on these findings, the main effect hypothesis for school lunch eligibility was rejected.

Implications

While researching the effects of lunch eligibility and school size on the literacy achievement of African American males, it was noted that a connection between historical perspectives and the academic performance of African American males was intertwined in the findings and research of some experts. Thus, this researcher examined the literature as it related to the literacy achievement of African American males and how it evolved throughout history. During the development of a historical, cultural analysis, the researcher synthesized findings concerning the impact of the past on the present literacy performance of African American males, while concurrently searching for a reference to their socioeconomic status or the size of the schools they attended. The literature included the influence of poverty on the literacy achievement of students in general, and specifically, on the literacy achievement of African American males. However, the literature failed to specifically address the literacy performance of African American males who qualify for free or reduced-cost lunch in comparison to those who do not.

Much of the literature focused on African American males and literacy achievement indicate that, in general, this population stuggles. However, before

successful literacy intervention can take place, the source of the deficiency must be identified. Tatum (2005) and Noguera (2008) argued that the low academic performance of African American males strongly correlates with poverty. A report by the Southern Education Foundation (2015) found that there is now a new majority, comprised of pupils in non-private K-12, who qualify for free or reduced-priced lunches. Further, findings indicated that out of 21 states, wherein most students were of low socioeconomic status, 13 of them were Southern states. These findings are critical because they challenge educators and policymakers to respond to what is being suggested by reviewed studies. Research by the Schott Foundation (2015) stressed that education, unrestrictedly accessible to the public, is an indispensable sustaining product of the American system and is the path by which the multigenerational cycle of poverty can be broken. Throughout history, there has been a general consensus among Americans that education is the vehicle by which its citizens can escape poverty.

Although the findings for poverty were significant, the findings on school size were inconclusive. Ready and Lee (2006) studied the impact of class size on the literacy achievement of elementary level students, and Schneider (2016) scrutinized the small school movement that took place in New York City; however, no study directly addressed the effects of school size as it relates to the literacy achievement of African American males. This lack of research concerning the effects of lunch eligibility and school size as they relate to the literacy achievement of African American males makes this research unique and valuable. These findings could be used to positively impact educational procedures related to the literacy achievements of all students.

The results of this study indicated the existence of a significant gap in literacy achievement between African American males in Grades 4, 6, and 8 who were eligible for free or reduced-cost lunches and African American males who were not eligible for free or reduced-cost lunches. Non-eligible students scored significantly higher than did eligible students. These findings aligned with Fantuzzo (2009) who asserted that the third-grade African American males in Philadelphia from homes of low socioeconomic status were at risk for academic struggles. In addition, there was a general indication that the size of the schools they attended was not a significant factor in the literacy achievement of African American males in Grades 6 and 8. However, the data did reflect a significant interaction between the size of schools and lunch eligibility among Grade 4 African American males. Thus, it indicated that the size of the school was a significant factor when coupled with school lunch eligibility. Among Grade 4 African American males in small schools, non-eligible students scored significantly higher compared to eligible students. Although there was significance within the small school setting, there was not significance within the large school setting or between the small school and large school setting. Whereas, in Grades 6 and 8, scores among non-eligible students from large schools were higher than the scores of non-eligible students from small schools but not significantly. Among students in Grade 8, the scores of eligible students from small schools were not significantly higher than the scores of eligible students from large schools. Thus, similar to the findings of Schneider (2016), the impact of the size of schools on literacy achievement was inconclusive. Therefore, the researcher determined that, although poverty played a major role in the literacy achievement of African

American males, there was no definitive data to support the influence of the size of schools on the literacy achievement of African American males.

This researcher found that among the three grades explored, those who qualified for the school lunch program struggled significantly more academically compared to those who did not qualify. These findings align with the broader literature concerning student achievement and poverty. Fantuzzo (2009) highlighted the myriad of struggles that existed among third-grade students in Philadelphia, indicating that poverty was a leading cause in the existence of the achievement gap between African American students and their peers. In addition, Blad (2015) asserted that when compared to a Euro-American student born in East Oakland, an African American child born on the West side was seven times more likely to be born into poverty, four times less likely to be reading on grade level by fourth grade, and nearly six times more likely to drop out of school. Furthermore, Payne (2005), who completed extensive research on poverty, asserted that low socioeconomic students were increasingly entering school with no understanding of learning or logical reasoning. These illustrations reflect the challenges of poverty that occur among many African American students.

Based on the continued mixed results relative to school size, this researcher hesitates to make swift judgments, but will, however, note that non-eligible African American males in Grade 4 in small schools yielded greater achievement. This increased achievement was possibly due to the fact that, in Arkansas, small schools usually equal rural, community, single elementary schools. This success could correlate with Meier's (1989) observations that smaller schools foster opportunities for students to become more familiar with their peers, faculty, and staff. Also, she asserted that the closeness of less

populated facilities nurtures faith in God, compassion, and caring interactions. Thus, for Grade 4 African American males, this could indicate that smaller schools are indeed a contributing factor to the increase in literacy achievement. Nevertheless, similar to Schneider (2016) and Noguera (2012), this researcher found mixed results relative to the overall effect of school size on the literacy achievement of African American males. Nonetheless, this research contributes to the body of knowledge regarding the literacy achievement of African American males and school size.

Recommendations

Potential for Practice/Policy

A powerful use of this research is to consider its potential for influencing educational practices and policies. First and foremost, the research indicates that the literacy achievement of African American males is fundamentally a reflection of economic status rather than race or the size of schools they attend. Thus, with respect to superficial judgements based on race, all African American males should not be observed as struggling learners in the area of literacy acquisition. Neither should it be assumed that all African American males are living in poverty. However, research does indicate that those raised in homes where income is insufficient, almost always struggle (Noguera 2012). In this instance, the research indicated that providing parents and guardians with relevant information, skills, and the motivation to be able to provide for families, will aid in the success of more African American males. Therefore, educators must reflect on non-stereotypical practices for differentiating services for African American males (Noguera 2008; Steele, 1997). In this endeavor, academic leaders must reflect on the root

cause of the myriad of African American males living in poverty, which in turn should lead to advocating changes in policies and practices.

Relative to policy, legislating change based on research is pivotal in facilitating systematic transformations. Among researchers, Tatum (2005) and Noguera (2008) specifically addressed the empowerment of African American males by way of teacher development and changes in curriculum. Another contemporary author, Ginwright (2010), specifically addresses policy with an assumption that many are living in poverty and adversely affected by it. He began by asking questions such as: What does thorough healing signify for public procedures? How can instructors and youth mentors utilize an essential healing method? What can be done to restructure the way society interacts with African American youth? He articulates the answer to these questions with broad, but firm, conviction and a strong sense of direction. First, he suggested the articulation of a distinct image of the social order in which we abide. This implies that it is more productive to focus on the distinct expression and implementation of the future that is envisioned rather than to engage in the futile exercise of incessant discussions concerning what is wrong in society. Second, he advocates for African American adolescents to be equipped to challenge disparity in power among educational institutions. This is done by inviting them to be a part of discussions designed to develop solutions. Third, he asserts that leaders build a purpose through identity and culture. These suggestions can be used as a stepping stone to building the structure that is needed for change relevant to the literacy achievement of African American males.

As for changes in practices, the employment of both educational and social interventions for children of poverty beginning at an early age may yield positive results

associated with literacy achievement. While conducting two separate interviews, the researcher was able to receive insight on possible strategies which can be utilized in towns and cities throughout the nation. One individual focused on early childhood education, while the other attended to the needs of adolecent males. In both cases, the targeted audience was primarily composed of youth living in poverty and the majority were African American.

Researchers have found benefits, relative to early childhood education, for those coming from homes of poverty. Shweinhart and Weikart (2008) coordinated studies of the effects of prekindergarten instruction on student success. They found that early childhood education brought about positive effects decades beyond when the experiences took place. Additional longitudinal studies have yielded similar results (Bracey, Montie, Xiang, & Schweinhart, 2007). Therefore, it seems appropriate to recommend early childhood interventions as a viable means of attending to the needs of African American males who have been educationally disadvantaged. In reference to serving those from homes of poverty in Arkansas, an interview was conducted to gain insight into the tenets of a structured early childhood intervention. R. L. Richmond (personal communication, November 6, 2017), CEO and founder of Tender Love Learning Center, a pre-school for students ages two-and-a-half to five, stated that she did not feel that poverty influenced the achievement or lack thereof of her students. Although the majority of her students were African American, she enrolled a very small percentage of Euro-American students as well. She recalled that most of her students were participants in a government program which provided funding for the cost of day care for families of low socioeconomic status. Central to her success, she credits her high expectations for her noted accomplishments.

Among those expectations for Tender Love students, were the obtainment of skills including adding, subtracting, multiplying and dividing. In her beginning stages, she also graduated students who knew how to read and write. Richmond especially emphasized a phonetic program titled “Sing, Spell, Read, and Write.” She added that reading played a significant role in her academic endeavors.

As the interview continued, core beliefs began to surface. Richmond also credited her engagement in Bible study with strengthening students academically, emotionally, socially, and spiritually. She added that she consistently taught them that they could become whatever they wanted to become by using her acting skills to convince them of their capabilities. Comparable to Fantuzzo (2009), Richmond believed in the power of a positive trajectory to overcome poverty. For example, she would use the traditional voice of an elderly woman to describe how she would one day enter their doctor’s office to receive medical assistance. As part of their teaching on spiritual endowment, they learned Philippians 4:13, “I can do all things through Christ which strengtheneth me” (KJV). This was used to support her teaching that students were never to use the word *can’t*. They were, however, allowed to say, “I think I can,” or “I need help.”. If a student used the word can’t, a sound of woe would cross the room because students knew that to do so was forbidden. These high expectations proved to be a strategy of empowerment without regard to socioeconomic status.

Throughout the community, Tender Love Learning Center students earned a reputation for exceeding beyond the norm, especially for poor African American students. Richmond recalled that the assistant superintendent came to her school because he wanted to know how she was sending students to school reading, writing, adding,

subtracting, multiplying, and dividing. She added that he sent teachers to her school to interview her. She continued that she introduced them to "Sing, Spell, Read, and Write," as a technique that she used daily. She emphasized that the use of phonetics was a tool that made teaching reading an easy task. She asserted that she did not allow her students to speak incorrectly. They were required to answer her in complete sentences. She ended by saying that she included as many students as possible in her yearly graduation exercise. Recognized for her ability to discipline some of the most undisciplined children, she recalled teaching a speech to one of the most socially challenged students she had ever encountered. In order to engage students, she engaged parents. For example, when preparing students for graduation, she would tape herself saying their speeches and sent the tapes home with parents, holding them accountable for working with their children at home. She recalled that one African American male student spoke in front of approximately 4,000 people at Mississippi Boulevard Christian Church in Memphis, Tennessee. Thus, a student of low socioeconomic status was able to influence a diverse audience, including many professionals, in a way that impacted his life as well as the life of others. To borrow a word from Fantuzzo (2009), this student's early childhood education "inoculated" him from the limitations of poverty. For this reason, education is seen by many as the only way to escape poverty.

Another highly recommended method of escape from poverty, particularly for African Amercan males, is mentoring. After being held at gunpoint and robbed, Tatum (2005) became bitter. However, he eventually comprehended how quickly a person could become critical of African American males because he became remorseful of categorically criticizing them himself. After a period of meditation, and the realization

that he has two sons who are African American and that his life was spared, he recovered and reinforced his allegiance to highlight problems critical to young African American males and their growth. Tatum realized that the deficiency of a male role model means that a large percentage of these youth are without resources in understanding the definition of manhood. Payne (1996) asserts that when the compatible mentor is present, the person being mentored can enter the refined periods of life at a proper pace and develop relational wealth. Tatum (2005) explained that because of this great need for mentors, social service establishments have prevailed on males to function as mentors for male youths. He related his commitment by advising educators on how to engage African American males in literacy. This is a perfect marriage since African American males can be mentored through reading as well as in person.

As a reference to a successful social intervention for students of poverty, namely mentoring, a second interview was conducted. A community leader, J. G. Smith (personal communication, November 6, 2016) is the General Manager of an Arkansas grassroots organization called Boys2Men/Girls2Women. The purpose of the organization is to aide youth in establishing and prioritizing the four levels of life: God, family, education, and recreation. Concerning helping students of poverty succeed, Smith recommended a network of wrap-around initiatives such as the nutritional programs advocated by Michelle Obama. He added that this network should also include programs such as President Obama's initiative, My Brother's Keeper, counseling, therapy, and any agency that involves mentoring programs such as The Boys and Girls Club. He also suggested that schools invest in relationships with stakeholders such as businesses and civic clubs to

conference on what can be done to benefit students and to avoid duplication of efforts, therefore maximizing resources.

In reference to what allowed him to experience success, Smith stated that with African American males, as with other races, the most powerfully significant resource is time. He added that time is a constant of which leaders must be prepared to give because it is how one comes to understand their world. Interwoven in his explanation of African American males having the same needs, desires, hopes and dreams as others, was his reference to *The Same Kind of Different as Me* by Ron Hall and Denver Moore. This book was one among many used in Smith's program.

In reference to how he succeeded in engaging African American males in literacy, Smith stated that he was shocked and in awe at a new student who participated in a Boys2Men discussion of *Unashamed* by Lecrae Moore and how he was able to quote from the book concerning Lecrae's challenges. Smith also referenced *Uncommon* by Tony Dungy and *The Strength of a Champion* by O. J. Brigance and Peter Schrager as books that would hold their interest. He went on to explain his strategy for engaging African American males in reading by adding that he is fully aware that these males read. Therefore, he makes sure that the things they read are available, such as *Sports Illustrated*. He used for example the fact that four or five males could be found on any given day reading an article about Lebron James. Then, for instance, he might ask them if they knew that Lebron had written a book. In his deliberate attempt to engage these young men in literary discussions, he would provide high interest literature that would provoke them to inquire about the name of the book. This not only led to discussions about the literature but more importantly about the literary connections to their lives.

Smith added that he uses the power of literacy to transfer from physical strength, during weight lifting, to mental strength, as he shouts out affirmations and holds discussions. These book studies are used in a deliberate attempt to engage males in literacy discussions through topics of high interest. In a reflective manner he asserted that the power of literacy has not changed since the time of W. E. B. Dubois. Like Tatum (2005), Smith observed that African American males enjoy citing books. Also, similar to Tatum (2005), Smith understood that discoursing literature with African American males cannot be disconnected from the necessity of ethnic sensitivity. He added that an older African American male, who is now an adult, came back, took out his phone, and began to interview him and video the facility while stating that Boys2Men was where he learned *it*, referencing the facts of life.

Advocating change through addressing poverty is a daunting and continuous task that may appear to be a futile exercise. Nevertheless, as stated by the Schott Foundation (2015), the data trend, revealed in the statistics on poverty, imposes a mandatory obligation upon America and more specifically lawmakers and educational leaders to not only recognize but to also address this enduring deficiency and use the research in successfully addressing it. Additionally, a measure of confidence can be placed in a result, particularly a substantive causal hypothesis, as support for the necessity of rectifying this inequality. Research demonstrates that there are those who are willing to address this difficult obstacle.

A logical strategy for addressing poverty and the literacy achievement gap that exist between African American males and their peers would be to consider existing initiatives, such as the ones mentioned in the interviews, policies, or techniques that have

already yielded positive results. Noguera (2012) suggested that the most relevant solutions to narrowing the achievement gap can be revealed by examining schools that are experiencing success. For example, he referenced Brocton High school, the largest high school in Massachusetts, as a notable illustration of a school that is chiefly serving minority students from a low socioeconomic level, where more than 90% passed the state test that spring, and 80% of the high school students demonstrate proficiency. He also credited their systematic approach to serving students as the reason for their success. Brocton achieved these striking outcomes by meticulously intervening for and with struggling learners and professionally developing instructors in every subject, even physical education, to improve the literacy abilities of their students. This example alone demonstrates that large schools are capable of experiencing academic success.

The idea of a systematic approach can be seen in small schools as well. For example, Brawner (2015) referenced the success of a rural elementary school in Marvel, Arkansas. In 2014, this community, positioned in a small farming area, obtained an A on their state evaluation. More importantly, the school was transformed from consistently being numbered among schools listed in school improvement to acquiring a symbol of excellence on the state issued report card. This was accomplished by targeting literacy throughout the day, after-school, and during the summer. With a total student population of 200, as many as 98% live in homes of low socioeconomic status. The demographics include 80.7% African American, 12.9% Euro-Americans, and the remaining 6% are mostly Hispanic combined with a category designated as Other. They were able to perform this great feat by accessing professional development as well as experts in literacy and math via the Great Rivers Cooperative in Helena, Arkansas. They also

benefited from volunteer college students, a 21st Century Community Learning Centers grant, and a national initiative called Freedom School, which is financed by the Children's Defense Fund. These endeavors include strategies which can be immediately replicated.

Future Research Considerations

In considering how this study can be replicated or extended by way of future research, several suggestions can be made. For example, since this study was conducted in Arkansas, a state that is predominantly rural, the same study could be conducted in a more metropolitan area. Doing so would create an opportunity to compare African American males of poverty from a relatively rural part of Arkansas with African American males of poverty from an urban population. From a different perspective, since the data on the effect of the size of schools was inconclusive, this study could also be extended by conducting a more thorough study on the size of schools. Considering the fact that the small schools movement of New York included flaws such as doing away with many libraries (Schneider, 2016), a study on an improved small schools movement versus large schools could provide clarity on whether it is actually school size or the implementation of more systematic changes appropriate for large and small settings that truly bring about growth in achievement. A third study could take place in a setting wherein a sustained educational intervention was provided in a facility targeting low socioeconomic African American male preschoolers in a learning environment such as Tender Love Learning Center, compared to African American males who did not receive this type of intervention. These students could be observed through Grade 5 or higher to compare the long-term effects of a pre-school education built on high expectations versus

those in the traditional setting for poorer students who simply learn to color in the lines and play outside. From the high school perspective, since Boys2Men/Girls2Women has been in existence for almost 20 years, a fourth study could include a look at African American male participants in a social intervention, such as Boys2Men/Girls2Women using their literacy achievement data, along with their socioeconomic status in comparison to those not receiving such an intervention. This could lead to stronger support for initiatives such as My Brother's Keeper. A fifth study could be conducted by an exact duplication of this study, but replacing Grades 4, 6, and 8, with African American males in Grades 3, 5, and 7. If the results, for example of Grades 3 and 4, 5 and 6, 7 and 8 were similar, these findings could provide information pertinent to the success of certain age groups. A sixth study could be led by conducting a qualitative study of high achieving, low socioeconomic status African American males from large schools and small schools in Arkansas. Thus, by combining an intimate look at the details behind the successes and failures of African American males in Arkansas with a quantitative study, experts could possibly provide better insight into the science behind the scores. Finally, a seventh study could be completed by comparing African American females versus African American males in small schools versus large schools in Arkansas. An extension of this research could prove to be helpful in combating the literacy achievement gap among all students from low-income homes and their higher income peers. It could also dispel some of the myths about capabilities that students do or do not possess simply because of gender.

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Appendix

HARDING UNIVERSITY
INSTITUTIONAL REVIEW BOARD

Status of Request for Project Continuation

(For Board Use Only)

Date: 10/20/17
Proposal Number: 2016-005
Title of Project: The Effects of Lunch Eligibility and School Size on the Literacy Achievement of African American Males
Principal Investigator(s): Sandra Smith

- [x] Continuation request approved.
- [ ] Continuation request approved with modifications.
- [ ] Committee requests further information before a decision can be made.
- [ ] This continuation request has been denied.

Your project continuation request has been reviewed and the decision is marked above. Please read the appropriate text below regarding this decision:

Continuation Approved: If your continuation request has been approved and this study continues unchanged for longer than one year, you will need to submit another ***Request for Project Continuation*** form. If, during this time, there are changes to the research design or data that is collected, you will need to submit a ***Request for Amendment to Approved Research*** form. The IRB reserves the right to observe, review and evaluate this study and its procedures during the course of the study.
Continuation Approved with Modifications: If approved with modifications, you will need to refer to the comments and recommendation on the attached page and submit (1) a revised ***Request for Amendment to Approved Research*** form, and (2) a revised ***Request for Project Continuation*** form within 30 days. You may continue your project on a conditional basis as you await the IRB decision.

Committee requests further information: Please see the attached document and use it to guide required modifications, then re-submit your request.

This proposal has been denied: See the attached document for an explanation of why your proposed continuation request has been denied.

Rebecca O. Weaver
Chair, Harding University Institutional Review Board