

Running head: IMPACT OF HEAD START PROGRAMS

The Impact of Attending a Head Start Program on a
Student's Academic Performance in Selected First Grade Classrooms

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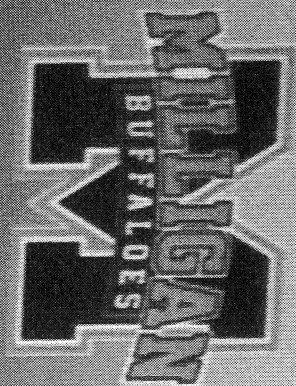
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Abstract

The purpose of this study was to determine the impact of Head Start programs on a student's academic success in selected first grade classrooms. The sample of this study included 12 students in 2 selected first grade classrooms. Of the 12 students, 6 participated in Head Start and 6 did not participate in Head Start, although they had qualified for participation. Data were collected using STAR Early Literacy results, academic grades, conduct grades, attendance, and standards-based report card rankings. Data were also collected using questionnaires and interviews with parents, current first grade teachers, and former Head Start teachers. Data were analyzed qualitatively and four trends were realized. Trend one indicated that Head Start participates out performed Non Head Start participates in the STAR Reading scores. Trend two and three indicated Head Start participates out performed Non-Head Start participates in reading and math grades issued by the teacher. Trend four indicated that Head Start participates out performed Non-Head Start participates in conduct grades. The results of the study suggest that Head Start programs did make an impact on student's academic success in selected first grade classrooms.

Key Words: Head Start Students, Non-Head Start Students, STAR Early Literacy, Standards-based report card rankings, Academic grades, Attendance, Conduct grades



Institutional Review Board Decision Tree

Based on your responses, you do not need approval from the IRB.

It looks like your research is exempt because it is educational research.



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[Return to Beginning](#)

Table of Contents

Abstract.....	2
IRB	
Table of Contents.....	3
Chapter	
1	Introduction..... 5
	Statement of the Problem..... 7
	Purpose..... 7
	Significance..... 8
	Limitations..... 8
	Definitions..... 9
	Overview of the Study..... 9
2	Review of Literature..... 10
	Head Start Programs..... 12
	Overall Student Performance..... 14
	School Readiness and Academic Success..... 15
	Social and Emotional Development..... 15
	Health and Wellness..... 16
	Family Engagement and Self-Sufficiency..... 16
	Long-Term Impacts..... 17
	Academic Data..... 18
	Conclusion..... 24
3	Methodology and Procedures..... 25
	Introduction..... 25
	Population..... 25
	Sample..... 26
	Data Collection Instruments..... 26
	Procedures..... 26
	Research Question..... 28
4	Data Analysis..... 29
	Data Collection..... 29
	Research Question..... 31
	Results Derived from STAR Reading Scores..... 31
	Results Derived from Reading Grade Card Scores..... 32
	Results Derived from Math Scores..... 33
	Results Derived from Attendance..... 34
	Results Derived from Conduct Grades..... 35
	Results Derived from Parent Surveys..... 35
	Results Derived from Teacher Interviews..... 37

5	Findings, Recommendations, and Implications.....	39
	Introduction.....	39
	Summary of Findings.....	39
	Conclusion.....	41
	Recommendations.....	42
	Implications.....	43
	References.....	44
	Appendices.....	48
	Appendix A.....	50
	Appendix B.....	52

Chapter 1

Introduction

Head Start was established in 1965 as part of the War on Poverty to provide preschool, health, and other social services to poor children age three to five and their families (HHS, 2006). Disparities in cognitive and non-cognitive skills along race and class lines observed before children start kindergarten motivated the interest in developing Head Start (Tremblay et al. 2004; Brooks-Gunn and Marksman 2005; Cunha et al. 2005). Head Start and preschool programs across the United States have gathered multiple forms of data to inform how children are impacted both short and long-term. Conclusions have been established that there has always been an important role for a national Head Start program, and they are well justified (Ripple et. al, 1999). In 2005, a federally sponsored evaluation of Head Start found that there was a significant difference in test scores one year out (Ludwig & Miller, 2005). These measurements were taken in comparison to control groups in home and center-based care.

Jens Ludwig and Douglas Miller finalized their research in 2005 to measure the lasting impacts of Head Start programs into adulthood. It was found early on that the benefits of pre-K programs have not always painted a positive picture as it relates to how children perform in early elementary grades and that there was little supporting evidence that there was impact over a long period of time. Prior research on these programs revealed no lasting gains for preschool students after they enter regular grades as it relates to short-term growth. According to USA Today in 2015, by the time children reach early elementary, the average preschool student has learned no more

than children who were not in preschool. However, President Barak Obama proposed high quality preschool for all with a major price tag of federal dollars, creating questions around the quality, limitations, or inability to track students from preschool well into the early grades.

Ludwig and Miller's continuity study of cohort groups who were enrolled in Head Start programs in 2005 measured the program's impact on work, earnings, criminal activity, community mobilization, high school and GED completion, and eighth grade math and reading achievement scores. The findings from their research dispute the argument that Head Start has been a failure from the beginning. Six years prior to Ludwig and Miller's study, Olsen and Olsen argued that when the emotional appeals are cleared from the table, what is left is a costly but unsuccessful experiment. "Head Start is not working.... accept that and let it go"(Olsen, & Olsen, 1999). However, Ludwig and Miller found that for children in the poorest counties in the South during the 1960s and 1970s, Head Start seemed likely to have generated benefits in the excess of costs (2005). Unfortunately, because of the length of the study and other factors that could have impacted the results, it was difficult for them to establish that specific services were indeed a significant factor in impacting all of the categories that were measured. However, the research did find that short and medium-term impacts on test scores are not necessarily a reliable predictor of long-term success, contradicting the negative views of Head Start as having "disappointingly small" short-term impacts (Besharov, 2005).

Statement of the Problem

It has been proven that longitudinal studies provide evidence that Head Start programs have more of an impact than originally thought. These studies unfortunately considered individuals who were a part of Head Start and Pre-K programs that were different than they are in the twenty-first century. The alternative learning environments that were measured in Ludwig and Miller's study were much different than they were in 2005 when the research was complete, making the long-term results difficult to apply to short-term suggestions. It is possible that there has been changes in Head Start programs and eligibility over the years. The likelihood of these changes make it difficult to measure Head Start effectiveness over long periods of time. This creates a need for more thorough and solid research to establish how Head Start programs (or lack thereof) can impact short-term results, specifically in the areas of academics, health, and social adjustment. Therefore, the problem of the study was to investigate the impact of Head Start programs on a student's academic performance in first grade.

Purpose

The purpose of the study was to examine the impact of Head Start programs on a student's overall performance in first grade. The study measured students who were enrolled in a Head Start classroom at an eligible age in comparison to students who would meet qualifying criteria but did not receive Head Start services.

Significance

It is important to understand the impact that Head Start programs could potentially have on student success in the short-term. More specifically, understanding student growth and progress throughout the early grades could significantly impact the availability, frequency, and location of Head Start in qualifying systems. Previous studies have measured the long-term impacts and effects of Head Start programs on multiple factors, but it is important to know the short-term impacts on students who receive access to Head Start and students who have qualified but did not receive access. Students qualify for Head Start by meeting specific demographic and family income criteria. This study will examine the difference in academic growth and achievement in students who have qualified and received Head Start services and students who have qualified and did not receive access. It will also measure differences in behavior, social interaction at school, and mastery of standards.

Limitations of Study

1. This study only examined a limited subset of students within a population in the Carter County School System. The results may not be generalized to other populations.
2. Data were collected only from the students who had permission from their parents and may differ from those who did not have permission.

Definitions of Terms

Student performance: Academic test scores (reading and math), student behavior surveys administered to teachers, mastery or non-mastery of expected standards in first grade.

Head Start Program: Federally funded, income-based preschool program for 3-4 year old students.

Selected First Grade Classrooms: Classrooms that have students enrolled who would have qualified for Head Start services at the appropriate age but were not exposed to any access to any Pre-kindergarten services.

Impact: The extent to which Head Start services limit or enhance qualifying students' ability to have greater success as a result.

Head Start Attendees- Students who met specific income qualifications and were enrolled in the Head Start program for the entire school year.

Overview of the Study

This study includes five chapters. Chapter one is an introduction which includes the statement of the problem, purpose of the study, and significance of the study. This chapter also discusses limitations of the study and important key definition, as well as an overview of the study. Chapter two discusses the review of the literature. Chapter three consists of the methods and procedures included in the study. Chapter four examines and explains the data analysis. Chapter five concludes with the results of the study and recommendations for further research.

Chapter 2

Review of Literature

For a long time it may have seemed unnecessary to seek out preschool or Pre-k for children. Preschool can have an overwhelming cost associated with it for parents without much guarantee of a return for the investment. After all, we all want what is best for our children. Parents sometimes have funny ways of going about it but the best interest of our kids usually makes it's way to the top priority.

So if preschool or Pre-k services can actually provide a benefit, which one should we choose? Which one has the best program to help our children get ready for the high demands of kindergarten? These questions, along with many others, are necessary when looking at whether or not Pre-k services like Head Start carry any benefit.

Kindergarten has changed over the years. Many of the tasks that children learned in first grade years ago they are learning now in kindergarten. The necessary range of skills needed when screening for kindergarten are tough and require support at home that parents must provide. In cases where parents aren't able to meet the demands of kindergarten preparation, Head Start sweeps in to save the day. But, not without it's own set of limitations.

If you are a middle class family, you can count Head Start out of the equation. Head Start, as you will read in the next section, is geared and driven toward helping and assisting children and families that live at or below the federal poverty line. Research over the years has provided tons of information that has lead us, as educators, into the understanding that children living in poverty need the services that Head Start provides.

The best part about it is that Head Start is comprehensive. In other words, it covers so much more than academics and supports families in ways that they normally wouldn't be exposed to if it weren't for federal dollars that keep Head Start moving. Social and emotional health, family and parental support, physical health and nutrition, self-sufficiency, and school readiness are areas in which Head Start was originally designed to help. The overall goal was to meet a deficit area that was noticed in students who were coming from families that lived in poverty. There was a noticeable gap in these areas when comparing students who were enrolling from middle to upper class families and those who were coming from impoverished families. The design of the program was to improve structures in the classroom and in the home that would both support and meet the needs of these deficit areas so that students would be ready for kindergarten.

Over time studies have shown both support and resistance for Head Start and continuing the funding and focus on it. As you will read in later sections of this chapter, the various types of studies, sample types, timing of studies, and the comprehensiveness of them all combine to create a wealth of data. The data can often times report as confusing and even contradictory. The key to most of the significant studies is the control and experimental groups. Supportive evidence has been found regarding Head Start when the groups being compared are those that have had Head Start and those who have not. Although there are multiple other variables that can come into play in all of the succeeding studies in this review, it is necessary to know how much academic impact Head Start can make for students who take advantage of services in comparison to those who normally would have qualified but did not receive services. The research

associated with this literature review examined students who fit these two categories and their academic success up to the first grade.

There are state and federally funded Pre-k programs that families have options with. The similarities and differences of Pre-k programs and Head Start will be explored in this chapter. The intent and purpose of this review is to research and discuss the benefits and pitfalls of Head Start since its inception in the 1960s and hopefully get a better look at whether or not the academic components are lasting through the first grade.

Head Start Programs

Head Start programs have been around for over 50 years. They have been providing services to students, families, and communities the necessary resources and funding to do just what the title suggests: get a head start. One of the primary focuses of Head Start is early learning. Children are prepared for school through relationships with adults, play, instruction, and progress through social skills and emotional well-being. Secondly, health is supported through focusing on perceptual, motor, and physical development. Children receive regular screenings, nutritious meals, oral support, and mental health support. Not only the children, but families in entirety are connected with the dental, medical, and mental health services they need to ensure that children are also part of the service focus. Lastly, family well-being is addressed by supporting families in finding housing stability, continuing education, and financial security. Parent-child relationships are strengthened through support in the school and in the home (ECLKC, 2016).

Often times there is confusion when comparisons are made between Pre-K and Head Start programs. Head Start, by definition, is a form of pre-kindergarten program but differs in its functionality and target audience in comparison to Head Start. Most Pre-K programs in public schools are federally funded through Title 1 funds. Districts receive Title 1 funding and eligibility is based on demographic data of the service area that the particular district or school resides (Serving Preschool children through title 1). Eligible schools and districts are measured based off of a minimum number of students that are enrolled in the school that are considered in a low-income category (ESEA section 1114(a)(1)). Even though Pre-K eligible schools and districts qualify by these categories, the primary difference in a Title 1 Pre-K program and Head Start is that Pre-K programs offer their services to any student that is residing in the service area. Head Start, however, is based primarily on income contingencies that target specific students and families. Children must be from birth to age five and family incomes must be below the federal poverty guidelines or be considered homeless or receiving public assistance (HHS poverty guideline).

The focus and benefits of Head Start and Pre-K programs are similar. Research has shown that children have a greater success rate as readers who begin first grade with strong skills in letter and sound correspondence, emergent reading and writing, basic mathematics concepts, and metacognitive aspects of literacy (Connor & Morrison, 2014). Both Head-Start and Pre-K programs spend a great amount of money and time focusing on these areas to strengthen student success. The key to both is that there is a large focus on primary influences that research suggest are key to children's academic success. These factors are categorized and tailored to the child, sociocultural factors,

parenting, and defining interventions to give children a better chance to succeed in early grades (Connor & Morrison, 2014).

Overall Student Performance

There are various samples that have been used in studies that measure the impacts of Head Start, but the overall results typically include categories that measure overall student performance. For example, many of the studies included in this literature review consider students and families who have had access to Head Start programs and those who have not. However, students and families who “have not” could fall into a few separate categories, one in which is most frequently assessed in research. Those who “have not” typically would not have qualified at the time of application due to income requirements. A separate category of those who “have not” would be a family or student who would have qualified at the time of application but did not receive access or chose not to participate. Studies comparing Head Start results with those who “have not” been enrolled but were eligible at the time are difficult to find. Most studies compare those who participated in a Head Start program and those who did not and could not.

Defining student performance in both the classroom and in research must be specific. Academic success is typically referenced as a key indicator of student performance in all grades. However, in Head Start programs, multiple factors contribute to defining student performance. Multiple studies have been conducted over time with both longitudinal and immediate implications. The lasting effects of Head Start are measured by following cohort groups over time to measure the effectiveness of

multiple variables. Likewise, throughout similar studies, immediate impacts of Head Start have been measured as well. These measurements have yielded arguments for the retention of Head Start, the elimination of it, or suggestions for overall improvements. The following categories are those in which various research studies have shown both positive and negative impacts from Head Start programs.

School Readiness and Academic Success

School readiness and academic success are focuses of Head Start programs so that children are “school ready” and succeed academically. Both of these factors are important to student success not only in early grades but over time (middle grades, high school, and post-secondary). According to the National Head Start Association, Head Start children have a higher likelihood of graduating high school, attending college, and receiving a post-secondary degree (Bauer et al. 2016). Children also make progress toward norms in language, literacy, and math during the program year and score at the norm on letter-word knowledge and program exit (Aikens et al., 2013). These statistics are important to consider, especially as it relates to how students are prepared for future education and how well they perform immediately after program implementation.

Social and Emotional Development

This category is considered a factor in student performance because of the amount of social and emotional demands placed on students when they begin school. Low-income children, especially English Language Learners and Spanish speaking students, close disparities among cognitive skills through Head Start access (Bloom &

Howard). Head Start children also increase their social skills, impulse control, and approaches to learning and decrease their problem behaviors like aggression and hyperactivity over the course of one year (Aikens et al., 2013).

Health and Wellness

A third factor that falls into a non-academic category is health and wellness. There have been calls in recent history for Head Start to become more academically focused and shift away from “whole child development” (Ron Haskins, 2004). Both the student and immediate family are the focus of access to quality health care and focused plans of healthy living and nutritional habits. Because of these services, Head Start children are more likely to receive dental checkups and have healthy eating patterns than students who did not participate in Head Start (Lee et al. 2013). These children typically have lower Body Mass Index (BMI) scores and are less likely to be overweight compared to children in non-parental care (Lee et al. 2013). Lastly, adults who received Head Start services are 19% less likely to smoke (Anderson, et al. 2010) and are 7% less likely to be in poor health as adults in comparison to their siblings who did not receive services (Johnson, 2010; Deming, 2009). These findings indicate that Head Start services have long-term and lasting impact that exists beyond the beginning years.

Family Engagement and Self-Sufficiency

Family engagement, home visits, and a focus on the family structure are all parts of Head Start that would fall under the category of student performance and can help indicate student success in the program. Academic growth in children who were in Head

Start clearly benefits from higher family engagement in learning. Parents who have children in Head Start are also more likely to increase their educational levels during their children's early years in comparison to other at-risk parents who do not receive services (Sabol & Chase-Lansdale, 2014).

Head start children can vary between the 3 and 5 years of age. In 2003, 4-year old children made up 49.2 percent of the newly entering children in Head Start, while 45.7 percent of the newly entering children were 3 year of age. A small 5.1 percent were 5 years old. Statistics show that these children lived in homes that have mothers that were on average 28.1 years of age and only 40 percent of those were married. Most of the fathers of Head Start children were single, employed full-time, and held only a high school diploma. A key statistic concerning fathers is that in the 2003 research findings is that more than half of the fathers did not reside in the household with their Head Start children, and close to 30 percent of the fathers had seen their children more than 5 days during the previous year (HHS, 2003).

Long-Term Impacts

It has long been argued by different parties that Head Start could be for naught and that long-term results can be skewed or difficult to define. As mentioned earlier, most studies that have significant results have been those that study long-term impacts within a cohort group and do not focus on as matter short-term result. The National Head Start Association reports that children who attended Head Start in the 1960s and 1970s were 28.3% more likely than their siblings to complete high school and 27.6% more likely to attend college (Garces et al., 2002). This longitudinal study supports the

impact of Head Start when comparing to other children who may have qualified but did not take advantage of services for whatever reason, assuming that the “siblings” reside in the same household and were dependents of parents who fell below the poverty line. Educational and wage benefits were higher where Head Start and schools were funded at higher rates (Johnson, 2011).

Furthermore, Head Start students are less likely to be in poor health and “idle”- meaning out of school and unemployed (Deming, 2009). Ludwig and Phillips finalized research in 2008 that discovered long-term benefits when weighed against the cost of Head Start. Outcomes from access to Head Start can range from higher paying jobs, access to higher education, increased local employment and economic return, and reduced costs in government assistance. These, among other findings, offer strong support for Head Start services and their lasting impact for students and families.

Academic Data

Many of the studies that have been conducted over time include academic component. These components largely consist of testing data over short periods of time and other measurements of “student success” typically are categorized by the items in the previous section and are measured over longer periods. Once again, in reviewing the literature, it is difficult to locate research that has been conducted in the short-term that measure student academic success in comparison to students who would have qualified but did not receive services. Most of these studies measure academic performance and testing data between students who have been in Head Start at an early age against a student who did not qualify. These studies not only bring in academic data to the

measurement but also are skewed because student family history and socioeconomic status are different.

In a study conducted by Eric Jensen, it was discovered that toddlers in professional working families do not use the same amount of vocabulary words when talking with their mothers as low-income mothers use when talking to their toddlers (Jensen, 2009). This research would support a hypothesis that if both student samples that are being measured are not in the same socioeconomic class that their before-school experiences could have been drastically different. It has also been discovered that more effective readers were exposed to a wider range of vocabulary words before they even begin school, which is only one of many potential factors that could skew results when measuring students if their life experiences before school aren't as similar as they can be (Jensen, 2009).

One recent study that concluded recently compared family members who qualify for Head Start and their academic success was performed by David Deming in 2009. Deming's sample consisted of Head Start children that were in the same household that had siblings who did not participate in Head Start. These students were enrolled between the years of 1984 and 1990. He found that the long-term impact of Head Start revealed a 0.23 standard deviation and that Head Start had an even larger impact for relatively disadvantaged children. In studying and analyzing academic data only, he analyzed three tests. The Peabody Picture Vocabulary Test (PPVT), the Peabody Individual Achievement Math subtest (PIATMT), and Reading Recognition subtest (PIATRR). All three are widely used and validated tests of cognitive function and/or

academic achievement of children. These tests were administered every survey year (which is every other year in this particular study) to children ages 5-14.

It was found that there was a significant increase in Head Start children on the PPVT for white and Hispanic children but faded out significantly for African American children by age 10. The concluded findings of the study reported that there was a test score gain of about 0.15 standard deviations at the initial ages of 5-6 but fades out to 0.05 by ages 11-14. This tells us that there is more of an impact of Head Start at a young age as it relates to academic data and test performance, and although the impact is still present at later ages, it is less.

Other studies have measured the impact of Head Start programs on math and language skills in students who were enrolled at various lengths. For example, some students can become eligible and take advantage of Head Start services for two years while most students are eligible and participate for only one year (before kindergarten). Minjong Youn conducted a study that measured these two groups by using assessment results at the end of Head Start and Kindergarten. All of the assessments were conducted one-to-one. The components that were measured were language skills (receptive vocabulary), emergent literacy skills, numeracy skills, and comprehensive math skills. In summary, students who were exposed to two years of Head Start performed significantly higher than those who were only allowed one year of attendance. The range of standard deviations ranged from two-thirds to one in favor of students who were enrolled for two years in all four categories. The key finding in this

study that connects to research of first-graders is that these results were sustained through the end of kindergarten.

This pattern of results contradicts some of the arguments that children reach a threshold of performance after only one year of Head Start and that a second year of learning would simply serve as a “repeat” of skills (Reynolds, 1995). Needless to say, this study did have its own set of limitations. The study focused primarily on duration of enrollment and access to services but did not focus on the extent of which services were given or the intensity. Absences, location, exposure to learning activities, and other important factors could cause a difference in results, even in the control group. Despite these limitations, it is important to recognize that there was a significant difference between the two groups and that it is compelling evidence that Head Start and the services it provides can significantly impact children, even in the short-term.

The United States Department of Health and Human Services have conducted their own series of studies over time to evaluate Head Start’s effectiveness. Since 1965, the federal government has spent more than \$167 billion on the Head Start program, without conducting an rigorous evaluations until a study in 2010 was completed (Muhlhausen & Lips, 2010). Average spending on Head Start between the years of 1965-1989 was around \$1.9 billion annually, only to see the annual spending soar to a recent \$9.5 billion overall total in 2009 (Department of Health and Human Services). This study, which began as a result of a mandated evaluation in 1998 by the United States Congress, started in 2002 but the results were released in 2010.

The control and experimental groups were selected from a sample of approximately 5,000 children who applied to participate in Head Start (Head Start Impact Study). The sample was randomly divided into control groups and intervention groups. The intervention group participated in Head Start while the control group did not participate in the program. An interesting factor in the study is that the parents of the control group children were not discouraged from enrolling their children in any other early education programs. This could significantly impact the results of the study in the 21st century as opposed to studies that may have been conducted at the inception of Head Start. Because of state and privately funded Pre-K programs and state-evaluated daycare centers, it would be interesting to know how many of the control group children were actually exposed to any type of Pre-k program. The data results were not included in the results of the study.

The findings of the 2010 Head Start study revealed that the program fails to provide critical areas of development in which the program was developed to address. Cognitive, socio-emotional, health, and parenting outcomes were all measured in the study. Benefits were found by providing access to head start to both 3-year olds and 4-year olds in health, cognitive and parenting domains. Only the 3 year-olds were affected in the area of the social-emotional domain. However, it was also discovered that any benefits that students gain in the above-mentioned categories all but disappear by the time they are in 1st grade. Kindergarten teachers actually reported poorer math skills for children in the Head Start group in comparison to those in the control group (Aikens, 2013).

Many attempts have been made to undermine the findings in this study. The Head Start Family and Child Experiences Survey (FACES) found that Head Start children made gains in vocabulary, math, and writing skills during the Head Start year (HHS, 2003). It has been argued that the design that FACES uses is not comprehensive and complete enough to measure Head Start's effectiveness. For example, it could be questioned that the gains were largely a result of some parents being more active in teaching their children at home, creating a threat to the validity of the study. This is not necessarily a factor that would only impact this study but could impact any study that measures cognitive abilities. As a matter of fact, any educational study in which parents and students reside in the same household would have to take this factor into consideration.

It has been argued that FACES did not account for naturally evolving cognitive abilities in children that happen with age. In the study there was no control group and it would be difficult to establish a control group in any study that takes into account "evolving cognitive abilities." The results of the study were a result of a pre-test and post-test format. Some have argued that this type of research does not take into account the fact that students can adapt and learn how to perform better on the year-end test. However, it was not mentioned in any way that this type of adaptation could potentially be a critical skill that is part of cognitive development for all students.

At the time of this study, there were calls for an increase in funding by the Obama Administration to either improve, consolidate, or reform the existing programs in place such as Head Start. The Early Learning Challenge Fund would award competitive

grants in specific states that expand early childhood education programs to the overall tune of \$8 billion in new dollars. The bottom line from the results insist that the United States Government should end ineffective programs and consolidate duplicative programs. Furthermore, the results yield an opportunity to reform the programs that are remaining so that they serve children and families better (Muhlhausen & Lips, 2010).

Conclusion

In conclusion, it is apparent that various studies around Head Start have brought different results as it relates to academic success. Some studies support the idea that Head Start has a positive impact on student academic success in both the short and long-term while others have questioned it's impact. Overall, the federal government has spent billions of dollars since the inception of Head Start to keep it's services in place. Only in recent history has there been a call for revision of Head Start and, in some cases, calls for termination. This study will focus more specifically on the academic success of students in specific first grade classrooms and how Head Start has impacted the results in comparison to students who did not attend Head Start. The key factor in this study will be that the control and experimental groups will differ in that one will be Head Start students and one will be students who would normally qualify but did not take advantage of services for whatever reason. This will hopefully help determine whether or not the effects of Head Start on academic success are evident or diminish in specific first grade classrooms.

Chapter 3

Methodology and Procedures

Introduction

The purpose of this study was to investigate the impact of Head Start Programs on academic success in selected first grade classrooms. The study investigated student's academic success as it relates to exposure of a Head Start program. The study also investigated student's social and emotional health through the lens of both the classroom teacher and parent. The researcher wanted to determine and distinguish whether or not Head Start had a significant impact on academic success by the end of first grade. The researcher also wanted to determine whether or not parents and teachers felt that social and emotional health of students was impacted by Head Start programs by the time students reached the end of first grade.

Population

The population of the study was from one elementary school located in Elizabethton, Tennessee. This elementary school is located within the Carter County School system. It contains grades Head Start through fourth grade. There are five hundred fifty-one students that attend the school, of which 270 (49%) are female and 281 (51%) are male. The demographics of this school are as follows: 493 (89.5%) of the students are white, 13 (2.4%) were African American, 26 (4.7%) were Hispanic, 2 (.4%) were Asian, 1 (.2%) were Native American, and 1 (.2%) were Pacific Islander, and 15 (2.7%) were Multi-racial. The number of students who were economically disadvantaged were 395, which is 71.7% of the school.

Sample

The sample of this study came from two (2) selected first grade classrooms within the school. Three (3) students in each class attended the Head Start program at the elementary school. Three (3) other students were randomly selected from the same class based on the fact that they would have qualified for Head Start based on income levels but did not attend a program. There were twelve (12) students total in the research sample, six (6) students who received Head Start services and six (6) students who did not receive Head Start services but would have qualified at the time of enrollment. The student's gender consisted of six (6) girls and six (6) boys.

Data Collection Instruments

The data collection instruments used in this research were questionnaires and interviews with parents, current first grade teachers, and former Head Start teachers (when applicable). The questionnaires to parents asked about health screenings and their opinion of their child's academic success after Head Start. Academic data were collected from sources within the classroom and previous data from Head Start classrooms (when applicable). Academic data includes STAR Early Literacy results (screening and progress monitoring), academic grades, conduct grades, attendance, and standards-based report card rankings.

Procedures

Permission was needed in order to conduct the research. Parents were given consent forms so that student data could be collected. Furthermore, school permission was given in order to access academic and attendance records. The principal gave sole

permission at Happy Valley Elementary to conduct the research with the support of both the Head Start Supervisor and Elementary Supervisor. Permission was sought from two first-grade teachers out of five total first-grade classrooms within the school. The two teachers who were selected had students enrolled that had participated in Head Start before. Approval was also sought from Milligan College IRB (Institute Review Board).

After permission was received, the researcher selected three students from two selected first-grade classrooms that had been previously enrolled in Head Start. The researcher also randomly selected three students in the same classrooms who had not been previously enrolled but met the criteria to be enrolled in a Head Start Program. Academic records, attendance records, grades, and screening results were collected for all students involved in both classrooms. Parent surveys were also sent home after requesting permission for student participation. The survey results, along with all other student data, were compiled and examined to determine the differences or similarities.

Both first grade teachers were interviewed using the same questioning tool to gather data about the students. No data were collected that were not measurable against any other data in Head Start, accounting for students who had actually participated in Head Start before. All students were required to have accessible and complete data or another student was selected. Data were collected at each nine-week grading period and during each screening window. Parent questionnaires and teacher interviews were completed at the conclusion of the school year in order to measure the final data and results from both first-grade classrooms.

Research Question

Research Question 1: What is the impact of attending a Head Start program on a student's academic performance?

Chapter 4

Data Analysis

The purpose of this study was to examine the impact of a Head Start program on academic success in selected first grade classrooms. The study was conducted at Happy Valley Elementary school within the Carter County School System in Tennessee where selected students in two different first grade classrooms were examined. This study shows that among Head Start students there were noticeable trends that proved Head Start is beneficial in certain categories of academic success. Head Start programs provide those students in lower socioeconomic homes the benefit of getting prepared for kindergarten without the high cost.

Data Collection

The data for this qualitative study consisted of reading and math scores, attendance, conduct grades, parent surveys, and teacher interviews. The data were collected to compare the impact of a Head Start program on academic success. There were twelve students selected from two different first grade classrooms. The demographic profile of the sample is displayed in Table 1.

The researcher collected data such as student report cards that included reading and math scores, student attendance and conduct grades. An average was calculated for each category. A parent survey (Appendix A) was given to each student's parent. The survey consisted of questions that related to the student's readiness for kindergarten, preparedness for reading and math, and student health and behavior. Data were also collected using teacher interviews, see (Appendix B), that were given to

the former Head Start teacher and the current First Grade Teachers. The interviews revealed the teaching strategies of each teacher along with their thoughts on the importance of attendance and conduct in the classroom.

Table 1: Demographic Profile of Sample

ID	Gender	Head Start Participate
<u>Class A</u>		
Student 1	Female	Yes
Student 2	Female	Yes
Student 3	Male	Yes
Student 4	Male	No
Student 5	Female	No
Student 6	Male	No
<u>Class B</u>		
Student 1	Female	Yes
Student 2	Male	Yes
Student 3	Male	Yes
Student 4	Male	No
Student 5	Female	No
Student 6	Female	No

Research Question

This study consisted of one research question that lead the analysis of the data collected. The research question was as follows:

What is the impact of attending a Head Start program on a student's academic performance?

This research question was answered using the data collected from the reading and math scores on the report cards, attendance, conduct grades, parent surveys, and teacher interviews.

Results Derived from STAR Reading Scores

There were specific categories in which students were identified after the first screening results in the Fall semester. When looking at students who did not participate in Head Start (NHS), there were none that performed "At or Above Benchmark" while among the students who did participate in Head Start (HS) there were 33% (2 out of 6). There were also 50% more students that were categorized as "On Watch" and "Intervention" in the NHS group as opposed to the HS group. There was one student in each subgroup that qualified as "Urgent", the lowest scoring category of the four.

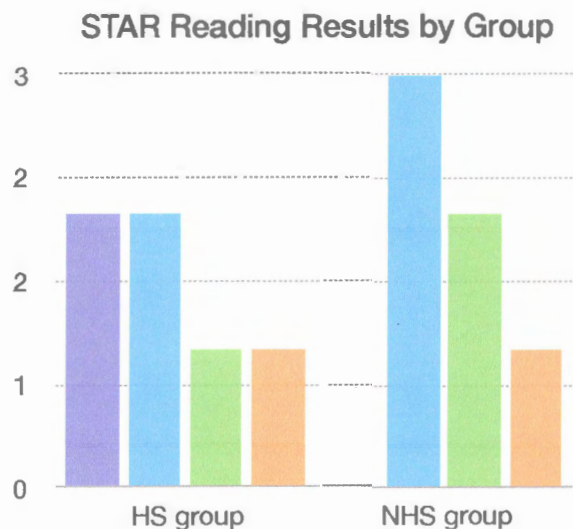
There was an interesting trend to notice concerning students who were "At or Above Benchmark" and "On Watch." These categories, according to the STAR screening results, places a student at the likelihood of 70% or better to be proficient on the TCAP Assessment in 3rd grade. The data from this particular set would indicate that 50% of

students in the NHS group are projected to be proficient readers in 3rd grade while 67% of the HS group are projected to be proficient readers in the 3rd grade (See Figure 1).

Figure 1:

STAR Reading Results by Group

CATEGORY	HS GROUP	NHS GROUP
At/Above Benchmark	2	0
On Watch	2	3
Intervention	1	2
Urgent	1	1



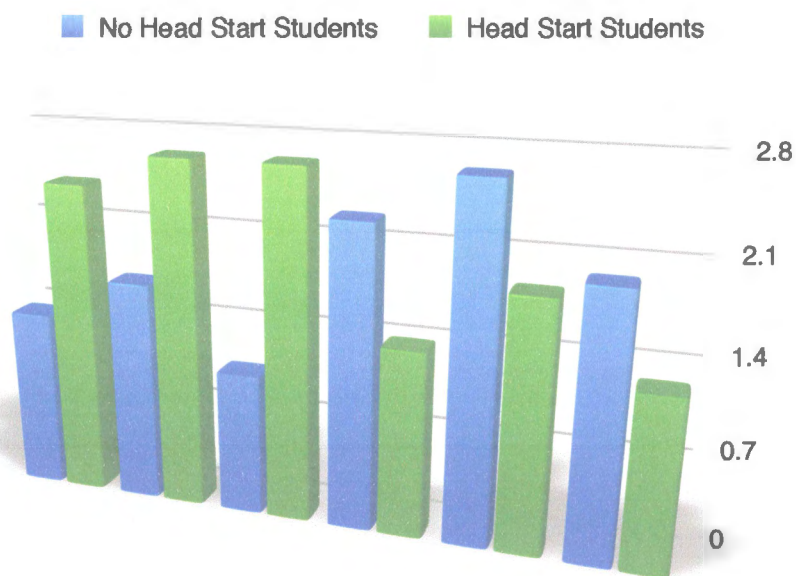
Results Derived from Reading Grade Card Scores

Students were ranked in mastery of standards in reading at the time the data were collected. Students who were exposed to Head Start services had a slightly higher overall average in mastery than those who did not receive Head Start services. The

overall average in the NHS student group was 1.85 while the overall average of the HS group was a 2.05, a +0.3 difference for the HS student group (see Figure 2).

Figure 2:

Student Reading Scores (Teacher-Ranked Grade card Data)



Results Derived from Math Scores

Students were not exposed to STAR Math at the point in which data were collected for this research. In looking at current averages of teacher ranked scores on the grade card, the standards that were scored were averaged for an overall level of performance in Math. Students were ranked on a 1 to 4 scale based on their mastery of the standard.

There were two students in the HS category that scored an average of 3 while one student in the NHS category scored an average of 3. There was one student that scored a 1 in the HS group while two students scored a 1 in the NHS group. There were no scores of 4 issued to either subgroup and the same number of 2's were earned by both subgroups (two each). The overall average of both subgroups differed by 0.33 with the NHS group carrying an average of 1.77 and the HS group carrying an average of 2.

Results Derived from Attendance

The total number of days absent were collected for each student. In the district that the data were collected, chronic absenteeism is defined as 10 or more days. Students were identified as such in each subgroup.

Within the NHS group there were 2 students identified as having chronic absenteeism. Both students had missed 10 and 11 days respectively. In the HS group there was one student who was considered chronically absent with a total of 11 missed days. There was not a significant difference in the total number of days missed in the chronically absent category but there were more students chronically absent in the NHS group than in the HS group.

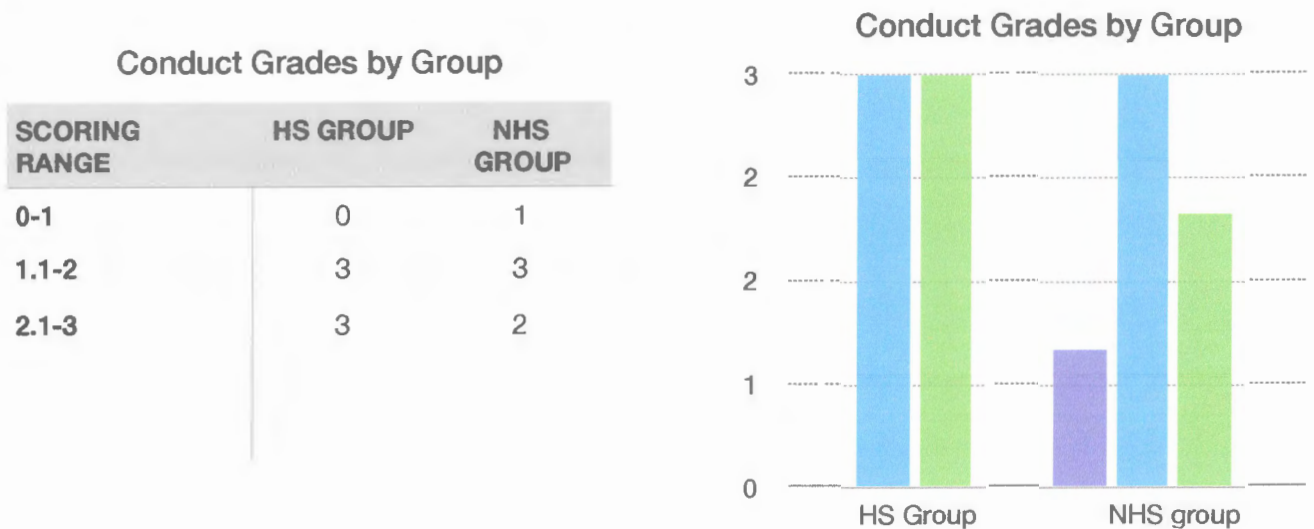
The total number of days missed by the NHS group almost doubled the number of days missed by the HS group. The NHS group had missed an average of 6.83 days for the year while the HS group missed an average of 3.5 days per year. This is a difference of 3.3 days per student (51%).

Results Derived from Conduct Grades

The results of conduct grades issued by the classroom teacher indicated that students who did not receive Head Start services scored lower than students who did receive Head start services. Each student received a ranking of 1-3 for conduct, 3 being the highest score possible.

More students in the HS group received an overall score of 3 than did the NHS group. This trend allowed for a 0.2 difference in scores between the two subgroups with the HS group holding the slight edge (2.38) over the NHS group (2.13)(See Figure 3).

Figure 3:

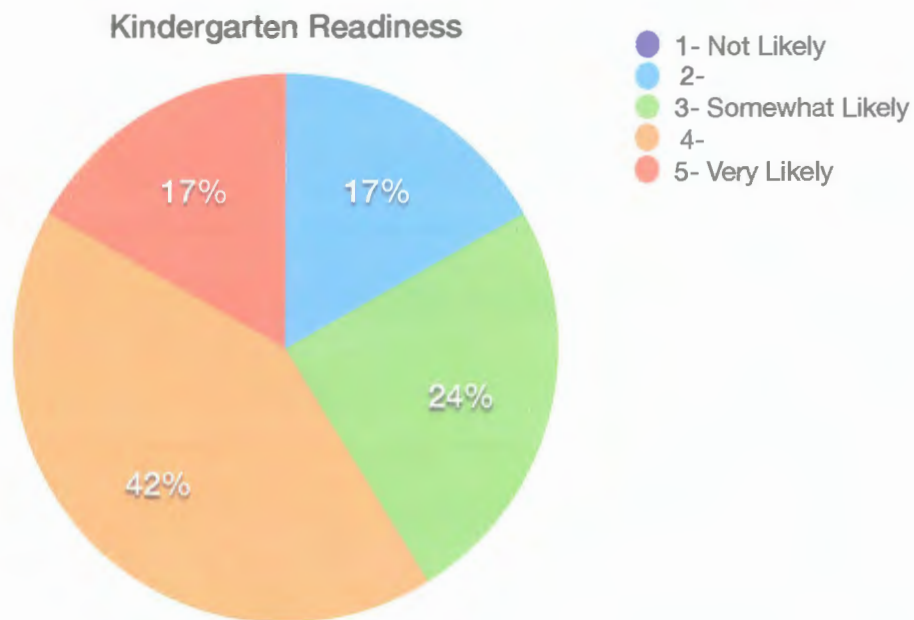


Results Derived from Parent Surveys

Each student was sent home with a parent survey. The parent survey consisted of ten questions that were related to the student’s readiness for kindergarten and first

grade, preparedness for reading and math, student health and student behavior. The results scale was based from 1-5, with 1 being very unlikely and 5 being very likely. The results of the parent survey indicated that 83% of all parents surveyed believed their child was ready for kindergarten upon beginning the school year (See Figure 4) and 75% believed their child was ready for first grade at the beginning of the school. Results also indicated 75% of parents felt their child was ready for reading, while 50% felt they were ready for math. The survey showed results indicating that 83% of parents viewed their child’s behavior as acceptable while at home. These results include both the HS group and the NHS group. There were no noticeable trends between the subgroups.

Figure 4:



Results Derived from Teacher Interviews

The researcher conducted interviews with the former Head Start teacher and the two selected first grade teachers. The interview questions revealed the teaching strategies of each teacher along with their thoughts on the importance of attendance and conduct in the classroom. The overall trend between all teachers was how important literacy skills are to early childhood. The Head Start teacher focuses on letter recognition through games and small groups, clapping out syllables in student's names, and fostering a love of reading and books through a library center located in the classroom. Both first grade teachers focus on reading and phonics skills through small groups and added help through RTI groups. They believe in encouraging students to work toward their Accelerated Reader (AR) goals and strive to differentiate through setting different goal levels for each student based on their reading level. This is a highly promoted activity within the school, in which a celebration is given to those students who have met or exceeded their AR goal.

Another trend found within the interviews was the importance of student attendance and conduct. All teachers believed students being on time and at school everyday establishes routine and a certain type of expectancy. Having students at school everyday aids in positive student behavior and good classroom management. The Head Start teacher commented on the fact that students entering school for the first time tend to struggle with routine and parent separation anxiety. Those students with high attendance rates adjust more quickly and develop a love of school and learning. The first grade teachers believed attendance promoted better reading skills and overall

grades, one commenting that students cannot learn if they are not at school. Based on data results and teacher interviews there is an overall trend that those students who attend Head Start show a higher attendance rate and have higher conduct grades in first grade than those students who did not attend Head Start.

Chapter 5

Findings, Recommendations, and Implications

Introduction

This chapter includes a summary of the findings, recommendations for future research studies, and implications of this study. This research study was a qualitative study that reviewed the impact of Head Start programs on academic success in selected first grade classrooms. The study compared students who participated in a Head Start program to those students who did not participate but would have qualified for a Head Start program based on income levels. The results of this study were derived from the data analysis described in Chapter 4.

Summary of Findings

The research question addressed in this study was whether or not Head Start made an impact on the success of students in first grade classrooms. A comparison was made in two selected first grade classrooms between students who attended a Head Start program and students who had not been exposed to a Head Start program, but would have qualified based on income levels. Comparisons were made in academic areas of reading and math. Other categories that were measured were student conduct,

attendance, and subjective questioning of teachers and parents regarding success in first grade.

Concerning reading and math scores across the board, it was discovered that students exposed to Head Start in these selected classrooms performed higher on average than students who did not. Research has shown that children have a greater success rate as readers who begin first grade with strong skills in letter and sound correspondence, emergent reading and writing, basic mathematics concepts, and metacognitive aspects of literacy (Connor & Morrison, 2014). Students with exposure to Head Start performed higher on the reading screener, had higher averages in both math and reading, and also were projected at a higher rate to be proficient readers on the end-of-year TCAP assessment (according to statistics presented by Renaissance Place, the developer of the STAR assessment).

Student attendance was on average higher in the Head Start category as opposed to students who had not been in Head Start. Federal guidelines in Head Start require that programs reinforce and regularly monitor student attendance. Furthermore, parents are regularly involved in classroom activities and home visits are often conducted to discuss academic success. It is likely that this focus had an impact on students, especially after kindergarten and into first grade. The likelihood that this actually had an impact is related to the comparison to students who were in first grade but did not attend Head Start. These students, on average, missed more days than students who attended Head Start.

There was only a slight difference in student conduct grades when comparing the two groups. Behavior is something that is also a focus in Head Start and according to the findings there is not a significant gap that exists between students who have been in Head Start and those who have not.

Regarding parent interviews it was found that parents generally felt that their children were ready for first grade but not as confident as they were when students were entering kindergarten. There was a difference in responses when parents were asked about their child's readiness for math as opposed to reading. More often parents stated that they felt their children were ready for reading but not as often concerning math. Since data were already conducted around behavior at school, parents were asked how their children behaved at home and most responded that their children behaved well.

Conclusion

Students are expected to be ready for first grade when they leave kindergarten. The standards and expectations of students are and should be high, and with a variety of socioeconomic backgrounds and multiple other factors, the difference in students' needs and overall goals can vary significantly. Reading and math goals for all students begin when they are in kindergarten. Several areas of research has been conducted on the impact of Head Start on students over long periods of time. The goal of this study was to determine whether or not students who had been exposed to Head Start were significantly impacted by programing and available resources when entering the first grade.

Based on the sample size in two classrooms, there is compelling evidence that differences exist between students who have been exposed to Head Start and those who have not. Although the differences in success categories are slight, there is still a trend in math, reading, conduct, and attendance that exists. In these particular classrooms and within these particular samples, students who were exposed to Head Start performed slightly better in first grade than those who were not exposed to Head Start.

There are, however, some subjective parts of the study that leave questions. As it relates to math and conduct grading, these areas were only reported by the teacher and were not tested areas. Other factors could impact the teacher's reporting and ranking of conduct and math as opposed to a specific assessment at a point in time. The validity of screening in reading should give better and more consistent result as it relates each student's ability to read and also to be proficient at a specific point in time (3rd grade). Attendance is also a specific measure that does not bring in any human element of subjectivity.

Recommendations

1. Future research should include a larger sample size to allow for a more variety of students.
2. Future research should include several different schools.
3. Future research should include a more random sample.

Implications

1. When eligible, parents should allow their students to receive Head Start services.
2. Schools and districts should establish early intervention methods to identify students and families who qualify for Head Start but otherwise choose not to participate.
3. Qualified children can benefit from a Head Start program in several areas in addition to academics.

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Appendices

Appendix A

Parent Survey Questionnaire

Parent Survey Questionnaire

4. Do you feel that your child was ready for Kindergarten on the first day of school?

1 2 3 4 5

2. Do you feel that your child was ready for First Grade on the first day of school?

1 2 3 4 5

3. Upon entering First Grade, do you feel like your child was ready for Reading?

1 2 3 4 5

4. Upon entering First Grade, do you feel like your child was ready for Math?

1 2 3 4 5

5. Do you feel that your child's teacher helps with your child's Reading?

1 2 3 4 5

6. Do you feel that your child's teacher helps with your child's Math?

1 2 3 4 5

7. Do you feel that your child's health is in good health?

1 2 3 4 5

8. Do you feel that it is important for your child to come to school everyday?

1 2 3 4 5

9. While at home, does your child behave the way you expect him/her to?

1 2 3 4 5

10. Would you like to see more help for students BEFORE they begin kindergarten?

1 2 3 4 5

Appendix B

Teacher Interview Questionnaire

Teacher Interview Questions

1. Do you feel Head Start is an important part of early childhood development?
2. Do you feel all students are prepared for Kindergarten?
3. What do you feel is the most important part of teaching a child to read?
4. How important is reading compared to math skills in early childhood?
5. What are your personal teaching strategies?
6. What is your favorite part of teaching?
7. What are some activities in your classroom you use to promote reading and math?
8. How important is attendance and conduct to academics?
9. Why did you become a teacher?
10. What do you feel is the most important part to helping a student become academically successful?