Walden University

College of Social and Behavioral Sciences

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Denise Mayo-Moore

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Walden University 2014

Abstract

Evaluation of a Literacy Program Addressing Third Grade African American Struggling Readers

by

Denise Mayo

MSW, Yeshiva University, 2005

MS, Southern New Hampshire University, 1995

BS, Audrey Cohen College 2003

Dissertation Submitted in Partial Fulfillment of

the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

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Abstract

School districts are accountable for students achieving grade-level literacy standards. However, many 3rd grade students in Sun Valley Lake, New Jersey, are not achieving the No Child Left Behind literacy standard of proficient, which is defined as reading on grade level. The purpose of this quantitative study was to investigate whether the Success Program was effective at engaging struggling 3rd grade African American students in a supplemental literacy program that can be replicated by school districts with similar demographics. The Success Program's theoretical underpinnings are grounded in Vygotsky's socio-cultural theory and the Zone of Proximal Development. These theoretical frameworks are supported by the Response To Intervention model, upon which the Success Program is based, and the Resilience model. One-hundred students from 2 consecutive school years (2010-2011 and 2011-2012) were selected using a nonprobability criterion sampling, which dictates a quasi-experimental design using a pretest and posttest method. The results are presented through descriptive statistics and MANCOVA. According to study results, for each school year, the 50 students who participated in the Success Program achieved statistically significant higher scores than the 50 students who did not participate for all 4 study variables: reading comprehension, oral reading fluency, instructional reading level, and sight word recognition. The quantitative data indicated the Success Program is a viable intervention. This study leads to positive social change by providing educators in Sun Valley Lake, as well as the additional 30 Abbott New Jersey school districts and similar other districts, strategies to increase the literacy skills of 3rd grade African American students.

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Dedication

I dedicate this dissertation to my children Rodney and Jeremy. If you believe, you will achieve. To my mother for her spirit and the support she has given me.

Acknowledgments

My school district has been supportive, allowing me to conduct this study. My district has evidenced its support through allowing me time to attend residencies as well as tuition reimbursement. I am truly privileged to work in such a progressive district.

My dear friend Herb, who kept all distractions at bay, fed me physically and spiritually, who critiqued every one of my classroom assignments. Thank you for always believing in me and pushing me to do my best.

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Chapter 1: Introduction to the Study

Educational inequality in the United States has been well documented. In *Brown v. Board of Education* (1954), the U.S. Supreme Court ruled that there was inequality in education due to segregation and inferior resources in schools that African American students attended compared to the schools that European American students attended. In *Abbott v. Burke* (1981), the State Supreme Court of New Jersey ruled that inequality in education existed in 31 school districts. The Abbott decision required the implementation of a number of measures with appropriate funding in the 31 districts deemed to have special needs (Gomez, 2008). These districts, which could not afford to offer students an adequate education, were considered the poorest in the state, with large minority populations (Gewertz, 2005). The State Supreme Court of New Jersey found there was less expenditure per pupil in these special needs districts than the affluent suburban districts in the state. The New Jersey Department of Education (NJDOE) was ordered to offer all students an equal education by providing supplemental early literacy, health, and social services to these impoverished districts (Gewertz, 2005). The Success Program in the Sun Lake Valley school district, one of the 31 Abbott districts, addresses early literacy deficits in third grade African American students.

Many strategies and interventions have been enacted to standardize curriculum ensuring that all students receive an equitable education. The No Child Left Behind Act (NCLB; 2002) was signed into law to ensure that all children meet educational standards in the United States. NCLB mandated that school districts to achieve adequate yearly progress (AYP), which means that schools must produce annual incremental improvement in statewide test scores (U.S. Department of Education, 2011). NCLB expected 95% of students to score proficient or above in statewide reading, math, and

science tests by 2014. A reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA) suggested that school districts should use a scientifically-based methodology such as response to interventions (RTI) for implementing strategies for behavior and learning difficulties (NJDOE, 2011a). Local school districts have been left to implement strategies best suited to their student populations (Mellard & Johnson, 2008).

The New Jersey Department of Education created a system to measure all school districts SES and educational demographics. NJDOE (2011a) developed the district factor groups to categorize its school districts to measure student performance with similar socioeconomic (SES) characteristics in the state. The categories are A (the lowest SES) through J (the highest SES). This system includes the following variables to measure the SES status of districts: (a) percentage of adults with no high school diploma, (b) percentage of adults with some college education, (c) occupational status, (d) unemployment rate, (e) percentage of individuals in poverty, and (f) median family income (NJDOE, 2011a). The Sun Valley Lake school district has a B rating. Moreover, the New Jersey Supreme Court in *Abbott v. Burke* (1981) ruled that Sun Valley Lake and 30 other New Jersey school districts students were not receiving the same economic and educational opportunities as their suburban counterparts. The New Jersey Report Card stated that 65.7% of Sun Valley Lake third graders did not meet the proficient benchmark of NCLB in literacy (NJDOE, 2011c). In an effort to raise the literacy of struggling third grade, African American students, Sun Valley Lake implemented an intervention called the Success Program. The three-tier structure of the Success Program is modeled after the RTI model, which has realized positive results in elevating literacy of at-risk students (Miller, 2010; Vellutino, Scanlon, Zhang, & Schatschneider, 2008). The purpose of this

study was to determine the relationship between participation in the Success Program and literacy test scores of African American, third grade students of the Sun Valley Lake school district. In this study, the literacy of the participants was measured with four dependent variables: reading comprehension, oral reading fluency, instructional reading level, and sight word recognition.

In this study, I evaluated the efficacy of the Success Program in raising literacy scores of third grade, African American students. Knowledge about the efficacy of this program could result in positive social change either through suggesting wider spread implementation of the program if it is successful or using a different program if it is not effective. Students reading on grade level in the third grade have a 75% graduation rate from high school (Hernandez, 2011) and are less likely to become a juvenile offender or face incarceration as an adult in (Harlow, 2003). The results of this study can be shared with the 30 other Abbott school districts the positive aspects of the Success Program. Other struggling districts could use the Success Program or its elements to elevate the New Jersey literacy test scores on the New Jersey Assessment of Stalls and Knowledge (NJ-ASK) state assessment for third grade, African American students. This intervention program can be replicated in school districts with similar student backgrounds across the United States. Additionally, because the Success Program is modeled after RTI methodology, it could add to the body of literature as a successful reading program using the RTI model.

In this chapter, the background, problem, and purpose of the current study pertaining to the elevation of literacy skills are described. The research questions and hypotheses driving the current research follow. The relevant theoretical underpinnings as well as the nature of the study are described. The definitions as they pertain to this study

are clarified. The assumptions critical to the meaningfulness of this study are described. I describe the scope and delimitations, followed by the limitations and significance of this study. The chapter concludes with a brief summary.

Background

In New Jersey there are 31 school districts that continue to struggle in achieving academic standards. Researchers (Teale, Paciga, & Hoffman, 2007; Vogel, Rau, Baker, & Ashby, 2006) and the U.S. Census Bureau (2010) suggested that poverty may be a contributing factor in low academic performance. In New Jersey, 6% (69,249) of European American children live in poor families compared to 27% (75,906) of African American children. In this study, I focused on one of the 31 Abbott districts in the New Jersey school district of Sun Valley Lake. Sun Valley Lake is an urban district in the State of New Jersey that continues to struggle educationally as well as economically. The Sun Valley Lake school district is categorized in the District Factor Group B, which is the second lowest classification. NJDOE (2011a) cited this school district for low academic performance, particularly in literacy of African American students. The NJDOE (2011a) suggested a connection of the disproportionate number of 3rd grade African American students scoring below proficient on the 2011 NJ-ASK in literacy with high numbers of referrals to the Child Study Team (CST) for special education services.

The administration of the Sun Valley Lake school district received funding to initiate a program to address low academic performance in the area of literacy in African American, third grade students. This early intervention literacy program, named Success, was implemented during 2 consecutive school years (2010–2011 and 2011–2012) in all of the district's 10 elementary schools. All third grade students were given the

Developmental Reading Assessment (DRA) to assess fluency, comprehension, and instructional reading level and the Dolch Sight Word List to assess the number of words students recognize by sight. These two pretests were used to identify third grade, African American students who were at least one full grade below third grade reading level and were thus eligible for the Success Program. Identified African American students were referred by their classroom teachers. In each school year, there were two groups of 50 third grade, African American students reading at least one grade below the third grade level. The comparison group of 50 students was eligible for the Success Program, but there were not enough spaces for them to receive the intervention. The participant group of 50 students received the intervention program.

The Success Program was conducted as a pull-out intervention twice per week for 40 minutes during the course of the regular school day. Two instructional support teachers provided supplemental literacy support over 35 weeks beginning in the fall and continuing through the spring. The results of the Success Program intervention were measured with four dependent variables: reading comprehension, oral reading fluency, instructional reading level, and sight word recognition. Using archival data, I addressed a portion of the district's struggling African American students who had literacy deficits by assessing the relationship between participation of the third grade students in the Success Program and improvements in literacy.

Extant data have not been analyzed to establish whether significant literacy was realized in the Success Program for third grade, African American students. This study was needed to determine if the Success Program is a course of action to address the literacy deficits of students in Sun Valley Lake. NJDOE has informed Sun Valley Lake

that there are a disproportionate number of African American students, particularly in the elementary grades, who are not meeting the proficient academic benchmarks. With this study, I evaluated a program that has the potential to improve the literacy of struggling third grade, African American students immediately and in the future.

Problem Statement

Historically, policy and law have been enacted in an effort to ensure high educational standards in the United States. The NCLB (2002) act is perhaps the most significant and far-reaching education policy initiative in the United States. This legislation expanded federal influence over the United States' more than 90,000 public schools. The NCLB regulation reauthorized the Elementary and Secondary Education Act (ESEA) to extend the historically restricted choice and scale of federal involvement in K–12 schooling (Dee & Jacob, 2011). This allows school districts to adapt their own strategies to address the current policy mandates regarding literacy.

More schools must implement assorted programs to address academically struggling students with minimal additional funds. Many school districts still struggle to understand federal regulations and bureaucratic rules. For local policy-makers, however, this mandate creates some practical challenges, particularly in meeting their responsibility to set education policy and ensure that instruction is both effective and financially efficient (Williams, 2011). School accountability is based on measuring each school's success in educating all of its students. The primary measure is progress toward literacy standards determined by state assessments.

In New Jersey, third grade is the first year students are tested to determine if they are meeting the NCLB benchmarks in literacy. In 2010, New Jersey's third grade students' literacy was measured by the NJ-ASK. According to the New Jersey Report

Card, 66.5% of all third grade students scored proficient on the NJ-ASK (NJDOE, 2011). However, in Sun Valley Lake, the 2010 NJ-ASK third grade literacy test scores reported that only 34.3% of the students attained the proficient benchmark. A student who scores a proficient rating is reading at grade level or higher (NCLB, 2002). Using archival data**,** I investigated the results of the Success Program that was conducted in the Sun Valley Lake district during the 2010–2011 and 2011–2012 school years to address lowperforming, third grade, African American students literacy test scores.

Third grade is a pivotal year in the education process. Throughout third grade, students continue to explore literacy as they learn to read and comprehend. This foundation is critical because in fourth grade students are expected to read to expand their knowledge and critical thinking skills. As much as 50% of fourth grade curriculum could be incomprehensible to students who are below grade level in reading (Schorr & Marchand, 2007). Schorr and Marchand (2007) found that readers who are below proficient in third grade remain so in high school. Low academic performance is a precursor for behavior and social problems, as well as retention in later grades (Hernandez, 2011). Graduation rates can be predicted based on student reading levels in the third grade (Snow, Burns, & Griffin, 1998). Those students not reading proficiently in third grade are four times more likely not to obtain a high school diploma (Annie E. Casey Foundation, 2012; Hernandez, 2011). According to the National Center for Educational Statistics (2012),New Jersey's high school graduation rate increased from 83% in 2011 to 86% in 2012, while Sun Valley Lake's graduation rate increased from 65% in 2011 to 71% 2012. As previously noted 34% of Sun Valley Lake's third grade students did not score proficient on the NJ-ASK in 2011 (NJDOE, 2011a).

Located in central New Jersey, Sun Valley Lake Public School District is an economically-challenged urban district. According to the National Center for Educational Statistics (2012), Sun Valley Lake public schools have 6,460 children enrolled, 76.8% of whom are eligible for a free or reduced price lunch, indicating they are living below the poverty guidelines according to the United States Department of Housing and Urban Development (2012). Nearly 14% of the residents of the school district are unemployed (U.S. Census Bureau, 2012). Sun Valley Lake spends $23,793 per pupil in current annual expenditures (New Jersey Data Bank [NJDB], 2012). Over the past 2 years, funding has been reduced 27.1% (NJDB, 2012). Yet the 2013–2014 proposed school budget called for Sun Valley Lake, one of the poorest districts in the state, suffered the largest dollar loss of all districts in its county (NJDB, 2012).

According to NJDOE (2011a), the state's average cost per student in 2010 was $17,352. However, pupil expenditures vary across the state, as noted by the NJDOE (2011b), from the lowest of $12,146 (Rockaway Boro) to the highest of $40,152 (Avalon Boro). Pupil expenditures of five random Abbott classified districts in 2010 included the following: Asbury Park $39,149l; Newark $27,498; Camden $28,456; Trenton 26,805; and Atlantic City $26,389 (NJDOE, 2011b). The Success Program is a cost effective literacy intervention, which will not increase the current pupil expenditures.

This study may contribute to the literature because there have not been any published studies conducted on third grade, African American students who participated in the Success Program in Sun Valley Lake. Sun Valley Lake, as well as the 30 other Abbott districts, can use the results of this study to evaluate a program that addresses the deficiency of supplemental early literacy. Addressing NCLB's expectation of third

graders attaining proficiency on the state exam in literacy is critical as well. The current research study, if successful, could change the way struggling, third grade, African American students are engaged in literacy in a supplemental literacy program that can be replicated by school districts with characteristics similar to those found in Sun Valley Lake.

Purpose of the Study

The purpose of this quantitative study was to investigate the effect of the Success Program on the reading performance of Sun Valley Lake African American students in third grade. The Success Program had two groups—100 students who participated in the program and 100 students who did not participate in the program. The Success Program was conducted during 2 consecutive school years with 100 students in each year. The independent variable was the Success Program with two groups—50 students who participated in the program and 50 students who did not. The Success Program was a new endeavor, created because NJDOE (2011a) cited the Sun Valley Lake school district for low student performance on literacy test scores of African American students, particularly in the third grade**.** The Success Program was implemented during the 2010–2011 and 2011–2012 school years. Archival achievement data collected during those times were used. Literacy was the dependent variable based on measures of reading comprehension, reading fluency, instructional reading performance, and sight word recognition.

Research Question and Hypotheses

The overall guiding research question, followed by hypotheses, is provided below.

Was there a difference in literacy between students who participated in the

Success Program and students who did not participate?

The independent variable was the Success Program over a 2-year period with two groups—100 students who participated in the program and 100 students who did not participate in the program. Literacy was the dependent variable based on four measures: three from the DRA (reading comprehension, reading fluency, and instructional reading performance) and one from the Dolch Sight Word List (sight word recognition). Data from the dependent variable instruments were obtained from pre and posttests. These instruments were used in this study because the Sun Valley Lake school board approved them several years ago to measure literacy. The Success Program and the achievement instruments are described in detail in Chapter 3. Low-performing, African American, third grade students were of primary interest. Archival data for the 2010–2011 and 2011–2012 school years were used for the data analyses. Analyses were done separately for each year. The .05 level of statistical significance was used to test the null hypotheses.

Hypothesis 1

H_{01}: There is no statistically significant difference in reading comprehension between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a1}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in reading comprehension than students who did not participate in the Success Program, as reported by the DRA pre- and posttests assessment tool.

Hypothesis 2

H_{02}: There is no statistically significant difference in reading fluency between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a2}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in reading fluency than students who did not participate in the Success Program, as reported by the DRA pre- and posttests assessment tool.

Hypothesis 3

H_{03}: There is no statistically significant difference in instructional reading performance between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a3}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in instructional reading performance than students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

Hypothesis 4

H_{04}: There is no statistically significant difference in sight word recognition between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the Dolch Sight Word List pre- and posttest assessment tool.

H_{a4}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in sight word recognition than students who did not

participate in the Success Program, as reported by the Dolch Sight Word List pre- and posttest assessment tool.

Theoretical Framework for the Study

Vygotsky's theoretical research in learning is congruent with the essence of the Success Program (Kozulin, 2009). Vygotsky considered relationships, culture, environment, and assessment as part of the intervention process (as cited in Korepanova & Saphronova, 2011). Vygotsky (1978) postulated that the zone of proximal development (ZPD) is a safe environment where a teacher can build upon skills a student has learned by molding what the student is ready to learn subsequently. This supportive environment encourages students to become increasingly independent (Kozulin, 2011;
Vygotsky, 1978). This learning process in Vygotsky's ZPD aligns with the Success Program because they are both grounded in assessment, culture, and the environment of the students. This learning process is evidenced in the Success Program through the four measures of this study: reading fluency, reading comprehension, instructional reading performance, and sight word recognition.

The concept of resilience is used to illustrate how a segment of the student population copes with stress in their lives, particularly in economically-challenged children like those in the Sun Valley Lake school district. Risk factors are those environmental problems or issues that have potentially negative effects. Sun Valley Lake, the setting of this study, is a high poverty school district (NJDOE, 2012a). The effects of poverty/low income on children's literacy may be accentuated by neighborhood poverty. In this study, I intended to determine the relationship between participation in

the Success Program and literacy test scores of African American, third grade students of the Sun Valley Lake school district.

The Success Program used a three-tier structure that aligns with the RTI model. The RTI model uses three basic components—Tier 1, Tier 2, and Tier 3. In Tier 1, the students are assessed. Tier 2 includes small group instruction for children who are struggling. The third Tier involves more rigorous strategies (e.g., fewer children in a group, daily one-on-one sessions). RTI includes student data to implement appropriate instruction and intervention in each tier (Dunn, Cole, & Estrada, 2009). IDEA (2004) suggests that RTI is a viable three-tier model of intervention for academic as well as behavior concerns. The RTI model has realized positive results in elevating literacy of at-risk students (Vellutino et al., 2008). In Chapter 2, I describe the theoretical underpinnings of Vygotsky's theory, the concept of resilience, and the RTI model drive the research questions in the Success Program in more detail.

Nature of the Study

In this quantitative study, I investigated whether African American, third grade, students who participated in the Success Program performed better on post intervention measures of literacy than students who did not participate in the program. The independent variable was the Success Program with two groups—students who participated in the program and students who did not. Literacy was the dependent variable based on measures of reading comprehension, reading fluency, instructional reading performance, and sight word recognition. The participants were selected using a nonprobability criterion sampling, which dictates a quasi-experimental design using a pretest and posttest method. Using this approach allowed conclusive statistics to serve as the basis for answering the research questions in this study.

The Success Program includes two assessment tools, the DRA and the Dolch Sight Word List, to assess students' literacy skills. The interventionist who supervises the program collects and stores the assessments. Archival data on students in the Sun

Valley Lake School District participating in the Success Program for the 2010–2011 and 2011–2012 school years were used for the analyses. In Chapter 3, I address the methodology used to examine the research questions as well as the hypotheses.

Definition of Terms

Adequate yearly progress (AYP): NCLB (2002) expected all school districts to ensure that 95% of their students attain predetermined proficiency benchmarks. School districts are expected to make AYP toward these benchmarks. Failing to meet AYP for 2 consecutive years identifies a school as needing improvement. There are penalties and sanctions determined by law for schools that do not make improvement and continue to fall short of AYP benchmarks (Children's Defense Fund, 2012b).

Developmental Reading Assessment(DRA): The DRA is an instrument that provides information to educators regarding students' strengths and weakness in the areas of reading comprehension, oral reading fluency, and instructional reading level (Pearson Education, 2009).

Dolch sight word list: The Dolch sight word list comprises five lists totaling 220 words, which represent over 50% of the words used in the fourth grade textbooks. The lists are *preprimer* (prekindergarten), which consists of 40 words a student should recognize before entering kindergarten; *primer sight word list* (kindergarten), an additional 52 words that students should recognize before entering first grade; *first grade sight word list*, an additional 41 new words students should recognize before second

grade; *second grade sight word list,* which introduces an additional 46 words a student should recognize before entering third grade; and the *third grade sight word list,* which introduces an additional 41 words that students should recognize before the end of third grade. There are an additional 41 words for third graders to learn before the end of the year (Meadan, Stoner, & Parette, 2008).

Instructional reading performance: For the purpose of this study, instructional reading performance is the students' ability to decode multisyllabic words (Duran, 2003). The number of words in a timed reading passage that a student is able to recognize without difficulty is measured by the DRA.

Intervention and referral service: The intervention and referral service is comprised of a team of school professionals who suggest resources to address issues impeding the academic progress in general education students (NJDOE, 2011a).

Literacy: For the purpose of this study, literacy was determined by reading comprehension, oral reading fluency, and instructional reading level based on the DRA, and sight word recognition based on the Dolch sight word list.

Low level skills: Reading at the lowest level is the combination of three different skills often described as mechanical or low level skills. These skills are the elementary operations that enable the reader to decode the reading input (Troschitz, 2009).

Microskills: Microskills contrast with the low-level skills intellectual operations. They can be subdivided into two groups: *word recognition* and *understanding of syntax* (Troschitz, 2009).

National Assessment of Educational Progress (NAEP): The National Center for Education Statistics conducts the NAEP. The NAEP reports student academic

achievement nationally in core subjects as well as the arts (Children's Defense Fund, 2012b).

National School Lunch Program: In 1946, the Truman administration enacted a federal lunch program for students in public and private nonprofit schools, as well as child care centers. The guidelines state students who reside in homes with income at 185% or less of the poverty level are to receive reduced-price lunch. Students who reside in homes with income at 130% or less of the poverty level are to receive free lunch. (NJDOE, 2011a).

New Jersey Assessment of Stalls and Knowledge (NJ-ASK): A standardized test that measures student achievement in the knowledge and critical thinking skills required to proficient on grade level by the New Jersey Core Curriculum Content Standards in language arts literacy, math, and science. Tests are administered to students in Grades 3, 4, 6, 7, and 8 (NJDOE, 2011a).

No Child Left Behind Act (NCLB): NCLB is a revision of the 1962 ESEA, which was initiated under President John F. Kennedy. When the ESEA was reauthorized in 2001 by the Bush Administration, it was renamed and amended to include components in reading literacy education, computer technology, and geography scores (Children's Defense Fund, 2004).

Oral reading fluency: Oral reading fluency is determined by intonation well as how smoothly and fluidly a text is read (Pearson Education, 2009).

Quality single accountability continuum (QSAC): NJQSAC is NJDOE's (2011a) monitoring and evaluation system to measure NCLB in each school district.

Reading comprehension: The capability of a reader to make inferences and apply them in a meaningful way that demonstrates knowledge and understanding of meaningful text (Pearson Education, 2009).

Response to intervention (RTI): A model that uses three basic components—Tier 1, Tier 2, and Tier 3. In Tier 1 the students are assessed. Tier 2 includes small group instruction for children who are struggling. The third tier involves more rigorous strategies (e.g., fewer children in a group, daily one-on-one sessions). RTI uses student data to implement appropriate instruction and intervention in each tier (Dunn et al., 2009).

Sight word recognition: Words the reader has committed to memory that do not require phonetic analysis (Meadan et al., 2008).

Socioeconomic status (SES): SES is determined by several factors, usually considering income, level of education, and occupation. For the purposes of this study if students receive free or reduced price lunch, their SES status was considered impoverished (Howard, Dresser, & Kunklee, 2009).

Supplemental educational services: Extra academic instruction provided to income-eligible students who attend a Title I School In Need of Improvement. This extra help in language arts literacy and math must be provided outside of the regular school day. NCLB required Title I schools that have not met AYP 2 years in a row to provide SES. The SES must be chosen from the NJDOE (2011a) approved list of vendors eligible to provide enrichment.

Assumptions

It was assumed that the DRA and Dolch Sight Word List assessments are reliable and valid instruments for measuring the current study's research variables.

Scope and Delimitations

The scope of this study was one urban school district's third grade, African American, students over a 2-year period of time. During 2 consecutive school years, there were a total of 200 participants: 100 who participated in the Success Program and 100 who did not participate in the Success Program. The criterion for participation in the study was a literacy level is at least one grade level below current grade.

Limitations

A study limitation was that the sample participants were referred by classroom teachers, making the selection process not completely random, which could create possible bias. Another limitation was that this study has no mechanism to evaluate any functioning deficits of the participants in terms of whether they lack capacity or motivation to master the skills. There was no indication whether any students participating in the study received other assistance to raise their literacy skills. The use of archival data precludes addressing these limitations.

The sample population was relatively small and limited to African American students. Although care should be taken when generalizing the findings, it is probable that the conclusions may be generalized to wider populations with the same environments (e.g., poverty, low literacy test scores). In New Jersey there are 30 additional school districts called Abbott with similar characteristics of the current study. Nationally, there are many cities with African American populations living below the poverty level with low literacy test scores.

Significance

Various scholars have contributed to the literature on educational challenges faced by African American students (Blanchett, Mumford, & Beachum, 2005; Cullinan &

Kauffman, 2005; Ebersole & Kapp, 2007; Gardner & Miranda, 2001; Harry & Anderson, 1995; Harry, Klingner, & Hart, 2005; Hart, Cramer, Harry, Klingner, & Sturges, 2010;

Hosterman, DuPaul, & Jitendra, 2008; Irving & Hudley, 2005; Jones & Menchetti, 2001; Kearns, Ford, & Linney, 2005; Lo & Cartledge, 2006; Olmeda & Kauffman, 2003); however, research is needed to determine the relationship between participation in the Success Program and literacy test scores of African American, third grade students of the Sun Valley Lake school district. Research is required to determine strategies to improve the literacy of struggling African American students. This research study has the potential to contribute to positive social change by filling a gap in the literature by evaluating the effectiveness of the Success Program. No research conducted in Sun Valley Lake on African American students in third grade regarding literacy in terms of literacy test scores has been published. This study's findings may contribute to the existing knowledge base by reporting the impact of a program designed to improve literacy by the end of third grade. Students not reading proficiently in third grade are four times more likely not to obtain a high school diploma (Hernandez, 2011). A lack of a high school diploma may lessen a person's opportunity for financial stability.

Ultimately, the purpose of this study was to determine if the Success Program was a positive intervention in increasing the literacy scores of third grade, African American students. Determining whether the program was successful could help the administration justify why resources should be reallocated for this endeavor. This study adds to the literature for evidence-based programs.

Summary

The administration of Sun Valley Lake is interested in whether the Success Program was successful and welcomes empirical research to make this determination. In this study, I used archival data from the 2010–2011 and 2011–2012 school years to determine whether the students who participated in the program performed better academically than students who did not participate in the program. There have been studies published on several of the larger Abbott school districts, but I found no published study with regard to approaches that may improve literacy of third grade

African American students in Sun Lake Valley.

This study has the capacity to contribute to the field of psychology because it will fill a knowledge gap that has existed since the State Supreme Court of New Jersey issued the *Abbott v. Burke* (1981) ruling that African American children were not receiving adequate education in 31 school districts. Sun Valley Lake is one of these 31 special needs districts. NJ-ASK test scores are evidence that Sun Valley Lake students are still educationally-challenged.

The barriers to literacy, including the impact of poverty as well as solutions, are elaborated in detail in Chapter 2.

Chapter 2: Literature Review

Introduction

Since the inception of NCLB, school districts have been held accountable for students achieving grade level literacy standards (Fernandez, 2009). The purpose of this study was to evaluate the effectiveness of a district-wide program designed to elevate the literacy scores of third grade, African American students. The Success Program was intended to provide reading skills to students who were at least one grade level below the expected proficient benchmark established by NCLB (2002). NCLB expected that all third grade students would be proficient by 2014. Even though NCLB did not require the use of RTI, it is cited as a positive intervention to address the literacy concerns of struggling students. The research setting was a Title I school district with documented low SES, low literacy test scores, and high poverty.

In Chapter 2 begins, I review the literature related to literacy achievement in low-SES districts with large African American populations. The theoretical framework of Vygotsky's (1978) theory of ZPD, which includes scaffolding and small group instruction, was the cornerstone of this study's literacy intervention driving the research questions. In this chapter, I describe the conceptual framework of the resiliency theory. Resiliency, poverty, and literacy are examined as they pertain to the participants in the study. The chapter then includes a brief historical overview of literacy. The recent legislation regarding NCLB as it pertains to New Jersey is reviewed. Literacy in early elementary schools is discussed next along with the literacy challenges in New Jersey. The intervention to address the challenges of literacy in one district in New Jersey is the next section, which includes a discussion of the RTI model that was used for the current study. This chapter continues with the issue of assessing literacy including the

instruments and variables. The state assessment NJ-ASK is discussed, as well as the instruments used in this study, the DRA2 and the Dolch Sight Word List. The chapter then concludes with a summary reviewing the key concepts of the literature review.

Literature Search Strategy

I used RefWorks software to organize my searches of the literature and conducted an online search using Walden University's library. I used the following search engines to obtain peer-reviewed literature from the last 10 years: Academic Search Premier, EBSCO Host, PsychARTICLES, ProQuest, and Sage. After identifying articles deemed useful, I scanned their references to locate additional pertinent sources. The major search terms I used were *literacy in third grade African American elementary students*, *African American students and resiliency theory*, *reading comprehension*, *instructional reading performance*, *reading fluency*, *sight word recognition*, *socioeconomic status, poverty and African American students*, *response to intervention*, *No Child Left Behind*, *Abbott v. Burke*, *assessments*, *Developmental Reading Assessment*, *Vygotsky*, *ZPD*, and *small group instruction*.

Theoretical Foundation

Vygotsky's Sociocultural Theory

The field of educational psychology has been influenced by Vygotsky. According to Vygotsky (1978), even though biological factors comprise the essential precondition for elementary development to emerge, sociocultural factors are crucial for the elementary natural developmental process to grow. Vygotsky argued for the individuality of the social environment and considered sociocultural settings as one of the influential factors in the growth of higher forms of individual mental activity such as intentional

memory, voluntary attention, logical thought, planning, and problem-solving (as cited in Turuk, 2008). This type of higher order thinking is necessary to develop literacy skills.

Higher order thinking is contingent on a student's social and cultural environments. In the sociocultural theory, Vygotsky (1978) concentrates on the transmission of cultural values, beliefs, and customs among social groups from one generation to other. According to Korepanova and Saphronova (2011), Vygotsky's (1987) theory is grounded in social interface. Cooperative dialogues among children and more well-informed members of a society are essential for children to learn the ways of behaving and thinking that make up the culture of a community (Korepanova & Saphronova, 2011). Vygotsky theorized that children would be able to excel if they were supported and guided properly by teachers, mentors, and peers (Berk, 2007). Small group instruction provides a safe environment for students to test new skills (Berk, 2007).

Student success is grounded in instruction as well as assessment. Vygotsky viewed both instruction and assessment as indivisible from one another (as cited in Korepanova & Saphronova, 2011). If teachers want to assess children's academic performance, they should not focus on testing their performance with the final achievement test. Contrary to this common practice, their real focus should be on the various class activities that they might engage in with the help of their teachers and peers in the classroom. Students are able to progress in the tasks presented to them with the help of others; they might also be able to succeed in their future tasks without the help of others (Yildirim, 2008).

Zone of Proximal Development

Students' educational success is contingent on a supportive learning environment. Vygotsky (1978) postulated that the ZPD is a safe environment in which a teacher can

build upon skills a student has learned by molding what the student is ready to learn subsequently. In this supportive environment, teachers encourage students to become independent (Kozulin, 2011; Vygotsky, 1978). By applying the concept of the ZPD to the Success Program, teachers expected that the presence of adult molding would result in literacy improvement in the students. The Success Program used scaffolding through planned opportunities for students to collaborate with their interventionist and peers in a small group setting. The interventionist models the acceptable exchanges and responses. The students become more confident, which encourages them to build their literacy knowledge.

Scaffolding

Scaffolding is a viable learning tool. Veerappan, Wei Hui, and Sulaiman (2011) explained that scaffolding in the classroom is a process in which the students are provided a temporary framework for learning by the teacher. Once the scaffolding is performed, students are motivated and encouraged to develop their own inventiveness, inspiration, and creativity. As the students start gathering knowledge and boost their skills on their own, the essentials of the framework are dismantled. Veerappan et al. postulated that the process is concluded once the lesson is completed in the classroom; the scaffolding is then removed in total, and students no longer require it. Scaffolding might be considered as three related pedagogical scales:

1. Supporting the students in different activities and skills and giving them a definite support structure for their cognitive development.
2. Performing specific activities in the classrooms.
3. Giving help and assistance in moment-to-moment interface (Veerappan et al., 2011).

These pedagogical scales are the platform for students to attempt newly acquired skills. The sociocultural theory coupled with the concept of ZPD forms the theoretical foundation of scaffolding (Korepanova & Saphronova, 2011). Scaffolding is a way of operationalizing Vygotsky's perception of working in the ZPD. There are three basic features that enhance the educational scaffolding in its specific character: (a) the fundamentally dialogic character of the communication in which knowledge is constructed, (b) importance of the kind of activity in which knowledge is embedded, and (c) role of artifacts that mediate the knowledge (Veerappan et al., 2011). When scaffolding, teachers use the ZPD as the catalyst to gradually transfer responsibility for the tasks from the teacher to the students. The role of the educator further accentuates the association between the learner and the teacher in constructing the essential skills and knowledge.

Several cultural and economic realities ensure early on that urban low-SES children will receive less stimuli that prepare them for school than their middle income suburban counterparts. The vocabulary of middle-SES 3-year-old children is typically 1,000 to 5,000 words, nearly 50% more than low-SES children (Howard et al., 2009). African American students enter the educational process behind their European American counterparts, and as students get older the achievement gap widens. Ready (2010) suggested that childhood poverty is affected by school-related failure of cognitive development. In fact, third grade middle-SES students have acquired 5,000 more words than low-SES students (White, Graves, & Slater, 1990). One of the reasons for this occurrence is inconsistency in learning environments, particularly between high- and low-performing schools. Socioeconomically-deprived children are allocated to several different programs and groups that provide restricted opportunities and resources to learn

(Ready, 2010). There are barriers facing economically challenged families who are given supplemental resources, such as who will provide the transportation for the student. The family may not own a car. Supplemental tutoring services are typically in suburban areas. Working parents may not be able to leave work to take or pick up their children from supplemental services.

Suburban families tend to seek educational support for students. Johnson and Johnson (1999) pointed out that many middle class and suburban families have and continue to use educational support services such as Sylvan, Huntington, and Kumon learning centers to help ensure their children's educational success. Teachers, parents, and students reap benefits from such programs, and there is a consequent decrease in grade retention (Johnson & Johnson, 1999). These kinds of supplemental educational supports are costly for children living in poverty. However, Sun Valley Lake is one of the 31 low-performing Abbott districts slated to receive additional funds to provide supplemental educational services to its students in an effort to close the educational achievement gap. The State Supreme Court of New Jersey found that there was a disparity between the educational achievement of students in poor communities compared to students in the states more affluent suburban districts.

Sun Valley Lake is an urban district trying to catch up from years of educational neglect. Educational supplements are more necessary than ever in reducing achievement gaps. In the fiscal environment, some states have been forced to cut budgets and slash education spending. New Jersey's Governor Christie inadequately funded schools by $1.6 billion in the 2010–2011 school year (Gewertz, 2011). This educational budget cut was enacted in spite of Abbott legislation, which defined a school funding formula for the 31 most disadvantaged school districts in New Jersey. Attorneys representing the Abbott

districts sought a ruling from the State Supreme Court to uphold the court order of the school funding formula to provide additional funds for the 31 impoverished school districts (Gewertz, 2011). The court's decision on May 24, 2011 to increase funding to the 31 Abbott districts by $500 million was a direct response to Governor Christie's educational budget cut of $1.6 billion (Gewertz, 2011). The decision was positive, but it came too late for students to benefit from the ruling in the 2010–2011 school year. There were only two weeks remaining in the school year. The funds were expended in the 2011-2012 school year.

The 31 Abbott districts were faced with ensuring students attain proficiency on the NJ-ASK with $1.1 billion less than anticipated in their budgets. New Jersey is not the only state facing budget deficits; many school districts are faced with decreased funding and have been forced to find research-based strategies that have been successful in improving student literacy. Veerappan et al. (2011) proposed scaffolding as an instructional method in which the instructor models the preferred learning strategies or tasks and then shifts the tasks to the students. This type of interface is consistent with Vygotsky's belief that the majority of learning happens in a social paradigm, not in isolation (as cited in Markova & Medvedev, 2010). This process emerges when interaction occurs among students and teachers in the classroom. Even though Vygotsky did not use the term scaffolding, it is still similar to the theoretical foundation of ZPD. Vygotsky defined the ZPD as the space between the level of potential development as determined through problem-solving under teacher guidance and interaction and collaboration with more capable student peers and actual development level of the learner as determined by independent problem-solving (as cited in Markova & Medvedev, 2010).

In applying the concept of the ZPD to the program participation of the students, the Success Program teachers expected that the presence of an adult interaction partner might bring improvement in the students' literacy scores.

In the classrooms, scaffolding is considered as a process in which the students are provided a temporary framework for learning by the teachers. Explicit connections between the content and literacy goals for designing instruction among the students must emerge as relevant for the student to benefit from cultural modeling. Risko and WalkerDalhouse (2007) found that sharing their experiences and knowledge among their small group, peers, community, and family helps students. Two fundamental components of culturally-approachable instruction emerge from cultural modeling. These include respect for cultural differences and viewing these differences as learning and teaching resources rather than as deficits to be surmounted. Cultural modeling helps to provide impartial and accelerated opportunities for learning for all students; however, it is mainly empowering for students who belong to racial groups whose language and culture are not visible in the classrooms (Lindenberger, 2011). Within the context of the ZPD, students benefit from experiencing diverse cultures through scaffolding. During the scaffolding process, the educators have the opportunity to model appropriate cultural interactions and responses in a safe small group situation. In the intervention program titled Start Instruction With Texts That Build Upon Your African American Students' Knowledge and Experiences, students are more involved when culturally authentic African American texts are used (Risko & Walker-Dalhouse, 2007). Swain and Lapkin (2000) found that the ZPD assisted South Korean elementary students in achieving their task, which was to learn English. During each small group session, the instructor built upon the knowledge the students learned earlier. The students engaged in ZPD realized greater vocabulary

than the students learning English who were not exposed to ZPD (Swain & Lapkin. 2000) The Success Program used ZPD on small group instruction to increase the literacy skills of struggling students.

Small Group Instruction

A component of Vygotsky's theory, as well as of RTI, is instruction of children in small groups (as cited in Samuels, 2008; as cited in Vellutino et al., 2008). Students in a small group may be more inclined to ask questions than in a large classroom environment. Small group instruction is a component of the Success Program. The Success Program's premise is that the segmented instruction of small groups will help emerging readers by providing opportunities to strengthen literacy skills for academic growth (as cited in Samuels, 2008; as cited in Vellutino et al., 2008). In the Success Program, students receive individualized attention and instruction that may not be possible in a large group or classroom activities. It is also expected that teachers in the Success Program might be able to observe how individual students perform on tasks and how they interact with other students (Wasik, 2008).

Small group instruction provides a unique learning opportunity. Tyner (2009) found that small group reading instruction includes effective assessments and a balanced instructional scheme (guided reading, phonics, and writing). Effective contextual reading and systematic word study is paced to the speed of individual students. This kind of teaching and learning is convenient when instruction is delivered in the smallest grouping teams and helps to meet the literacy needs of the students (Tyner, 2009). According to Wasik (2008), there are certain factors that should be given consideration while teaching students in small groups. One factor is the size of the group should not exceed five.

Another factor to consider is the skill level of the group members. Both factors are essential when developing small group instruction.

The current study was grounded in small group instruction. During small group instruction, meaningful relationships emerge, making the scaffold approach a natural progression within the ZPD. The students in a small group may be more inclined to ask questions than in a large classroom environment. Vygotsky argued that students do not learn in isolation (as cited in Miller, 2011). Assessments are used to address the levels of the students and the teacher builds on the strengths of the students while providing enrichment for weaknesses (Miller, 2011). Small group guidelines mean that

- Groups should not exceed more than five children.
- Groups should be deliberately organized.
- Groups should be unique from center time activities.
- Groups can show better results than the whole groups to teach content if the schedules are rotated properly among students (Wasik, 2008).

According to Fien et al. (2011), progressive instruction in the small group setting provides the environment for students to be immersed in vocabulary, fluency, as well as the word meanings and their application. This small group progressive instruction has the potential to reduce the vocabulary achievement gap for students as well as comprehension challenges (Fien et al., 2011).

Response to Intervention

RTI has been implemented in school districts to increase the opportunities and learning capabilities of struggling students. This model has achieved recognition in the United States in recent years because it addresses the mandates of NCLB by supporting struggling students, with academic as well as behavioral strategies who are under IDEA

(Samuels, 2008). IDEA (year) suggests that RTI is a model of intervention before referral is made to a child study team (CST). The CST members decide if the student is a candidate for special education services. The RTI model includes a focus on literacy in short periods of time (Greenwood et al., 2011). As Greenwood et al. (2011) articulated, there are three basic components of the RTI model—Tier 1, Tier 2, and Tier 3. The first strategy (Tier 1) includes the assessments and probable alterations of the language arts program in a targeted classroom. Assessments ensure that the literacy instruction delivered by the classroom teacher addresses the needs of the individual as well as all the children in the classroom (i.e., children who experience early literacy difficulties). The second strategy (Tier 2) includes the secondary (small group) instruction for children whose literacy difficulties are not resolved by suitable adjustments to the classroom instructional program. The third (Tier 3) involves more rigorous strategies (e.g., fewer children in a group, daily one-on-one tutoring). All three strategies rely on monitoring each student's progress as the basis for defining eligibility for a given tier of remediation. Furthermore, referral to a child study team, as well as diagnostic classification, is deferred pending the outcomes from the different tiers (Wanzek & Vaughn, 2010). I stopped reviewing here due to time constraints. Please go through the rest of your chapter and look for the patterns I pointed out to you. I will now look at Chapter 3.

Vygotsky's learning process manifests in the RTI model of intervention. In Tier 1 the RTI model is congruent with Vygotsky's concept in that the initial assessment of the student transpires through the relationship with the educator. Vygotsky's ZPD is centered on small group instruction, just as is Tier 2 of the RTI model. Both Vygotsky and RTI expect the instructor to build upon a student's current knowledge base in small

increments. Through modeling and encouragement, it is expected that the student will realize independence as confidence is gained (Bacon, 2005).

Although the literacy strategies and progress monitoring for struggling readers of the RTI model are well fleshed out, questions persist about how RTI can fit into other subjects and with older students (Samuels, 2008). Vellutino et al. (2008) argued that RTI models are mainly based on work with reading-impaired children highly favor small group instruction as a major strategy to improve literacy skills. The Success Program implements strategies to improve literacy through small group instruction basing its structure on the RTI model.

Conceptual Framework

Resiliency

Social scientists have long been concerned with the determinants of adverse social phenomena, such as interpersonal conflict and depression, on individuals who have little apparent capacity to shape these outcomes. In the 1970s, the research began to shift to focus on understanding why some persons succeed in spite of adverse circumstances. This change in focus gave rise to studies on what is now referred to as *resilience*, which until recently has predominantly focused on characteristics of the individual. For instance, a review of the evidence shows that since the 1970s many children who were raised in deprived and adverse environments actually went on to become successful and loving individuals (Sirvani, 2007).

Resiliency's historical conceptual underpinnings are grounded in ecological systems. In ecological sciences, resilience relates to the property of the ecological systems at different scales rather than populations. There has been a significant evolution of the concept of resilience in ecology over the past decade in terms of its measurement

and in terms of understanding how resilience interacts with other system properties such as diversity and stability (Powers, 2010).

The concept of resiliency has evolved in the social sciences as encompassing the capability to bounce back effectively regardless of the exposure to severe risk (Ross et al., 2008). Student resiliency is fostered by environment where the student feels cared for and safe to explore academically (Ayalon, 2007). At least one adult must be included who knows the child well and cares sincerely about his or her success (Ayalon, 2007). In addition to this, student resiliency can also be enhanced through persistent support, high expectations as well as opportunities for significant involvement (Ayalon, 2007). Resilience includes several environmental stresses such as poverty (Atkinson, Dietz, & Neumayer, 2007).

Resilience is therefore defined as the actual interaction between humans and nature; the resilience of the socioecological system is a central objective of sustainability. Social elements of these systems include the well-being and the governance of access and regulation to the resources in question. The resilience of institutions depends on their historic evolution and their inclusivity or exclusivity and how effective they are in meeting the needs of a segment of the society (Sirvani, 2007).

In the context of the present study, resilience is anchored between a student's home and school environments. Slavin, Lake, Davis, and Madden (2008) indicated that the failure of students to read at grade level is not random but is concentrated among schools serving los-SES minority students. In fact, Bhattacharya, Currie, and Haider (2006) and Fernandez (2009) documented the link between student poverty, socioeconomic status, and low academic performance. The gap in performance between children of different ethnic groups first appears in the early elementary grades

(Bhattachana et al., 2006; Fernandez, 2009). This gap is perhaps the most important policy issue in education in the United States today (Slavin et al., 2008).

Academic resilience is based on the more general definition of resilience. Much of the resilience research includes and goes beyond literacy (Unger, 2010). Several researchers (Ayalon, 2007; Downey, 2008; Powers, 2010) looked at resilience as a broader concept encompassing physical, mental, and emotional health. Resilience is generally defined as the capacity to overcome or experience of having overcome, deleterious life events (Meece, 2010).

Recent research (Ayalon, 2007; Meece, 2010) on low-SES minority elementary students indicated that the most powerful school characteristics for promoting resiliency (academic success) include a supportive school environment model that is safe and promotes positive student relationships. Downey (2008) noted that in the resiliency model one educator is the pivotal person who knows the child well and cares sincerely about his or her success. Ayalon (2007), Powers (2010), and Downey concluded that students in these safe and nurturing environments display greater engagement in academic activities, a stronger sense of efficacy, higher self-esteem, and a more positive outlook toward school.

Compensatory strategies are those tactics that are used by educators to assist students in order to overcome their vulnerabilities or risk factors. Morales (2008) and Ungar and Lerner (2008) indicated that a number of factors are central to children's learning. Benard (2004) and Henderson and Milstein (2003) found that more instruction produces more learning. Luthar, Cicchetti, and Becker (2000) examined the literature of resilience for conceptual and methodological weaknesses and noted that research on resilience is an evolving approach, which emerging in the 1970s focusing on internal

(self-esteem), advanced to external (social environment), and more recently environmental factors, all of which link with adaptation to perceived risk. Perceived risk could be subjective in the research process. Luthar et al. found that resilience research lacks standards or a consensus of definitions and terminology.

The resiliency theory is a strengths-based construct that is grounded in the process of assessment, engagement, and intervention (Benard, 2004). The current study aligns well with this view and benefited from this theoretical approach. This study assessed student literacy using two instruments, the DRA and the Dolch Sight Word List. In terms of building relationships and fostering engagement as part of the Success Program, teachers were hired to provide literacy instruction to the participants in safe, small group environments. As the resiliency model suggests, this environment provides students a safe atmosphere and encourages them to ask questions they may not ask in the classroom. The premise is that through the intervention process the student will gain the confidence to attempt using newly acquired skills.

Resiliency and the Impact of Poverty on Literacy

The rate of childhood poverty in the United States has increased in the last several years (U.S. Census Bureau, 2010). The national rate rose from 15% in 2009 to 15.1% in 2010 (U.S. Census Bureau, 2010). The U.S. Census Bureau (2012) reported that 9,880,000 residents were living below the poverty level in 2011. This growing economic instability is reflected in the steep jump in the number of children living in families receiving food stamps. The number of children in families receiving food stamps was 317,819 in 2010, up 58% from 2006 (Allen-Kyle & Parello, 2011). Allen-Kyle and Parello (2011) noted that hungry children have more difficulty learning. By contrast

when students are not hungry there are fewer disciplinary referrals, fewer visits to the nurse, and greater student achievement (Allen-Kyle & Parello, 2011).

The landmark New Jersey Supreme Court case, Abbott v. Burke, established academic and social–emotional support for the state's 31 poorest districts to sustain early academic learning as a means of eradicating the effects of poverty. This ruling established that there is a segment of students across the state who are economically vulnerable. The Abbott legislative order found that students' achievement in school severely affects their social and economic success as adults.

The structure and methods of the resiliency theory (Morales, 2008; Morales & Trotman, 2004; Ungar & Lerner, 2008) supported the current study in identifying common threads in improving the literacy achievement of at-risk African American third grade students. According to Morales and Trotman (2004), the resiliency model suggests the dynamics affecting at-risk students are protective factors, vulnerability areas, and compensatory strategies. The resiliency theory aligns with and supports the current study illuminating the national (NCLB) and local (Abbott v. Burke) protective factors affecting the participants.

Risk factors are generally those environmental problems or issues that have the potential to place students in probable danger, such as lack of food and living in poverty. The protective factor directly affecting the current study on the national level is NCLB. NCLB (2002) protected students educational progress by ensuring that all students meet predetermined benchmarks. NCLB required all school districts to achieve AYP, which means that schools must produce annual incremental improvement in statewide standardized test scores (Department of Education, 2011). NCLB expected 95% of students to score proficient or above in statewide reading, math, and science tests by

2014. Even more directly protecting students in the Sun Valley Lake School District is the New Jersey Supreme Court decision Abbott v. Burke enacted to ensure the at-risk, poorest students in the state have the proper funding to support literacy.

Risk factors might involve a culture of violence, substandard schools, or lack of parental consideration and interest. All of these factors are probable to place a student at risk. Risk factors are those characteristics or features that work to increase the possibility of developing negative notions in an individual (Powers, 2010). Conversely, protective factors involve uniqueness and individuality, which may depict optimistic encouraging effects on outcomes and interact with risk factors to alter or change their impact (Powers, 2010).

African Americans students living in poverty areas are exposed to challenging life environments that can significantly hinder their goal towards academic success. Burchinala, Vandergriftb, Piantac, and Mashburnc (2008) and Downey (2008) illustrated the higher risk factors of African American students in elementary and middle schools. The multiple risk model demonstrated by Burchinala et al. recognizes that there are several indices of risk such as poverty, single parenthood, large households, low parental education, unemployment, and low-income communities and schools, and more proximal measures such as maternal depression and lack of social support tend to cluster in the same individual.

School districts with high poverty rates have students with low literacy, which increases their susceptible to experience factors such as low self-confidence and greater behavioral problems in the classroom (Bhattachana et al., 2006; Fernandez, 2009). According to Morales (2008), resilient students are able to do well in school while dealing with adverse situations such as severe poverty or learning deficiencies. In the current study susceptibility to vulnerability manifested itself as students reading one

grade level below what is expected in third grade and the effect poverty may have in this situation. The Success Program was a compensatory strategy to address the vulnerability of the participants in the current study.

Sun Valley Lake, high poverty school district, has several environmental risk factors that have potentially negative effects (NJDOE, 2012a). The effects of poverty/low-income on children's literacy may be accentuated by neighborhood poverty. A holistic approach must be taken when identifying deficiencies in the academic performance of each student. The holistic approach in determining academic performance is not limited to environmental risks, microsystem, and resilience. Correspondingly, research (Kim, Petscher, Schatschneider, & Foorman, 2010) on empirically supported intervention programs has revealed that intervening across multiple domains is more resourceful than focusing on just one aspect of a child's environment (Powers, 2010). Swanson, Solis, Ciullo, and McKenna (2011) in their research on reading outcomes for at-risk early elementary students found skill development should not be concentrated in one specific area. They found positive results when skills were developed across several domains: vocabulary, letter recognition, comprehension, and oral reading fluency through read alouds in small group instruction. The research conducted by Swanson et al. aligns well with Sun Valley Lake's supplemental reading program. The Success Program provides skill development as a collaborative intervention to African American at-risk third grade students during small group instruction in the areas of reading comprehension, oral reading fluency, instructional reading level, and sight word recognition.

Literature Review

Historical Overview of Literacy

In order for a nation such as the United States to improve school literacy, it has to pay special attention to literacy achievement through third grade. Wilson and Colmar (2008) explained that students who improve their learning ability in third grade will suffer fewer academic problems than students who fail to meet academic benchmarks in the third grade. According to Elias and Torres (2007), one out of six children faces reading and learning problems from Grades 1 to 3. Literacy not only relates to reading but is also considered as the foundation of all other areas of academic learning and application of education in life outside the school. Normally, students use reading skills for learning their lessons, but when they start struggling with literacy they become very likely to have difficulty in all academic sectors. Larson (2006) noted that students who are not reading on the third grade level by the end of the school year continue struggling in their remaining school years. Students who read below grade level in the first grade but receive literacy intervention by and/or during third grade will do well in their studies in high school (Larson, 2006).

Redesigning text books is an intervention to increase literacy skills (Larson, 2006). VanDerHeyden, Snyder, Broussard, and Ramsdell (2007) recognized the increasing disparities between purely school-based learning and literacy practices in practical life. Educators can enhance and mobilize students' knowledge and performance by designing and redesigning textbooks and syllabi with emphasis on social and realworld importance. This sort of redesign effort would require obtaining textbooks that are applicable to the students' culture. Educators may find enhanced participation by incorporating texts from relevant cultures so that students will pay special attention to the lesson (Larson, 2006).

No Child Left Behind

The Department of Education has made many changes in the education sector in last decade and these changes affected goals and provisions of education in all public schools across America (Ainsworth, Ortlieb, Cheek, Pate-Simnacher, & Fetters, 2012). To fill the gap in education between poor and affluent students, one of the major goals of NCLB's framers was to provide education to all minorities and economically challenged students to improve and develop their reading and writing skills. This act changed the environment of classrooms, schools, and literacy delivery. NCLB (2002) focused on five basic concepts or components:

- Linguistic and grammatical awareness
- Pronunciation ability
- Improvement in vocabulary
- Fluency in reading and speaking
- Comprehension (Ainsworth et al., 2012)

NCLB is perhaps the most significant and far-reaching education policy initiative in the United States. This legislation vividly stretched federal influence over the states' more than 90,000 public schools. NCLB (2002) required each state to create a system of accountability that can be applied to all public schools and students. These accountability systems must include annual testing of public school students in mathematics and reading in third grade through eighth grade (Dee & Jacob, 2011).

Literacy in Early Elementary School

The educational system is responsible to ensure that students are able to read proficiently by the end of third grade. Illiteracy impacts individuals, families and society as a whole. The result of the 2003 National Assessment of Adult Literacy (NAAL) provides startling information on the future of our youth who do not attain the literacy

benchmarks. In it the National Center for Education Statistics (2003) reported that two thirds of the students not reading at grade level in fourth grade will end up on social service assistance or in a penal institution. Harlow (2003) established a link between literacy and crime, noting that 80% of the youth in the juvenile court system are functionally illiterate. Harlow reported that 70% of incarcerated individuals in the American penal system are reading at a fourth grade level. Some states use third grade literacy test scores to project future inmate populations. Ensuring the reading comprehension of early elementary students will benefit them immediately as well as society in the future.

The importance of literacy in early elementary school, particularly in third grade, is well established. Children who fall behind their classmates in learning to read not only have to catch up but also to use their reading abilities to keep pace with the daily introduction of new lessons and skills (Gunn, Smolkowski, Biglan, & Black, 2002). Literacy is important for children at the elementary level, particularly as the academic environment becomes increasingly challenging in third grade and children start to use their skills for learning subjects like science, social studies, mathematics, and literature. Proficient literacy skills provide the opportunity to engage students in more intricate critical thinking and problem-solving tasks. Children who are poor readers at the end of first grade rarely attain average-level reading skills by the end of elementary school (Snow, 2005). Children who do not reach grade-level literacy skills, including writing and reading by third grade struggle to catch up in future years. Snow (2005) found that students who were poor readers in third grade did not adequately develop their reading and writing skills by eighth grade.

Literacy Challenges in New Jersey

Nationally NCLB policy has introduced instruments to ensure that all children receive a quality education in an effort to advocate for the academic and social success of at-risk students (Larson, 2006). However, New Jersey's children encountered challenges that were not fully addressed in the NCLB Act. The inequalities faced by students in New Jersey required an additional protective layer that NCLB did not take into consideration. The New Jersey Supreme Court decision in Abbott v. Burke required significant reforms and mandates for the state's poorest school districts. In an attempt to remedy the inequalities of school funding and their impact on the poorest residents of the state, the New Jersey Supreme Court ordered an unprecedented series of entitlements for urban school children (Fernandez, 2009). These mandates required that per pupil spending be equalized between urban districts and more affluent suburban districts. The courts also ordered the implementation of a series of specific standards-based education reforms for all students in New Jersey for the 31 poorest districts in what came to be known as the Abbott remedies. These remedies contain a strong focus on assessment and data to close the achievement gap and instruction based on

- State core curriculum content standards
- Class-size limits
- Comprehensive literacy program from kindergarten through third grade
- Intensive and continual professional development
- Quality early childhood programs for all 3- and 4-year-olds (Fernandez, 2009).

Literacy Interventions

The Success Program was created to increase the literacy skills of third grade African American students who were one grade level below the proficient standard. The three-tier approach of the Success Program was based on the RTI model, largely because

it has proven effective (Greenwood et al., 2011; McGrath, McLaughlin, Derby, & Bucknell, 2012; Samuels, 2008; Vellutino et al., 2008) and can be used to improve literacy achievement in elementary schools. The RTI model consists of a framework that favors differentiating instructional strategies for individual students based on their demonstrated need. RTI is a method that uses measurement starting with a universal screening of the students (McGrath et al., 2012). Because many students enter the Sun Valley Lake school district with limited exposure to early literacy experiences, all students were assessed with the DRA to determine their literacy level as part of Tier 1.

Van Der Heyden et al.'s (2007) research assessed Head Start preschool students using the Brigance Preschool Screen to identify lower performing students that have greater risk of failure in the areas of letter naming and fluency. Using the RTI model Van Der Heyden et al. found that students in the lowest 25% had the greatest improvement of skills whereas students in the highest 25% had the least improvement in skills. Students who responded to Tier 2 strategies were called high responders. Wanzek and Vaughn (2010) evaluated third grade students based on their reading skills. Based on these evaluations, the third grade students were given Tier 2 small group instruction, resulting in positive outcomes.

Assessing Literacy: Instruments and Variables

There is a need for intervention and remediation for those children who are below grade level in literacy. Scammacca, Vaughn, Roberts, Wanzek, and Torgesen (2007) suggested the focus of studies should be on building emergent literacy that points toward the knowledge, skills, and approach that are considered developmental precursors in writing and reading. There are also several assessments that help in promoting the

academic skills among the economically disadvantaged African American students. Paris and Hoffman (2004) suggested the rationales for these assessments lie in

- Research on reading development that indicates the importance of basic skills for future success.
- Classroom evidence that early diagnosis and remediation of reading difficulties can improve children's reading achievement.

In response to NCLB's assessment requirements, NJDOE constructed an assessment. The NJ-ASK is the state test for students in Grades 3 through 8. It is designed to give the school information about how well the children are achieving in the areas required by New Jersey's Core Curriculum Content Standards. NJ-ASK is administered to New Jersey's public school students in Grades 3 through 8. Language arts and mathematics are tested. In fourth and eighth grades science is also tested (Pizzo, 2008).

In third grade the New Jersey Common Core Curriculum Standards place emphasis on narrative and expository texts, as well as literal and inferential comprehension. In 2010, the NJ-ASK literacy test was administered to third grade students in the Sun Valley Lake school district. The proficient rating indicates that a student is reading at grade level (NCLB, 2002). According to NCLB (2002), 95% of all students should read at grade level by 2014. According to the New Jersey Historical Report Card Data 1995–2012 (NJDOE, 2012a), 66.5% of all third grade students scored proficient on the NJ-ASK. In Sun Valley Lake the 2010 NJ-ASK third grade literacy test scores reported 65.7% of students did not attain the proficient benchmark.

Sun Valley Lake Public School District is an economically challenged urban district where 76.8% of the students are eligible for a free or reduced price lunch, which

indicates they are living below the HUD poverty guidelines (Plainfield School District, 2011). A preponderance of research literature (Hammer, Farkas, & Maczuga, 2010; Morgan & Meier, 2008; Wasik & Hindman, 2011) suggested that poverty impacts language acqusition because children whose parents are professionls have larger vocabularies than children whose parents are receiving Temporay Assistance to Needy Families (TANF). Hart and Risley (2003) found enormous differences in word exposure before age 4, suggesting that low-SES children are exposed to 30 million fewer words than medium- and high-SES children. Children residing in professional homes (middle class) have familiarity with or exposure to apoximately 45 million words, whereas children residing in low-SES (TANF) homes have familiarity with or exposure to 13 million words (Champion, Hyter, McCabe, & Bland-Stewart, 2003). In terms of actual vocabulary by age 3, children whose parents were professionals had vocabularies of about 1,100 words and children whose parents were TANF (social service) recipients had vocabularies of about 522 words (Howard et al., 2009). The Success Program was develped in part to create opportunities to expand language acquesion to address this topic.

Developmental Reading Assessment

The DRA is a set of independently managed criterion-referenced reading assessments for students in kindergarten through eighth grade. It is modeled after a casual reading inventory and is used to administer, score, and interpret the results by the classroom teachers. DRA includes two important instruments involved in the DRA series. These include Developmental Reading Assessment, Kindergarten Through Grade 3, Second Edition (DRA2), which includes the DRA Word Analysis (Weber, 2000), and the Developmental Reading Assessment, 4–8, Second Edition (Williams, 1999). The

DRA2 K–3 and 4–8 are intended to identify students' independent reading level, defined as a text on which students meet specific criteria in terms of accuracy, fluency, and comprehension.

The DRA plays a vital role in measuring the progress of students as these measures are based on the students' independent reading levels based on the performance in the areas of accuracy, fluency, and comprehension. The results that are obtained from DRA give comparisons with respect to reading on grade level (Mullen, 2007). The Success Program will use the DRA to assess the participants.

Variables Measured by the DRA

Reading comprehension. Reading comprehension is the structure of the meaning of written communication through a shared, holistic interchange of concepts and ideas between an interpreter and the message (Rasinski, Brassell, & Yopp, 2008). The content of the meaning is affected by an interpreter's previous knowledge and experience. This definition suggests that reading comprehension needs an action on the part of reader. That action can involve the use of prior knowledge that the reader has on the topic of the text as well as the text itself in order to create meaning (Rasinski et al., 2008).

As early as possible students should begin working on a variety of comprehension skills so that they can continue reviewing those skills and add to new ones they are learning as they transition from grade to grade. In third grade, emphasis is placed on narrative and expository texts, and literal and inferential comprehension (Duran, 2003). Students in third grade continue using prior knowledge to answer questions, make connections with what they are reading, recall major points made in the text, answer questions specific to what they have read, and search for specific information in the text in order to answer questions about what they have read (Duran, 2003).

Reading comprehension is the ability to take information from written text, make inferences, and apply them in a way that demonstrates knowledge or understanding of that information (Rasinski et al., 2008). Comprehension helps the reader to be able to act on, respond to, and transform the information that is presented in the written text in ways that demonstrate understanding.

As reading skills are acquired, the ability to interpret underlying meanings such as irony and sarcasm is recognized as metalinguistic awareness. Metalinguistic awareness in first grade is a statistically significant predictor of later reading comprehension performance, when it is considered with academic aptitude (Duran, 2003). As late as third and fifth grade, metalinguistic awareness still predicts reading comprehension performance. Dreher and Zenge (1990) assessed the relationship between metalinguistic awareness in first grade and reading achievement in the third and fifth grades. The participants were randomly selected to participate in the study. The tests and procedures included standardized tests, interviews, and informal sessions. The results showed that metalinguistic awareness continues to account for at least as much variance in reading comprehension in fifth grade as in third grade.

A component of education is learning to comprehend the meaning of texts. It is vital for students to know the significance of what they are reading or else the effort is pointless. Reading without comprehension is similar to talking to someone and listening without understanding what the person wishes to express.

As early as possible, students must acquire knowledge of learning and literacy. This acquisition will make the long-term educational process less arduous. Reading comprehension is significant for second and third grade students. As Ari (2011) noted,

- It will make the life less problematic if children learn to comprehend what they read.
- Other than the knowledge of writing and reading, students should develop understanding of math, science, social studies, and other subjects as that understanding establishes the foundation for their future education, thus making their experience well rounded and measurable.
- It will improve the vocabulary of the learners, which is a basic requirement of reading comprehension, and they will gain confidence in writing and reading.
- They will be able to read fluently, mimicking their normal speech patterns.
- It will assist students to relate the topic they are reading to their life experiences or to their earlier understanding from other text.

In order to achieve these goals it is imperative to introduce emerging readers to vocabulary, language, and reading opportunities early in their lives. Students' environment should support them in the progression of their skills toward reading. When third grade students enhance their skills and have a better understanding of what they are reading, they discover new knowledge and form new strategies to build comprehension. Improved comprehension will broaden students' horizons, opening a new world of enjoyable reading (Rasinski et al., 2008).

NCLB (2002) required that third graders be measured in reading comprehension. New Jersey uses the NJ-ASK third grade literacy test for this measurement. Therefore, this study used third grade reading comprehension as one of three distal measures that can be assessed using the DRA instrument.

Reading fluency. Defining reading fluency is considered a complex skill to attain for numerous reasons. Fluency is an extremely difficult proficiency to acquire and involves quick and correct processing, which is conjointly intertwined with several skills (Duran, 2003). Fluency entails automatic processing, the ability to smoothly read large passages of reading, and incidental, or implicit, learning (Duran, 2003).

Fluency is often defined as reading quickly, smoothly, and with expression. In order for students to become fluent readers, they must be accurate readers (Duran, 2003). Such a definition of fluency includes skills in rapid word recognition, rapid reading rate, extensive exposure to print (large amounts of reading), accuracy in comprehension, and incremental learning (Rasinski et al., 2008). Moreover, fluency is a skill to be mastered; in order for students to comprehend they must go beyond accuracy to decoding (Duran, 2003).

Grabe (2010) proposed that amount of reading is a strong predictor for good reading skills. He conducted an international study that correlated the relationship between amount of reading and achievement for fourth grade students. Grabe found that in reading, use of language, word recognition, vocabulary, and fluent use of language need to be reinforced.

Reading fluency has been a concern of young readers' literacy development since it became one of the five pillars—along with phonemic awareness, phonics, vocabulary, and comprehension—of early reading education (Ari, 2011). Reading fluency, according to the NRP (2000), improves as accuracy is developed and subsequently reading has a natural flow. Fluency is usually measured as the number of words read correctly (orally or silently) per minute (Ari, 2011).

Several researchers (Kim et al, 2010; Kostewicz, 2012; Pilonieta, 2012) consider students' level of fluency as directly related to their comprehension skills. Kim et al.

(2010) examined the relationship of growth trajectories of oral reading fluency, vocabulary, phonological awareness, letter-naming fluency, and nonsense word reading fluency from first grade to third grade. It was found that oral reading frequency showed a relatively higher order reading skill (Kim et al., 2010). Pilonieta (2012) in an 8-week research study assessed reading rate, or correct words per minute, and concluded that reading fluency was strongly related with reading comprehension. According to Kostewicz (2012), students practicing to attain increased fluency rates not only build confidence but also experience other successful effects.

Reading fluency is important for students as it will help them to understand and articulate the main topics and the themes of texts. For example, students might read a story about the sun as an introduction to the solar system and gain information such as how the sun benefits the earth, that it is a star, and how it rotates. This knowledge is building on existing knowledge such as its shape, that it gives light to us, and that it rises in the east and sets in the west. Students would be able to connect this subject with their life experiences (e.g., The sun is yellow and round. It rises in the morning.) and articulate their learning with others (Rasinski et al., 2008).

Reading in a fluent manner builds confidence in students as their reading increasingly mimics their normal speech patterns (Meadan et al., 2008). This study used third grade oral reading fluency as one of three distal measures that can be assessed using the DRA instrument.

Instructional reading performance. Reading level depends on low-level skills and microskills. The purpose of reading instruction is to make sure that students are ready to properly establish the words of a text and then be able to extract the correct meaning. By specializing in word-level signals, a reader will recognize words while not

being distracted by different stimuli, like pictures being presented within the reading context (Conley, Derby, Roberts-Gwinn, Weber, & McLaughlin, 2004). According to Duran (2003), as students progress in word analysis skills, they encounter many complicated words. Third grade students are expected to learn ways to decode multisyllabic words. They are taught to use the structural options of such word elements as affixes (e.g., *pre*, *mis*, *tion*) to assist in word recognition.

Variables Measured by Sight Word Recognition

Word recognition is an essential part of reading comprehension because it includes all processes that are necessary to give a word meaning and context (Troschitz, 2009). Understanding a sentence is more than substituting every given word or phrase with its translation. A reader must be able to understanding the meaning of a word or phrase. Language items develop meaning in their contexts and understanding this meaning is called *word recognition* (Troschitz, 2009), which itself is a compound of different meanings (Troschitz, 2009). Sight-word recognition is defined as a discrete, observable response that is controlled by a printed stimulus (Meadan et al., 2008). Sight words are recognized without mediation or phonetic analysis, can be read from memory, and include not only high frequency words but any words that can be read from memory (Meadan et al., 2008).

According to Duran (2003), sight words are those words that have not been introduced as a part of the reading lesson when students encounter new sounds and syllables as a part of the original reading lesson. Most third grade students are acquainted with sight words that will help them to become more fluent in reading. In addition to sight word recognition, early readers sound out unfamiliar words. Decoding is the process of phonetically sounding out words. It is necessary for students to acquire

decoding skills. Decoding skills assist students to read the unfamiliar words easily by breaking them into parts. It also helps them to spell out the words. When students are able to read long sentences other than word by word (Duran, 2003), it helps them to read independently and understand more what they are reading.

Variable Measured by the Dolch Sight Word List

Teaching sight words to third grade readers might require explicit skill instruction from education professionals. One of the most frequently used lists to teach sight words is the Dolch sight word list (Meadan et al., 2008) which includes 220 words that represent over 50% of words found in printed material. If all of the Dolch sight words are mastered, a learner will be able to read at a third grade level. Realizing that over half of all third grade students in Sun Valley Lake are not proficient in literacy, the Success Program implemented the Dolch sight word list as a literacy strategy.

There are five Dolch sight word lists. It is expected that each student will be able to recognize all of the words before entering the subsequent grade. The lists are preprimary (prekindergarten), consisting of 40 words a student should recognized before entering kindergarten; primer sight word list, an additional 52 words that students should recognize before entering first grade; first grade sight word list, an additional 41 new words students should recognize before second grade; second grade sight word list, an additional 46 words a student should recognize before entering third grade; and third grade sight word list, an additional 41 words that students should recognize before the end of third grade. There are an additional 41 words for third graders to learn before the end of the year. This study assessed students' sight word recognition with a pretest and a posttest using the Dolch sight word list for third grade students.

Summary and Conclusions

Research has documented the existence of a literacy achievement gap between children of low-SES families living in lower-income urban communities and children of affluent higher-income families (Hart et al., 2010; Hosterman et al., 2008; Irving & Hudley, 2005; Jones & Menchetti, 2001; Kearns et al., 2005; Lo & Cartledge, 2006; Olmeda & Kauffman, 2003). In terms of literacy, children from low-income families score on average 60% below children from higher-income families, and once the children from poverty fall behind, they tend to stay behind (Children's Defense Fund, 2004). Scholars have determined that reading comprehension, oral reading fluency, and sight word recognition are major constructs to be considered in assisting students with elevating literacy levels (Ari, 2011; Grabe, 2010; Meadan et al., 2008).

Further research is recommended to determine what strategies work and do not work in for African American students in order to improve their literacy skills. Currently, a gap in the literature exists because there has not been any published research conducted in Sun Valley Lake on African American students in third grade regarding literacy in terms of literacy test scores. This study's findings may contribute to the existing knowledge base by reporting the impact of a program to improve literacy by the end of third grade. Students not reading proficiently in third grade are 4 times more likely not to obtain a high school diploma (Hernandez, 2011). Lack of a high school diploma may lessen a person's opportunity for financial stability. According to the Children's Defense Fund (2004), every year a child spends in poverty results in a cost of $11,800 in lost future production. A parallel exists between economic success and academic success (Children's Defense Fund, 2004); therefore, this study will contribute to society's future citizens.

Veerappan et al. (2011) described scaffolding as the instructor modeling the preferred learning strategies or tasks and then slowly shifts the tasks to the students. This type of instruction seems to be consistent with Vygotsky's belief that learning is a social process and not an individual one, which emerges when interaction occurs among the students and teachers in the classroom. Even though Vygotsky did not use the term *scaffolding*, it still possesses a theoretical foundation in his discussion of the ZPD. He defined the ZPD as the space between the level of potential development, as determined through problem solving under teacher guidance, and interaction and collaboration with more capable student peers and actual development level of the learner, as determined by independent problem solving.

I chose resiliency theory as the theoretical framework for the current study because it demonstrates that individuals possess marked behaviors that are associated with optimistic performance (Benard, 2004). Resilience encompasses a number of elements, including environmental stresses such as poverty that warrant corrective action (Atkinson et al., 2007). The current study was intended to determine the relationship between participation in the Success Program and literacy test scores of African American third grade students of the Sun Valley Lake school district. The three-tier structure of the Success Program is modeled after the RTI model, which has realized positive results in elevating literacy of at-risk students (Vellutino et al., 2008). Chapter 3 clearly describes the research design, methods, and the rationale providing a connection to the resiliency model, RTI, and the variables in the current study. Chapter 3: Research Method

Introduction

Using archival data, I evaluated the effectiveness of the Success Program, a district-wide initiative designed to elevate the literacy of third grade, African American

students reading below grade level, conducted during the 2010–2011 and 2011–2012 school years. The Success Program and assessments were conducted in the same manner each school year. The purpose of this study was to determine if the students who participated in the Success Program (program group) had significantly higher performance on measures of achievement than similar children who did not participate (comparison group) in the Success Program.

In this chapter, the research design and rationale are discussed, including the variables. The chapter includes the methodology, sampling procedure, characteristics exclusive to the population, and a discussion of the data collection method and the instruments used in the assessment of the sample. I also discuss threats to validity, ethical procedures, and concerns regarding data and the protection of participants' rights. The chapter concludes with an overall summary of the design and methodology.

Research Design and Rationale

In this study, I used archival data collected during the 2010–2011 and 2011–2012 school years to determine whether the students who participated (program group) in the Success Program performed better academically than students who did not participate (comparison group) in the Success Program. The independent variable was the Success Program with two groups—students who participated in the Success Program and students who did not. Literacy was the dependent variable, based on measures of reading comprehension, reading fluency, instructional reading performance, and sight word recognition. The participants were selected using a nonprobability criterion sampling, which dictates a quasi-experimental design using a pretest and posttest method. Using this approach allowed conclusive statistics in response to the research questions in the current study.

The Success Program used two assessment tools, the DRA and the Dolch word list, to determine if students' participation elevated their literacy skills. These assessments were used in this study because the school district purchased and adopted the DRA2 and Dolch Sight Word List instruments to be used district wide with all kindergarten through third grade students. Therefore, no resource constraints were associated with the research design of this study. Both instruments aligned with the New Jersey Common Core Standards (NJCCS) as well as the curriculum used during the 2010–2011 and 2011–2012 school years. The district provided the staff with professional development in the administration and recording procedures of these instruments. Research designs using reliable data will add to the knowledge base of elevating literacy skills in third grade, African American students in high poverty school districts.

Methodology

Population

The participants in this study totaled 200 students. There were 100 students per year for 2 years—50 students (program group) who took part in the Success Program the first year (2010–2011) and a second group (comparison group) of 50 students who did not participate in the first year of the Success Program. Data collected for the second year (2011–2012) included scores of 50 students (program group) who took part in the Success Program and a comparison group of 50 students who did not participate in the Success Program. The criteria for participation in the Success Program was that the students had to be in the third grade and at least one grade level below their current grade in literacy as measured by the DRA2 and the Dolch Sight Word List assessments. All of the participants of the Success Program were African American. The comparison group met the same criteria as the participant group: Students had to be in the third grade and at

least one grade level below their current grade in literacy as measured by the DRA2 and the Dolch Sight Word List assessments. The comparison group was 50 African American, third grade students from the same school years who met the same criteria but did not participate in the Success Program. Archival DRA2 and Dolch Sight Word List records were available for both groups.

Sampling and Sampling Procedures

I used a nonprobability criterion sampling method. This method was suitable because I had criteria for each of the two groups. The participant group must have completed the Success Program. Only students meeting this criterion were accepted and included into the participant group for this study. The criterion for inclusion in the comparison group was that they were academically eligible for the Success Program but did not participate. Students had to be African American, in the third grade, and at least one grade level below their current grade in literacy as measured by the DRA2 and the Dolch Sight Word List assessments.

Procedures for Recruitment Participation and Data Collection

The Success Program participants were located at all 10 elementary schools in the district. The Success Program was conducted in the same manner each of the 2 years. In the beginning of each school year, the DRA2 and the Dolch Sight Word List were administered in the third grade classrooms as pretests. This test administration took place no later than the second week of October. For students to be considered a participant in the Success Program they had to meet the following criteria: (a) African American, (b) in the third grade during participation in the program (c) in a general education classroom and (d) at least one grade level below in literacy according to four measures: reading fluency, reading comprehension, instructional reading performance, and sight word

recognition. The comparison group was composed of students who met the criteria to participate in the Success Program but did not participate.

Classroom teachers were asked to submit the names of students meeting the eligibility guidelines to the interventionist. The interventionist selected students from the classroom teacher recommendations for participation in the Success Program. There were 50 spaces for participation in the Success Program. Eligible students who were not placed in the Success Program due to limited space were placed in the comparison group. Parents were notified that their child was receiving supplemental intervention during classroom literacy instruction. Parental consent was not required for participation in the Success Program.

The DRA2 and the Dolch Sight Word List were administered no later than the second week of June to all third grade students as posttests. There were pretest and posttest scores available on all third grade students for the school years 2010–2011 and 2011–2012. The test results were recorded in each student's permanent record. The interventionist who oversaw the Success Program also had a copy of the DRA and Dolch Sight Word List test results for all students. I used archival data to obtain the pretest and posttest scores for the program group students and the comparison group students.

The district's procedure to access these archival data was to request permission from the superintendent of schools, as well as the person directly responsible for the security of the scores (the letter of cooperation is located in Appendix A). To ensure confidentiality, the students were not identified by name or by the school of enrollment. All student data were coded before their test results were released to me. The analyses of the pre and posttests were based on aggregated data.

Instrumentation

The DRA2, K–3 (Beaver, 2006) and the Dolch (1942) Sight Word List were used as the measures of literacy by the school district. The DRA2 is used to measure reading comprehension, reading fluency, and instructional reading level and provides educators with information to implement instructional strategies (Williams, 1999). In 1996, a large formal field test was conducted with 84 teachers and 346 students in kindergarten through third grade across 10 states and one province in Canada. The sample was considered ethnically diverse, and 16% of the participants were from urban areas. A nearly equal number of male and female students were assessed. During May and September of 2000, additional field tests were conducted in 39 school districts in the United States and two provinces in Canada, encompassing 208 students in kindergarten through third grade. Further field testing was done in the fall of 2004 and the spring of 2005 and published in 2006. Revisions were made based on the NRP (2000) report and *Reading for Understanding* (Snow, 2002). Reliabilities (Cronbach's alpha) were greater than .75, and concurrent validity was found when correlated with the Iowa Test of Basic Skills (Williams, 1999).

The Dolch (year) sight word list was first developed in 1936 and published as a test in 1942. This list represents the expected vocabulary of primary materials and encompasses over 50% of all words used in schoolbooks and other publications (preschool through third grade). The list consists of service words, which are pronouns, prepositions, and verbs not learned without pictures.

The school district adopted the DRA2 and Dolch Sight Word List instruments to be used district wide with all kindergarten through third grade students. Both instruments align with the NJCCS as well as the curriculum used during the 2010–2011 and 2011–2012 school years and continue to be used. The district has provided the staff with

professional development in the administration and recording procedures of these instruments.

Operationalization for Each Variable

The objective of the analysis was to determine statistically if there was a difference in literacy between students who participated (program group) in the Success Program and students (comparison group) who did not participate. Archival data for the 2010–2011 and 2011–2012 school years were used. For purposes of the analysis, literacy was operationally defined as the scores on the threes subscales of the DRA2 and the score on the Dolch Sight Word List. The .05 level of statistical significance was used to test the null hypotheses. Each of the four variables in this study is described below with an operational definition, an explanation of how it was measured and scored, and an explanation of what the scores represent.

Oral reading fluency is defined by the NRP (2000) as accurate, rapid, and expressive reading. A student's score is contingent on how well oral reading fluency has been mastered in four categories: expression, phrasing, rate, and accuracy. For each of the four categories, a student received a numeric score from 1 to 4. Using the DRA, oral reading fluency is calculated by summing a student's scores, which indicates the child's ability. The lowest possible score a student can receive is 4 and the highest is 16. This score places the student in one of four categories: intervention, 4–6; instructional, 7–10; independent, 11–14; and advanced, 15–16. In this study, student scores revealed an increase in literacy acquisition.

Reading comprehension can be defined as the ability to take information from written text and reiterate it in a way that demonstrates knowledge or understanding of that information (Rasinski et al., 2008). Reading comprehension needs action on the part of a

reader. That action can involve the use of prior knowledge that the reader has on the topic of the text and the text itself in order to create meaning (Rasinski et al., 2008). A student's score is contingent on how well reading comprehension has been mastered. Student reading comprehension is calculated on the DRA using six categories: use of test factors, questioning/prediction, scaffold summary, literal comprehension, interpretation, and reflection. For each of the six categories a student receives a score of 1 to 4. Comprehension is calculated by adding the student's score from each category, from 6 to 24, which indicates the child's ability. The lowest possible score a student can receive is 6 and the highest is 24. This score places the student in one of four categories: intervention, 6–11; instructional, 12–16; independent, 17–22; and advanced, 23–24. In this study, success was achieved when a student scored in the independent or advanced levels.

A student's instructional reading level can be assessed by word recognition and understanding of syntax (Troschitz, 2009). When administrating the DRA, a third grade student's instructional reading level is calculated by summing the student's scores (from 26 the lowest to 38 the highest), which indicates the child's reading ability. The student's score is contingent on the leveled reading book he or she is able to read with few errors.

Sight words are a list of words that are recognized without thinking or phonetic analysis (Meadan et al., 2008). Sight words are committed to memory and include not only high frequency words but any words that can be read from memory (Meadan et al., 2008). There were five Dolch sight word lists from prekindergarten through third grade that were incorporated into the present study. The Dolch Preprimer Assessment consists of 40 words that students should know before entering kindergarten. The Dolch primer sight word list consists of an additional 52 words that students should have mastered

before entering first grade. At the end of first grade, there are 41 new words students are expected to add to their vocabulary by second grade. In second grade, students are introduced to 46 words to be memorized before entering third grade. There are an additional 41 words for third graders to learn before the end of the year. The words total 220, which comprise over 50% of the words used in fourth grade textbooks. The score is calculated using a worksheet for each grade level. If the child does not master all of the words on the worksheet, supplemental assistance is given. When a child begins kindergarten, 75 of the total 220 words should have been mastered. When a child begins first grade, 120 of the total 220 words should have been mastered first. When a child begins second grade, 170 of the total 220 words should have been mastered. When a child begins third grade, 210 of the total 220 words should have been mastered. When a child begins fourth grade, 220 of the total 220 words should have been mastered. Mastery is achieved when all 220 words are recognized by sight. Third grade students are expected to reach mastery on the DRA posttest given at the end of the school year.

Data Analysis Plan

The data in this study were analyzed using the SPSS software program, Version 14.0 for Windows, analysis of variance (MANOVA). Prior to conducting the MANOVAs, the data were screened for outliers and the assumptions of normality, linearity, and homogeneity of variance. Any discrepancies were dealt with according to procedures suggested in the *Publication Manual of the American Psychological Association* (APA, 2010) and *Statistics for the Behavioral Sciences* (Gravetter & Wallnau, 2007).

The hypotheses associated with each of the achievement scales are follows:

Hypothesis 1

H_{01}: There is no statistically significant difference in reading comprehension between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a1}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in reading comprehension than students who did not participate in the Success Program, as reported by the DRA pre- and posttests assessment tool.

Hypothesis 2

H_{02}: There is no statistically significant difference in reading fluency between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a2}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in reading fluency than students who did not participate in the Success Program, as reported by the DRA pre- and posttests assessment tool.

Hypothesis 3

H_{03}: There is no statistically significant difference in instructional reading performance between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a3}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in instructional reading performance than students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

Hypothesis 4

H_{04}: There is no statistically significant difference in sight word recognition between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the Dolch Sight Word List pre- and posttest assessment tool.

H_{a4}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in sight word recognition than students who did not participate in the Success Program, as reported by the Dolch Sight Word List pre- and posttest assessment tool.

MANOVA was the statistical procedure employed to test the null hypotheses (Gravetter & Wallnau, 2007). This procedure was used to test for a difference between the means on the posttests, while statistically controlling for possible pretest differences. The reading comprehension, reading fluency, instructional reading, and sight word recognition pretest scores were entered as covariates. If there were pretest differences between the two groups on any of the DRA2 scales or on the Dolch sight word list before the Success Program was implemented, the posttest means were adjusted through the use of covariates to take the preprogram differences into account. The .05 level was used as the criterion for statistical significance. Because there are four measures of literacy as represented by the four hypotheses, four MANOVAs were employed for each year the program was conducted, for a total of eight MANOVAs. Descriptive statistics (means and standard deviations) were reported as part of the MANOVA. MANOVA only provides information about statistical significance. It provided no information about how important the results may be. Effect size, regardless of statistical significance, is an

indicator of importance and was reported to accompany the statistical results (Gravetter & Wallnau, 2007).

Threats to Validity

External Validity

External validity impacts several aspects of this study. The pretest and the posttest were administered by a teacher who may have led the students or have bias in scoring the tests. The students may have been distracted or not felt well when the tests were administered. I was not involved with the selection of participants nor with the administration of either assessment, and I have no knowledge of out of school supports the students may have been exposed to such as tutoring programs, educational television programs, reading books, or encouragement from their home environments.

Internal Validity

Internal validity in terms of maturation is anticipated as a natural progression in the study participants. Third grade students may perform in a positive or a negative manner in response to a relationship developed with the interventionist. The assessment instruments in this study (DRA2 and Dolch Sight Word) have been determined to be statistically valid. Sun Valley Lake school district found these assessment instruments appropriate to address the impact of the Success Program on literacy test scores.

Threats to Construct or Statistical Conclusion Validity

This study used archival data and was limited to 50 participants for each group (participant and comparison) per year, the statistical power may have been low and influenced the statistical conclusion validity resulting in Type II error. As such, power for different effect sizes was determined and reported as part of the analysis. Further, regardless of statistical validity, effect sizes were also reported as described in the

Publication Manual of the American Psychological Association (APA, 2010). Effect size is an indicator of the magnitude or the importance of a result irrespective of statistical significance (Gravetter & Wallnau, 2007).

Ethical Procedures

Permission to conduct this study using archived data must be granted by the superintendent of schools. The letter of cooperation is located in Appendix A. The IRB approval number to conduct this study is 10-15-13-0120565. The interventionist provided the pretest and posttest results of two assessments, the DRA and the Dolch Sight Word List to me. The results were in an anonymous format. The students were identified by two initials. The participants were not identifiable by name or school of attendance. The interventionist was the only person to know the name of the students and which school they attended. I will keep the data locked for 5 years and then destroy the files. As a normal course of action, the district makes the results of the DRA2 and Dolch Sight Word List results available to parents or guardians.

Summary

Using archival data, in this study I evaluated the effectiveness of the Success Program conducted during the 2010–2011 and 2011–2012 school years. This was a district-wide initiative designed to elevate the literacy of third grade African American students reading below grade level. The study included a total of 200 students. There were 100 students per year for 2 years, which included 50 students (program group) who took part in the Success Program the first year (2010–2011) and a second group (comparison group) of 50 students who did not participate in the first year of the Success Program. Data collected for the second year (2011–2012) included scores of 50 students (program group) who took part in the Success Program and a comparison group of 50

students who did not participate in the Success Program. The criteria for participation in the Success Program was students in the program group who were in the third grade and at least one full grade below the third grade level in literacy as measured by the DRA2 and the Dolch Sight Word List. All of the participants were African American. The comparison group was 50 African American third grade students from the 2010–2011 school year and 50 students from the 2011–2012 school year. The criteria for the comparison group was they were eligible, meaning reading at one full grade level below the third grade literacy level per the DRA and the Dolch Sight Word List, but did not participate in the Success Program. Therefore, for the school year 2010–2011 the sample was composed of 50 students in the program group and 50 students in the comparison group. For the school year 2010–2011 the sample was composed of 50 students in the program group and 50 students in the comparison group. Archived pretests and posttests from the DRA2 and Dolch Sight Word List have been recorded and are available for both school years.

This study used a nonprobability criterion sampling method. The data in this study were analyzed using the SPSS software program, Version 14.0 for Windows, MANOVA. Precautions were taken for the protection of participants' rights by the original data collectors. Chapter 4 reports the results of the study including any changes or discrepancies to the design or data collection processes. The baseline descriptive and demographics of the sample were discussed.

Chapter 4: Results

Introduction

Chapter 4 contains a reiteration of the hypotheses associated with this study as well as the data collection plan presented in Chapter 3. Because the results are concluded from archival data, there were no changes to instruments or strategies. How the data were collected is clarified. The results are presented through descriptive statistics and MANCOVA. The chapter concludes with a summary of the results.

Using archival data, I evaluated the effectiveness of the Success Program, a district-wide initiative designed to elevate the literacy of third grade, African American students who were reading below grade level. The purpose of this study was to determine if the students who participated in the Success Program (program group) had significantly higher performance on four measures of achievement—reading comprehension, oral reading fluency, instructional reading level, and sight word vocabulary—than children at a similar reading level who did not participate (comparison group) in the Success Program.

The hypotheses associated with each of the achievement scales are as follows:

Hypothesis 1

H_{01}: There is no statistically significant difference in reading comprehension between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a1}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in reading comprehension performance than students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

Hypothesis 2

H_{02}: There is no statistically significant difference in reading fluency between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a2}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in reading fluency performance than students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

Hypothesis 3

H_{03}: There is no statistically significant difference in instructional reading performance between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a3}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in instructional reading performance than students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

Hypothesis 4

H_{04}: There is no statistically significant difference in sight word recognition between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the Dolch Sight Word List pre- and posttest assessment tool.

H_{a4}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in sight word recognition than students who did not

participate in the Success Program, as reported by the Dolch Sight Word List pre- and posttest assessment tool.

Data Collection

Data was collected using the DRA2 and the Dolch Sight Word List as a pretest to all third grade students before October 15th in each school year. The Success Program had the following eligibility criteria: (a) African American, (b) in the third grade during participation in the program, (c) in a general education classroom, and (d) at least one grade level below in literacy according to four measures: reading fluency, reading comprehension, instructional reading performance, and sight word recognition. The comparison group of students met the criteria to participate in the Success Program but did not participate.

Third grade classroom teachers submitted the names of eligible students to the interventionist. The interventionist selected 50 students from the classroom teacher recommendations to participate in the Success Program. Fifty eligible students who were not placed in the Success Program due to space constraints were placed in the comparison group. Parents were notified that their child was placed in the Success Program. Parental consent was not required for participation in the Success Program.

The posttest using the DRA2 and the Dolch Sight Word List were administered before June 15th to all third grade students. The test results for the school years 2010–2011 and 2011–2012 were placed in each student's permanent record. The interventionist who oversaw the Success Program also had a copy of the DRA and Dolch Sight Word List test results for all students. Archival data were collected to obtain the pretest and posttest scores for the program group students and the comparison group students.

The district's procedure to access this archival data was to request permission from the superintendent of schools, as well as the person directly responsible for the security of the scores (see Appendix A for the letter of cooperation). To ensure confidentiality, the students were not identified by name or by the school of enrollment. All students' data were coded before their test results were released to me.

Results

Data were collected for 200 participants. Data were assessed for univariate and multivariate outliers. Univariate outliers were looked for by creating standardized *z* scores for the following scores at pretest and posttest: reading fluency, reading comprehension, instructional reading, and sight work recognition. Values that were greater than 3.29 standard deviations from the mean were considered outliers; nine cases were removed as outliers. Eight cases were removed from the treatment group and one from the control group. All nine cases were removed from the 2010–2011 school year. Of the univariate outliers that were removed, six were removed because of scores at pretest and only three were removed because of scores at posttest. Of the cases that were removed because of posttest scores, all scores were outliers because they were extremely low, as opposed to extremely high. Data were also assessed for multivariate outliers using Mahalanobis distances. The critical value was set at $\chi^2(10) = 29.59$, $p = .001$ (Tabachnick & Fidell, 2013). Four multivariate outliers were found and removed from the dataset. All four of those outliers were from the treatment group. Three of the outliers were from year 2010–2011 and one was from 2011–2012. Final data analysis was conducted on 187 participants.

Descriptive Statistics

Of the 187 students, 88 (47%) were from school year 2010–2011 and 99 (53%) were from school year 2011–2012. Frequencies and percentages are presented in Table 1.

Table 1

Frequencies and Percentages for Participation and School Year (N = 187)

	2011		2012	
Characteristic	*N*	%	*N*	%
Success Program				
Participated	39	44	49	50
Did not participate	49	56	50	50

Means, standard deviations, minimum, maximum, skew, and kurtosis were conducted on the entire sample (*N* = 187) for reading comprehension, reading fluency, instructional reading, and sight word recognition at pretest and posttest. Means and standard deviations are presented in Table 2. Skew, kurtosis, minimum, and maximum are presented in Table 3.

Table 2

Means and Standard Deviations for Reading Assessment Scores at Pretest and Posttest (N = 187)

	Pretest		Posttest	
Assessment	*M*	*SD*	*M*	*SD*
Reading comprehension	6.12	0.36	14.24	3.10
Reading fluency	4.17	0.44	9.55	1.71
Instructional reading	23.27	2.04	36.76	2.16
Sight word recognition	12.65	6.02	39.06	3.75

Table 3

Min, Max, Skew and Kurtosis for Reading Assessment Scores at Pretest and Posttest (N

= 187)

	Pretest				Posttest			
Assessment	Skew	Kurtosis	Min	Max	Skew	Kurtosis	Min	Max
Reading comprehension	2.99	8.82	6	8	-0.94	-0.12	7	19
Reading fluency	2.72	6.94	4	6	0.31	-0.27	6	15
Instructional reading	-0.82	0.27	18	26	-0.14	-0.70	32	42
Sight word recognition	0.21	-0.76	0	29	-1.83	3.23	23	49

Assumption Testing

Prior to the analyses, data were assessed for normality using Shapiro-Wilk tests. The Shapiro-Wilk test is appropriate for sample sizes of up to 5,000 cases (Royston, 1995). Data did not meet the assumption of normality; however, with univariate *F* and large samples the central limit thermo suggests that the distribution of the mean approaches normality (Tabachnick & Fidell, 2013). Further, the *F* statistic is robust to violations of normality when they are not attributed to outliers (Tabachnick & Fidell, 2013). The results of the Shapiro-Wilk tests are presented in Table 4. Table 4

Shapiro-Wilk Tests to Assess Normality

Variable	Statistic	*p*
Reading comprehension posttest	.94	.001
Reading fluency posttest	.88	.001
Instructional reading posttest	.88	.001
Sight word recognition posttest	.65	.001

Homogeneity of variance was assessed with four Levene's tests and was significant for reading comprehension, instructional reading, and sight word recognition. Due to the violation of this assumption, the assumption of homogeneity of variance was found to be significant; however, ANOVAs are robust to this assumption as long as the

cell sizes are relatively similar (largest: smallest = 1.5). The largest differences among the cells were 39:50, indicating similar cell sizes (Pallant, 2010). The results of the Levene's test are presented in Table 5.

Table 5

Levene's Tests to Assess Homogeneity of Variance

Variable	Statistic	*P*
Reading comprehension posttest	25.13	.001
Reading fluency posttest	1.95	.124
Instructional reading posttest	4.06	.008
Sight word recognition posttest	24.69	.001

Homogeneity of covariance was assessed with Box's M and was found to be significant, $F = 7.69$, $p < .001$. The assumption was overly sensitive and was assessed at the .001 level. With similar sample sizes, a violation of the assumption was ignored (Tabachnick & Fidell, 2013). Absence of multicollinearity was assessed among the dependent variables to be certain they were not too related (Table 6). It was also assessed for the covariates (Table 7). The assumption was assessed using two Spearman ρ correlation matrices. The correlation coefficients were all < .90, indicating the assumption was met (Pallant, 2010).

Table 6

S*pearman Correlations among Reading Assessment Scores at Posttest*

Variable	Reading fluency	Reading comprehension	Instructional reading
Reading comprehension	.79**		
Instructional reading	.72**	.67**	
Sight word recognition	.35**	.41**	.60**

Note. $^{**}p < .01$.

Table 7

Spearman Correlations amo *ment Scores at* *g Reading Assess* *Pretest*

Variable	Reading fluency	Reading comprehension	Instructional reading
Reading .37** comprehension			
Instructional reading	.11	.15	
Sight word recognition	.01	.02	.26**

Note. $^{**}p < .01$, $^{*}p < .05$.

Pretest and posttest scores were correlated using Spearman ρ correlations to determine if they were related. The correlations were found to be significant, indicating that pretest and posttest scores were related. Because of the relationship between pretest and posttest scores, pretest scores were used as covariates in the MANCOVA analysis. Results of the correlations between pretest and posttest scores are presented in Table 8.

Table 8

Spearman ρ Correlations between Pretest and Posttest Scores

Reading Fluency recognition Variable posttest		comprehens ıdi	ıg posttest posttest
Reading comprehension pretest	.06	.12	.08	-.05
Fluency pretest	.19*	.18*	.13	.05
Instructional reading pretest	.26**	.39**	.42**	.11
Sight word recognition pretest	.39**	.37**	.44**	.30**

To assess Research Hypotheses 1–4 and to determine if there were differences in reading assessment scores posttest by group and school year after controlling for reading assessment pretest scores, a two-way between subjects MANCOVA was conducted. The reading comprehension, reading fluency, instructional reading, and sight word recognition pretest scores were entered as covariates. The dependent variables in the model were reading comprehension, reading fluency, instructional reading, and sight word recognition posttest scores. There were two between level independent variables. They were group (treatment and control) and school year (2010–2011 and 2011–2012).

The main effect of group was significant, $F(4, 176) = 113.32$, $p < .001$, partial $\eta^2 = 0.72$, indicating there were differences on reading assessment scores by whether or not the students participated in the Success Program, after controlling for pretest scores (Table 9). Examination of the individual ANCOVAs demonstrated significant differences on reading comprehension, reading fluency, and instructional reading by group. The ANCOVA for reading comprehension was significant, $F(1, 179) = 189.05$, $p < .001$, partial $\eta^2 = 0.52$, indicating large differences between the two groups (Table 9). Those who participated in the Success Program had a significantly higher mean reading comprehension scores ($M = 16.39$, $SD = 1.32$) than those who did not participate ($M = 12.33$, $SD = 2.98$; Table 10). The ANCOVA for reading fluency was significant, $F(1, 179) = 331.86$, $p < .001$, partial $\eta^2 = 0.65$, indicating large differences between the two groups (Table 9). Those who participated in the Success Program had a significantly higher mean reading fluency scores ($M = 11.01$, $SD = 1.10$) than those who did not participate ($M = 8.24$, $SD = 0.93$; Table 10). The ANCOVA for instructional reading was significant, $F(1, 179) = 41.48$, $p < .001$, partial $\eta^2 = 0.19$, indicating small differences between the two groups (Table 9). Those who participated in the Success Program had

significantly higher mean instructional reading scores (M = 37.93, SD =1.81) than those who did not participate (M = 35.72, SD = 1.92; Table 10). There were no differences on sight word recognition posttest scores by group

The main effect of school year was significant, $F(4, 176) = 15.76$, $p < .001$, partial $\eta^2 = 0.26$, indicating medium differences on the reading assessment scores by school year (2011 vs. 2012; Table 9). Examination of the individual ANCOVAs demonstrated significant differences on reading comprehension, instructional reading, and sight word recognition by school year. The ANCOVA for reading comprehension was significant, $F(1, 179) = 62.36$, $p < .001$, partial $\eta^2 = 0.26$, indicating medium differences on reading comprehension scores by school year, after controlling for pretest scores (Table 9). The students in the 2012 school year scored significantly higher on reading comprehension (M = 15.47, SD = 1.73) than those in the 2011 school year (M = 12.85, SD = 3.67; Table 10). The ANCOVA for instructional reading was significant, $F(1, 179) = 9.28$, $p = .003$, partial $\eta^2 = 0.05$, indicating small differences on instructional reading scores by school year (Table 9). The students in the 2012 school year scored significantly higher on instructional reading (M = 37.23, SD = 2.15) than those in the 2011 school year (M = 36.23, SD =2.07; Table 10). The ANCOVA for sight word recognition was significant, $F(1, 179) = 7.98$, $p = .005$, partial $\eta^2 = 0.04$, indicating small differences on sight word recognition scores by school year (Table 9). The students in the 2012 school year scored significantly higher on sight word recognition (M = 40.08, SD = 2.67) than those in the 2011 school year (M = 37.92, SD = 4.42; Table 10). There were not significant differences in reading fluency posttest scores by school year. The interaction term of group*school year was significant, $F(4, 176) = 12.08$, $p < .001$, partial $\eta^2 = 0.22$, indicating small differences in the mean scores by the interaction effect, after

controlling for pretest scores (Table 9). ANCOVAs and pairwise comparisons were assessed to determine where those differences lie. There were differences on reading comprehension, reading fluency, and sight word recognition by the interaction term.

The ANCOVA conducted to assess reading comprehension was significant, $F(1, 179) = 39.92$, $p < .001$, partial $\eta^2 = 0.18$, indicating there were small difference in reading comprehension by the interaction term (Table 9). Pairwise comparisons showed that for the 2011 school year, students who participated in the Success Program ($M = 16.10$, $SD = 1.60$) had significantly higher mean reading comprehension scores than those who did not ($M = 10.27$, $SD = 2.65$; Table 10). And for the year 2012, students who participated in the Success Program ($M = 16.61$, $SD = 1.04$) had significantly higher mean reading comprehension scores than those who did not participate ($M = 14.36$, $SD = 1.55$; Table 10). Additionally, nonparticipants scored statistically lower in the year 2011 ($M = 10.27$, $SD = 2.65$) than they did in 2012 ($M = 14.36$, $SD = 1.55$; Table 10). The MANCOVA results are presented in Table 9. Figure 1 visually displays the reading comprehension posttest scores by group and school year.

Table 9 *MANCOVA for Reading Comprehension Scores by Intervention Participation and School Year*

Variable	MANOVA $F(4, 176)$	ANCOVA $F(1, 176)$			
		Reading comprehension	Reading fluency	Instructional reading	Sight word recognition
Group	113.32**	189.05**	331.86**	41.48**	4.57
Year	15.76**	62.36**	1.85	9.28**	7.98**
Group*Year	12.08**	39.92**	11.50**	1.74	8.94**

Note. $^{**}p < .01$.

Table 10

Means and Standard Deviations for Reading Comprehension Scores by Intervention

Participation and School Year

Test	2010–2011				2011–2012			
	Participant		Nonparticipant		Participant		Nonparticipant	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Reading comprehension	16.10	1.57	10.27	2.65	16.61	1.04	14.36	1.55
Reading fluency	11.15	1.29	7.94	0.85	10.90	0.92	8.54	0.91
Instructional reading	37.54	1.55	35.18	1.82	38.24	1.94	26.27	1.88
Sight word recognition	39.62	2.23	36.57	5.22	40.33	2.94	39.84	2.38

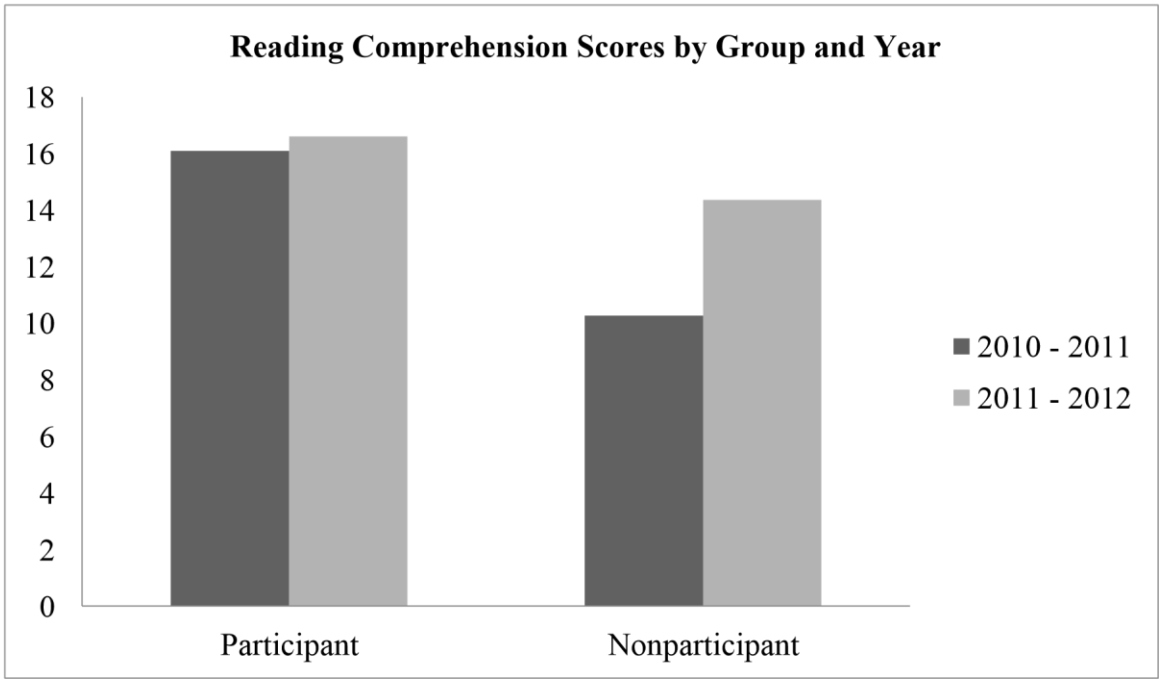
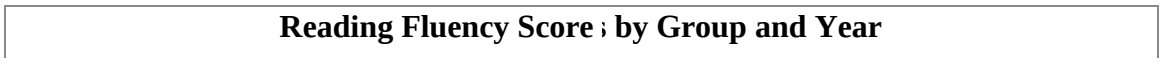


Figure 1. Bar chart of reading comprehension posttest scores by group and school year.

The benchmark for oral reading fluency in the Success Program was 11. The ANCOVA conducted to assess reading fluency was significant, $F(1, 179) = 11.50$, $p = .001$, partial $\eta^2 = 0.06$, indicating there were small difference in reading fluency by the interaction term (Table 10). Pairwise comparisons showed that for the 2011 school year, students who participated in the Success Program ($M = 11.15$, $SD = 1.29$) had significantly higher mean reading fluency scores than those who did not ($M = 7.94$, $SD = 0.85$ Table 10). And for the year 2012, students who participated in the Success Program ($M = 10.90$, $SD = 0.92$) had significantly higher mean reading fluency scores than those who did not participate ($M = 8.54$, $SD =$; 0.91 Table 10). Additionally, nonparticipants scored statistically lower in the year 2011 ($M = 7.94$, $SD = 0.85$) than they did in 2012 ($M = 8.54$, $SD = 0.91$; Table 10). Figure 2 visually displays the reading fluency posttest scores by group and school year.




12
10
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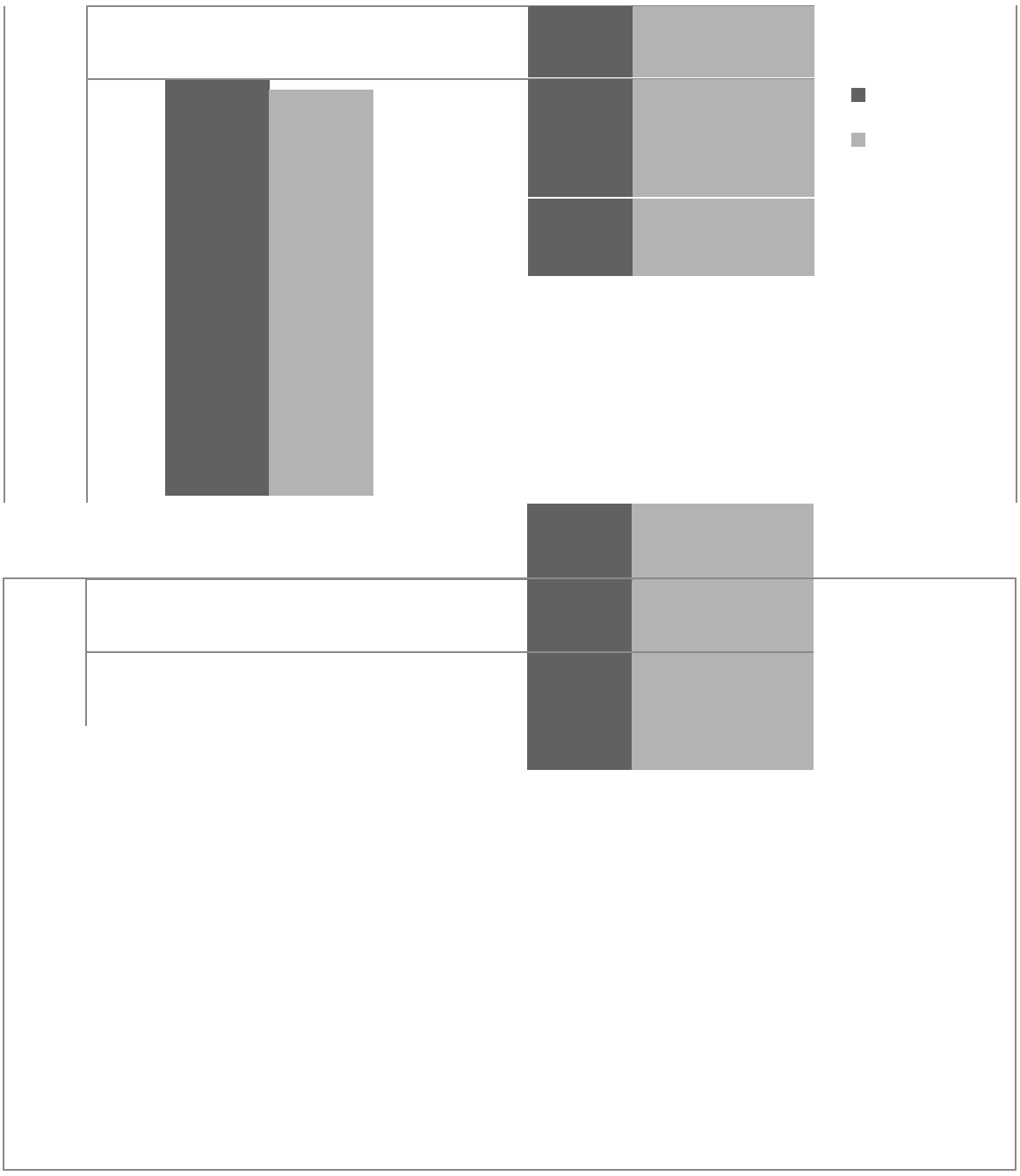

8

2011

2011 -

2012

4

2

0

Figure 2. Bar chart of reading fluency posttest scores by group and school year.

There were no differences in instructional reading posttest scores for the interaction term. Figure 3 displays the instructional reading posttest scores by group and school year.

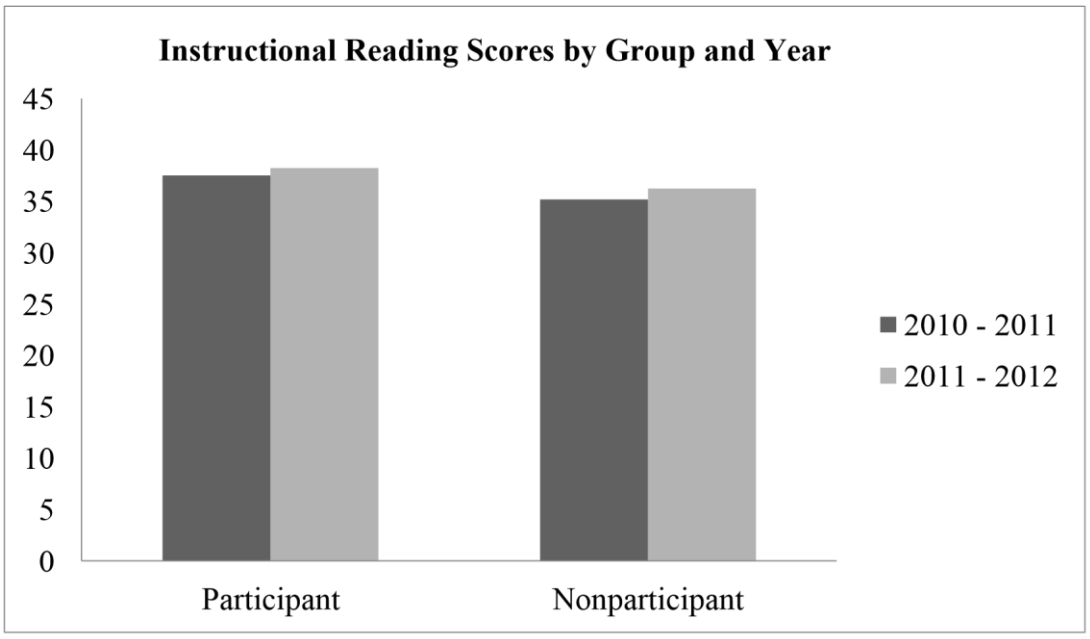

Figure 3. Bar chart of instructional reading posttest scores by group and school year.

The ANCOVA conducted to assess sight word recognition was significant, $F(1, 179) = 8.94$, $p = .003$, partial $\eta^2 = 0.05$, indicating there were small differences in sight word recognition by the interaction term (Table 9). Pairwise comparisons showed that for the 2011 school year, students who participated in the Success Program ($M = 39.62$, $SD = 2.23$) had significantly higher mean sight word recognition scores than those who did not ($M = 36.57$, $SD = 5.22$; Table 10). There were no differences found in the year 2012 for students who participated or did not participate in the success program. However, nonparticipants scored statistically lower in the year 2011 ($M = 36.57$, $SD = 5.22$) that they did in 2012($M = 39.84$, $SD = 2.39$; Table 10). Figure 4 visually displays the sight word recognition posttest scores by group and school year. All null hypotheses must be rejected in favor of the alternative hypotheses.

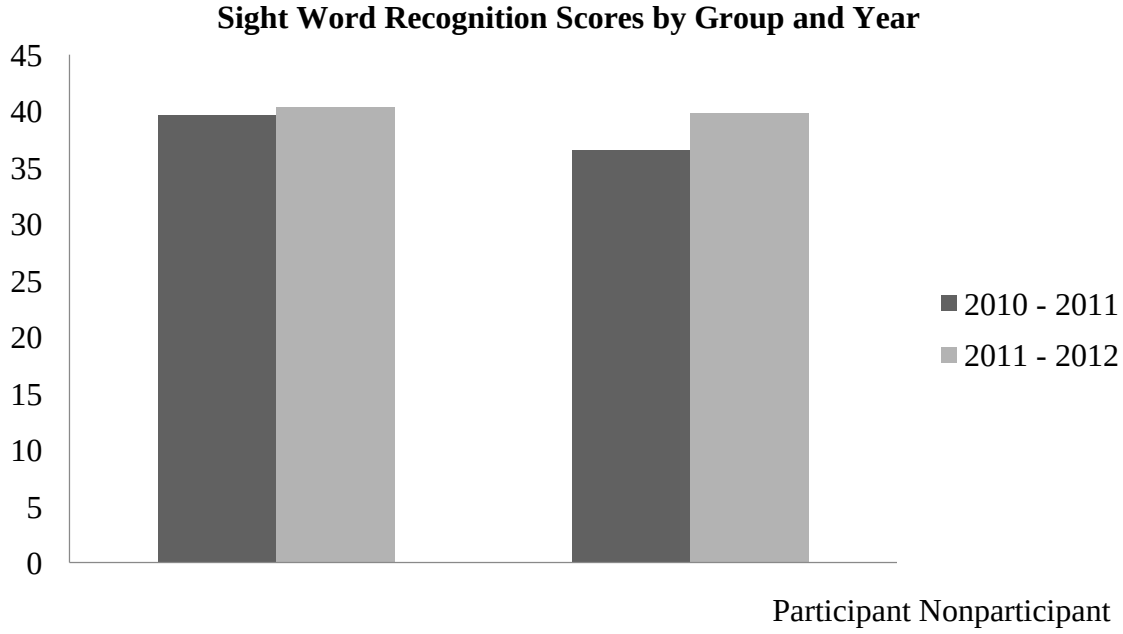

Figure 4. Bar chart of sight word recognition posttest scores by group and school year.

Summary

In summary, all null hypotheses were rejected in favor of the alternative hypotheses. To determine if there were differences in reading assessment scores posttest by group and school year after controlling for reading assessment pretest scores, a MANCOVA was conducted. The main effect for group and school year was found to be significant. Additionally, the interaction effect of group and year was also found to be significant for reading comprehension, reading fluency, and sight word recognition by the interaction of group and year. Pairwise comparisons were conducted to determine where those differences lie. For reading comprehension, reading fluency, and sight word recognition there were similar outcomes. For each test, participants scored higher in 2011 and 2012 than nonparticipants. Additionally, nonparticipants scored higher in 2012 than 2011.

After a brief introduction, Chapter 5 proceeds with the findings of this study in an examination of the individual ANCOVAs for each research Hypothesis 1–4. Limitations

of this study are scrutinized, followed by recommendations for future study. The implications for positive social change explored, terminating with a conclusion of the study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Literacy is the foundation for academic success (Blanchett, 2009). If students cannot read, they will most likely not be successful in school (Hernandez, 2011). The State Supreme Court of New Jersey in *Abbott v. Burke* (1981) ruled that inequality in education existed in 31 school districts (Gewertz, 2005). The Abbott decision required the implementation of a number of measures with appropriate funding in the 31 districts deemed to have special needs (Gomez, 2008). These districts are considered the poorest in the state with large minority populations that unable to afford to offer students an adequate education (Gewertz, 2005). The State Supreme Court ruled that there was a greater amount of funds spent on affluent suburban districts than the urban special needs districts in the state of New Jersey. The NJDOE was ordered to offer an equal education by providing supplemental early literacy, health, and social services to these impoverished districts (Gewertz, 2005). The Success Program was implemented as a response to the NJDOE, citing the Sun Valley Lake school district for low student performance on literacy test scores of African American students, particularly in the third grade**.**

This quantitative study adds to the literature addressing the low performance in early literacy as stated in the decision of the State Supreme Court of New Jersey ruling *Abbott v. Burke* (1981). I investigated whether African American, third grade students who participated in the Success Program performed better on measures of academic

achievement than students who did not participate in the program. The independent variable was the Success Program with two groups—students who participated in the program and students who did not. Academic achievement was the dependent variable, measured through reading comprehension, reading fluency, instructional reading performance, and sight word recognition.

The participants were selected using a nonprobability criterion sampling, which dictates a quasi-experimental design that uses a pretest and posttest method. The pretest was administered in the fall of each year and the posttest was administered in the spring of each year. The Success Program included two assessment tools, the DRA and the Dolch Sight Word List, to assess students' literacy skills. The interventionist who supervised the program collected the data from the teachers. The data remain stored as required in a locked file cabinet for 5 years. Archival data on students in the Sun Valley Lake School District participating in the Success Program for the 2010–2011 and 2011–2012 school years were used for these analyses. Using this approach, reported conclusive statistics in response to the research questions in this study.

Interpretation of the Findings

There is a positive, congruent relationship between the statistical findings and the theoretical and conceptual framework presented in Chapter 2 of this dissertation. Following is an overview of data collected for each research question. The discussion of each question is supported with research from the literature review, what was discovered, and what was surprising. As visual confirmation, bar charts have been added to each research question for clarification.

Hypothesis 1

H_{01}: There is no statistically significant difference in reading comprehension between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a1}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in reading comprehension than students who did not participate in the Success Program, as reported by the DRA pre- and posttests assessment tool.

Reading comprehension is affected by a person's previous knowledge and experience (Rasinski et al., 2008). NCLB (2002) required that third graders be measured in reading comprehension. The students in Sun Valley Lake have fallen short of literacy benchmarks for many years (NJDE, 2012b). The Success Program used Vygotsky's ZPD molding, scaffolding through planned opportunities for students to collaborate with their teacher and peers in a small group setting. Comprehension helps the reader to be able to act on, respond to, and transform the information that is presented in the written text in ways that demonstrate understanding (Rasinski et al., 2008).

In order to achieve the goals of increasing literacy, it is important to introduce emerging readers to vocabulary, language, and reading opportunities early in their lives. When assessing students' reading comprehension with the DRA, the goal for each student is to achieve a score in the independent range of at least 17. As Figure 1 demonstrates, students who participated in the Success Program during both years scored in the independent range. I was expecting the students who did not participate in the program to score below the independent range. However, I was surprised that students who did

not participate in year 2012 (M = 14.36), scored so closely to those who participated in the Success Program even without receiving the intervention (M = 16.61).

After reflecting on what was different during the 2 years the Success Program was implemented, I concluded the difference was the infusion of small group instruction into the classroom during the 2010–2011 school year. The administration in school year 2010–2011 did not require small group instruction and word walls to be infused into the curriculum. However, the administration in school year 2011–2012 did require small group instruction and word walls to be introduced into the curriculum. Therefore, every third grade student was placed into a small group. Success Program participants continued with the program and also received small group instruction in their classroom. All students in the classroom began participating in groups of no more than five students reading at about the same level. There were four or five groups per class dependent on the total number of students in the class. The group with the lowest literacy scores met 5 days per week. The middle groups met 4 days per week. The group with the most advanced skills met 3 times per week. Each classroom teacher was given the opportunity to develop relationships during the small group experience that they were privy to during the first year of the Success Program. The difference in curriculum in the 2 school years may be the reason the students who did not participate in the Success Program during school year 2011–2012 scored similarly to those who did participate in the Success Program in school year 2011–2012.

Hypothesis 2

H_{02}: There is no statistically significant difference in reading fluency between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a2}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in reading fluency than students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

In oral reading fluency the Success Program participants were expected to meet the benchmark of 11. Oral reading fluency is a difficult skill to acquire and involves quick and correct processing, which entails automatic processing, the ability to smoothly read large passages of text, and incidental or implicit, learning (Duran, 2003). Grabe (2010) examined the relationship between the amount of reading and high achievement for fourth grade students. Grabe concluded that reading, use of language, word recognition, vocabulary, and fluent use of language need to be reinforced. Grabe found a correlation between the amount of reading, as well as reinforcement of reading skills and the level of academic achievement of fourth grade students. Grabe's conclusions are upheld by the Success Program. Participants in the Success Program read more than those in the comparison group. The Success Program participants outperformed the comparison group on all four measures of this study.

Researchers (Hammer et al., 2010; Morgan & Meier, 2008; Wasik & Hindman, 2011) have suggested that poverty impacts language acquisition. Howard and Coulge (2009) indicated that children whose parents are professionals have larger vocabularies than children whose parents are receiving Temporary Assistance to Needy Families (TANF). In terms of actual vocabulary by age 3, children whose parents were professionals had vocabularies of about 1,100 words and children whose parents were TANF (social service) recipients had vocabularies of about 522 words (Howard & Coulge, 2009).

Sun Valley Lake Public School District is an economically-challenged urban district where 76.8% of the students are eligible for a free or reduced price lunch, which indicates they are living below the HUD poverty guidelines (Plainfield School District, 2011). Figure 2 illustrates participants in both years of the Success Program attained the benchmark of 11 in reading fluency. The students who participated in year 2010–2011 attained an average of 7.94, almost 3 points below the benchmark, whereas the students who did not participate in the Success Program during the 2011–2012 school year scored an average of 8.54, which is almost 2.5 points below the benchmark. However, I was surprised that the 2011–2012 nonparticipants performed as well as they did. Scholars (Hammer et al., 2010; Morgan & Meier, 2008; Wasik & Hindman, 2011) have suggested that students in Sun Valley Lake would not do well because of their SES and, therefore, their vocabularies would be limited, impacting fluency as well as comprehension skills. This is evidenced in Sun Valley Lake third grade African American students by their Sight Word Recognition, one grade level below the expected proficiency.

Oral reading fluency is a difficult literacy skills to achieve. There was a significant difference between school years 2010–2011 or 2011–2012. The Success Program provided strategies to participants to increase their oral reading fluency during both school years. However, during the 2011–2012 school year, all third grade students participated in small group instruction in their classrooms which emphasized oral reading fluency. Success Program participants met the benchmark of 11 in both school years. According to researchers (Hammer et al., 2010; Morgan & Meier, 2008; Wasik & Hindman, 2011) and the statistics from the 2010–2011 and 2011–2012 school years, the Success Program was positive in improving the oral reading fluency skills of the participants in both years of the program. This segment of the study informs the 30

Abbott school districts in New Jersey with similar populations of an intervention that succussfully increased oral reading fluency.

Hypothesis 3

H_{03}: There is no statistically significant difference in instructional reading performance between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

H_{a3}: Students who participated in the Success Program are expected to achieve statistically significant higher scores in instructional reading performance than students who did not participate in the Success Program, as reported by the DRA pre- and posttest assessment tool.

The benchmark for instructional reading performance in the Success Program was 38. Reading instructors need to make sure that students are ready to properly establish the words of a text and then be able to extract the correct meaning (Conley et al., 2004). A student's instructional reading level can be assessed by word recognition and understanding of syntax (Troschitz, 2009). Third grade students are expected to learn ways to decode multisyllabic words. Using the DRA, a third grade student's instructional reading level is calculated by adding a student's score (from 26 the lowest to 38 the highest), which indicates the child's reading ability.

The benchmark of 38 was met at the highest scale for third grade students who participated in the Success Program in school year 2010–2011 (M = 37.54). The benchmark was slightly exceeded for students who participated in the Success Program in school year 2011–2012 (M = 38.24). The students who did not participate in the Success Program did not meet the benchmark for third grade students in school year 2010–2011

(M = 35.18). Students who did participate in the Success Program in school year 2011–2012 were just below the benchmark (M = 36.12). I was surprised that the students who did not participate in the Success Program came as close to the benchmark as the results indicated because many students enter the Sun Valley Lake school district with limited exposure to early literacy experiences.

I found that the students who participated in the Success Program were ready to enter the fourth grade able to understand syntax and decode multisyllabic words. The students who did not participate in the Success Program were not as prepared for the fourth grade in terms of expanded knowledge and critical thinking skills. As much as 50% of fourth grade curriculum would be incomprehensible to students who are below grade level in reading (Schorr & Marchand, 2007). Schorr and Marchand (2007) found that readers who are below proficient in third grade remain so in high school. In the 2010-2011 school year, 66% of students in Sun Valley Lake were not reading on grade level. This supports the 2010-2011 school year low high school graduation rate of 65% in Sun Valley Lake.

Hypothesis 4

H_{04}: There is no statistically significant difference in sight word recognition between students who participated in the Success Program and students who did not participate in the Success Program, as reported by the Dolch Sight Word List pre- and posttest assessment tool.

H_{a4}: Students who participated in the Success Program are expected to achieve a statistically significant higher score in sight word recognition than students who did not participate in the Success Program, as reported by the Dolch Sight Word List pre- and posttest assessment tool.

The Success Program used the benchmark of 41 in sight word recognition. For the 2011 school year, students who participated in the Success Program (M = 39.62) had significantly higher mean sight word recognition scores than those who did not (M = 36.57). There were no differences found in the year 2012 for students who participated or did not participate in the success program.

Word recognition is an essential part of reading comprehension because it includes all processes that are necessary to give a word a meaning and its context (Troschitz, 2009). Sight word recognition is defined as a discrete, observable response that is controlled by a printed stimulus (Meadan et al., 2008). Sight words are recognized without mediation or phonetic analysis, can be read from memory, and include not only high frequency words but any words that can be read from memory (Meadan et al., 2008). By mastering all of the Dolch sight words, a learner will be able to read at a third grade level (Meadan et al., 2008). Realizing that over half of all third grade students in Sun Valley Lake are not proficient in literacy, the Success Program implemented the Dolch Sight Word List as part of the literacy strategy plan.

The results of this segment of the study were surprising. The ANCOVA for sight word recognition was significant, indicating small differences on sight word recognition scores by school year as well as by group. The students who did not participate in Success Program in the 2011–2012 school year (M = 39.84) scored visually higher on sight word recognition than students who participated in the Success Program in the 2010–2011 school year (M = 39.62). In the school year 2011–2012, students without intervention almost attained the exact level as the students who participated in the Success Program. The only evident change in the 2 school years or the classroom was the administration and what was being required in the classrooms. The administration in

school year 2011–2012 required classroom teachers to provide small group instruction every day. Also, word walls were required in every subject area. Immersing students with word walls in the classroom is significant. The word walls in the classroom assist students in committing the words to memory. Committing more words to memory increases the ability to read more fluently (Duran, 2003). In the comparisons for the 2010–2011 school year, I found that students who participated in the Success Program had significantly higher mean sight word recognition scores than those who did not. There were no differences found in the year 2011–2012 for students who participated or did not participate in the success program. Students in the 2010–2011 school year who participated in the Success Program met the third grade benchmark of 41 in sight word recognition. Those students who did not participate in the Success Program in the 2011–2012 school year benefited from the classroom small group instruction and word wall as evidenced by the results in Figure 4. To summarize, research strongly supports early identification and intervention strategies to support students struggling with literacy skills. This quantitative study determined through archival data from the 2010–2011 and 2011–2012 school years that the students who participated in the Success Program performed better on oral reading fluency, reading comprehension, instructional reading level, and sight word recognition, than students who did not participate in the Success Program.

There have been studies published on several of the larger Abbott school districts, but no published study has been documented with regard to approaches that may increase literacy of third grade African American students in Sun Lake Valley. This study has contributed significantly to the field of psychology because it has filled a knowledge gap that has existed since 1981 when the State Supreme Court of New Jersey issued the

Abbott v. Burke ruling that African American children were not receiving adequate education in 31 school districts.

Summary of the Key Findings

All null hypotheses were rejected in favor of the alternative hypotheses. The overarching research question, "Is the Success Program a viable intervention to increase literacy skills of third grade African American students?" has been answered via the rejection of Research Hypotheses 1–4. Statistical analyses were conducted with results indicating that there is conclusive empirical evidence of significant differences in reading scores posttest by group and school year across all four dependent variables.

In the 2010–2011 school year, students who participated in the Success Program had significantly higher mean reading comprehension scores than those who did not. And for the year 2011–2012, students who participated in the Success Program had significantly higher mean reading comprehension scores than those who did not participate. Additionally, nonparticipants scored statistically lower in the year 2010–2011 than they did in 2011–2012.

In the 2010–2011 school year, students who participated in the Success Program had significantly higher mean reading fluency scores than those who did not. And for the year 2011–2012, students who participated in the Success Program had significantly higher mean reading fluency scores than those who did not participate. Additionally, nonparticipants scored statistically lower in the year 2010–2011 than nonparticipants did in 2012.

The instructional reading scores indicated small main effects of both group and school year. Students who participated in the Success Program had significantly higher mean instructional reading scores than those who did not participate. Additionally,

students in the 2011-2012 school year had significantly higher mean instructional reading scores than those in the 2010-2011 school year.

In the 2010–2011 school year, students who participated in the Success Program had significantly higher mean sight word recognition scores than those who did not. There were no differences found in school year 2011–2012 for students who participated or did not participate in the success program.

To summarize the results, the Success Program realized favorable outcomes across all four measures (reading comprehension, reading fluency, instructional reading, and sight word recognition) during both years the study was conducted. As noted, the students who did not participate in the Success Program in the second year (2011–2012) achieved unexpected favorable outcomes across three of the measures; reading comprehension, reading fluency, instructional reading. Additionally, during the second year (2011–2012) the students who did not participate in the Success Program achieved almost identical results as the students who did participate in the Success Program on the measure of sight word recognition. There were two major differences in the classroom the second year of the study, which may explain the favorable outcomes on the students who did not participate in the Success Program. During the second year of the study, the third grade general education teachers were directed to incorporate small group instruction as well as sight word walls in all subject areas within their classrooms. This was a huge instructional change between the 2 years of the study. Perhaps increasing small group instruction and visually immersing students with word walls had a positive effect on the results of the second year data in the Success Program.

There is a connecting thread between this study and previous studies of small group instruction and improved literacy skills as evidenced in theoretical underpinnings

previously mentioned such as Vygotsky and the RTI model. When there is relationship building through modeling and encouragement, it is expected that the student will realize independence as confidence is gained (Bacon, 2005). The RTI model supports academic achievement focusing on literacy in relatively short periods of time. Vygotsky's ZPD is centered on small group instruction just as Tier 2 of the RTI model. Both Vygotsky and RTI expect the instructor to build upon a student's current knowledge base in small increments. Ultimately, this method will foster confidence in students to apply concepts learned independently.

Scaffolding is a process in which the students are provided a temporary framework for learning by the teachers as they gain confidence as they master a particular area of skill (Yildirim, 2008). The ZPD is the safe small group environment where the teacher models the appropriate exchanges of responses for the students to implement, first in the small group, and eventually in the classroom (Korepanova & Saphronova, 2011). The expectation of small group instruction in the Success Program was to provide a safe environment for students to have the confidence to ask questions or read text that they may not in the larger class setting. Several researchers (Miller, 2011; Tyner, 2009; Wasik, 2008) found positive results using scaffolding and ZPD, a Vygotskian theoretical framework often used when improving literacy skills for emerging readers receiving individualized instruction in small groups. The results of the research data from this study indicate that utilizing small group instruction and the three-tier approach was a viable intervention for the Success Program to follow.

Finally, I chose the resiliency theory as the theoretical framework for this study. The landmark New Jersey Supreme Court case, Abbott v. Burke, established a lack of academic and social–emotional support for the state's 31 poorest districts. The New

Jersey Supreme Court allocated funds to sustain early academic learning as a means of eradicating the effects of poverty. This ruling established that there is a segment of students across New Jersey that is economically vulnerable. The Abbott legislative order found that students' achievement in school severely affects their social and economic success as adults.

The structure and methods of resiliency theory (Morales, 2008; Morales & Trotman, 2004; Ungar & Lerner, 2008) support the current study's identification of common threads in increasing the literacy achievement of at-risk African American third grade students. According to Morales and Trotman (2004), the resiliency model suggests the dynamics affecting at-risk students are protective factors, vulnerability areas, and compensatory strategies. Resiliency theory aligns with and supports the current study illuminating the national (NCLB) and local (Abbott v. Burke) protective factors affecting the participants of the Success Program. Even more directly protecting students in the Sun Valley Lake School District is the New Jersey Supreme Court decision Abbott v. Burke enacted to ensure the poorest at-risk students in New Jersey have the proper funding to support academic achievement.

The findings from this study are congruent with previous research studies regarding resiliency identified in Chapter 2. For example, according to Morales (2008), resilient students are able to do well in school while dealing with adverse situations such as severe poverty or learning deficiencies. In the current study susceptibility to vulnerability manifests itself as students reading one grade level below what is expected in third grade and the effect poverty may have in this situation. Research (Kim et al., 2010) on empirically supported intervention programs has revealed that intervening across multiple domains is more resourceful than focusing on just one aspect of a child's

environment (Powers, 2010). Swanson et al. (2011) in their research on reading outcomes for at-risk early elementary students found skill development should not be concentrated in one specific area. They found positive results when skills were developed across several domains: vocabulary, letter recognition, comprehension, and oral reading fluency through read alouds in small group instruction. The research conducted by Swanson et al. aligns well with Sun Valley Lake's supplemental reading program. The quantitative data results from the Success Program, which provided skill development as a collaborative intervention to African American at-risk third grade students during small group instruction in the areas of reading comprehension, oral reading fluency, instructional reading level, and sight word recognition were found to have a significant impact on the students who participated in the program.

Limitations of the Study

As with most studies there were several limitations to consider. One study limitation was that the sample participants were referred by classroom teachers, making the selection process not completely random and lending itself to possible bias. Another limitation was that this study had no mechanism to evaluate any functioning deficits of the participants in terms of whether they lacked capacity or motivation to master the literacy skills in the Success Program. There was no indication whether any students participating in the study or those who did not participate received other assistance to raise their literacy skills. With archival data there is no way to address these limitations. Additionally, the sample population was relatively small and limited to African American students in the third grade in the Sun Valley Lake school district, which makes it difficult to generalize to wider populations with the same environments (e.g. poverty, low literacy test scores).

Recommendations

In terms of the importance of building relationships with low SES students in order to assist them with academic achievement, professional development for teachers is highly recommended. Ayalon (2007) proposed that there are several programs that describe the utilization of educators or mentors for the academic progress of the students who belong to the lower SES and minority groups. Indeed it is observed that the students who are at risk can be encouraged if they develop close relationships with the educators and mentors. Professional development is essential part of training that will help educators realize the importance of relationship building when teaching students and elevating their skills.

In New Jersey, third grade is the first year students are tested to determine if they are meeting the NCLB benchmarks in literacy. Therefore, it is recommended that screenings start as soon as students enter the district so they may be placed in the Success Program or in small groups as needed to elevate their literacy skills as soon as possible. Sun Valley Lake school district would benefit working with early childhood centers to provide stronger literacy foundations for preschool students. This recommendation to increase literacy skills in preschoolers is supported by the New Jersey Supreme Court Abbott v. Burke decision. Laosa (2005) reported that the foundation for strong literacy skills is established before children reach age 5.

Another recommendation is to conduct research using participants instead of archival data. The participants would be chosen through an anonymous method. For example just the children's numbers on the DRAs would be used for identification. This anonymity would eliminate the possible bias of the classroom teacher. Perhaps it would be beneficial if future studies included a short survey to evaluate any functioning deficits

of the participants in terms of whether they lack capacity or motivation to master the skills and whether any students participating in the study received other assistance to improve their literacy skills, such as an outside tutoring service or parents reading nightly at home.

Future research in terms of the relationship of the students' assessments, such as the DRA and NJ-ASK test results, may inform educators of areas for specific improvement. Additionally, future studies could expand on and inform the existing body of knowledge by increasing information on topics such as demographics, including gender, ethnicity, and years in district, and whether the student receives free or reduced price lunch, which would give researchers a broader base of data resources. This kind of research would make the information gathered useful to other school districts with similar demographics in terms of which interventions were successful or not with comparable populations.

Another essential recommendation for future direction is the design of the curriculum of third grade students. Curriculum plays a vital role in the educational process. A curriculum should be designed considering the views of a student, family and teacher. The backbone of curriculum should be laid with the interest, development levels and personality of a student (Burns & Helman, 2009). The curriculum should be diverse and consider the cultural, religious, and linguistic backgrounds of the students. However, the design of the curriculum should focus on methods and techniques to ensure that all materials are understandable by the students (McGrath et al., 2012). The learning environment of elementary school students requires a strong literacy curriculum including; effective teaching methods, daily planned schedules, assessments and daily tests admiring the student's goals (Larson, 2006). A curriculum includes social, physical

and linguistic aspects, as these are the key learning areas. In addition to cultural diversity the instruction method should be designed under consideration of student's ability, interest and background (McGrath et al., 2012).

Implications

Positive Social Change

This research study has the potential to contribute significantly to positive social change by filling a significant gap in the literature. There have been studies published on several of the larger Abbott school districts, but no published study has documented approaches that may increase literacy of third grade African American students in Sun Lake Valley. This study could contribute significantly to the field of educational psychology by filling a knowledge gap that has existed since 1981 when the State Supreme Court of New Jersey issued the Abbott v. Burke ruling that African American children were not receiving adequate education in 31 school districts. Sun Valley Lake is one of the 31 special needs districts.

This study sought to determine of the Success Program was an effective supplemental literacy intervention of third grade African American students who were at least one grade level below curriculum standards. The data indicate the Success Program realized favorable outcomes across all four measures (reading comprehension, reading fluency, instructional reading, and sight word recognition) during both years the study was conducted. The favorable outcomes indicate that the Success Program is an effective intervention. Even though the sample population was relatively small and limited to African American students, it is quite probable that the conclusions may be generalized to wider populations with the same environments (e.g. poverty, low literacy test scores). In New Jersey there are 30 additional Abbott school districts with very similar

characteristics of the current study. This quantitative research study could be implemented even more widely if shown to be effective in other populations as well as in future research. Nationally, there are many cities with significant populations with low literacy skills resulting in low test scores.

The connection between economic success and academic success means this study could contribute to the economic success of American society's future citizens. Students not reading proficiently in third grade are 4 times more likely not to obtain a high school diploma (Hernandez, 2011). Lack of a high school diploma may lessen a person's opportunities for financial stability. Lewis, Simon, Uzzell, Horwitz, and Casserly (2010) in a report for the Council of the Great City Schools noted that African American males age 18 and over in 2008 represented only 5% of the total college student population but 36% of the total prison population. The Children's Defense Fund's (2012b) research found that two thirds of students who do not read at the proficient level by the end of fourth grade have a 75% chance of never attaining literacy proficiently and will most likely experience the incarceration and or the social service system. The Success Program is a positive intervention to improve the literacy skills of African American students and has the potential to ultimately reduce the dropout rate of high school students, reduce occurrences with the justice and social service systems.

Conclusion

Educational research, law, and policy point out that the quandary of African American students not reading on grade level is persistent and pervasive. If interventions are not designed to address issues of inadequate allocation of educational resources, appropriate cultural curricula, and teacher preparation, the impact to society may have far

reaching implications. There appear to be correlations between literacy, the penal system, and poverty. Poverty is pervasive in African American families according to the *Portrait of Inequality 2012 Black Children in America* (Children's Defense Fund, 2012a). On average, African American children arrive at kindergarten and/or first grade with lower levels of school readiness than White children (Farkas, 2003).

Literacy is an essential skill to function effectively in society. One of the significant components of education is learning to comprehend and know the meaning of text. It is vital for students to know the significance of what they are reading or else the effort is pointless. As Ari (2011) noted, improved comprehension will increase the vocabulary of the learners, and they will gain confidence in writing and reading. They will be able to read fluently mimicking their normal speech patterns (Ari, 2011).

The findings of this study add to the body of existing knowledge by reporting empirical research findings supporting, the three-tier approach of the Success Program which was based on the RTI model, largely because it has been proven effective (Greenwood et al., 2011; McGrath et al., 2012; Samuels, 2008; Vellutino et al., 2008) and can be used to improve literacy achievement in elementary schools. The RTI model framework aligned with the Success Program because both models use differentiating instructional strategies for students based on their demonstrated need. RTI is a method that uses measurement starting with a universal screening of the students (McGrath et al., 2012).

The results of this study may be beneficial for gaining a deeper understanding of an intervention program that raised literacy skills in third grade African American who were one grade level below the benchmark assessment. The results of this study are conclusive in that the students were academically resilient. The participants in the

Success Program were able to engage in relationships with their supplemental teacher and subsequently increase their literacy. Although it was surprising that such significant gains in literacy skills were realized with a 40-minute intervention twice per week, these results demonstrate that the Success Program is indeed an effective intervention for improving children's literacy skills.

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Appendix A: Letter of Cooperation

Public Schools of Plainfield
New Jersey

Office of the Superintendent of Schools
Anna Belin-Pyles
1200 Myrtle Avenue
Plainfield, NJ 07063
(908) 731-4335 Fax: (908) 731-4336

April 25, 2013

Dear Ms. Denise Mayo Moore,

Based on my review of your research proposal, I give permission for you to conduct the study entitled *Evaluation of a Literacy Program Addressing Third Grade African American Struggling Readers.* As part of this study, I authorize you to use archival data from the pre-tests and post-tests of the DRA and Dolch Sight Word List collected during the 2010-2011 and 2011-2012 school years. I understand the sole purpose of this data is to determine whether third grade African American students who participated in the program performed greater academically than students who did not participate in the program. I expect that you will provide a copy of the Institutional Review Board (IRB)-approved, stamped consent document to me. It is expected that you will complete your research on or before June 30, 2014. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting. I understand that you will use the **pseudonym** Sun Valley Lake.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,

Anna Belin-Pyles
Superintendent of Schools

Curriculum Vita

Denise Mayo Moore

Education

Doctor of Philosophy—Psychology Expected 2014
Walden University, Minneapolis, Minnesota

Master of Social Work May 2005
Yeshiva University, New York, New York

Bachelor of Professional Studies Degree June 2003
Audrey Cohen College, New York, New York

Master of Science—Community Economic Development March 1995 New Hampshire College, Manchester, New Hampshire

Professional Accomplishments

ADMINISTRATION & PERSONNEL MANAGEMENT: Prepared budgets, administrative and fiscal analysis. Analyzed and designed data collection, processing and retrieval systems. Recruited, trained and supervised professional, clerical, fiscal, and volunteer personnel. Developed personnel policies and procedures, labor market and job analysis. Designed employee and volunteer training, evaluation and survey instruments. Experiences also include interviewing, testing, hiring, evaluating, supervising, and terminating employees.

PROGRAM DEVELOPMENT: Designed programs for transitional housing facilities, employment training, youth and parenting skills development projects. Planned, implemented, monitored, and evaluated program objectives. Developed a comprehensive long-term program for low-income families to achieve home ownership. Prepared required fiscal and programmatic reports. Wrote successful proposals and grants that provided program funds. Developed model to train testers in discrimination cases. Designed and implemented countywide "Welfare to Work" program.

SOCIAL EMOTIONAL SUPPORT SERVICES—Health and Human Services Coordinator of the Intervention and Referral Services (I&RS) team composed of the Administrators, School Social Workers, Guidance Counselors, School Nurse, Child Study Team Representative, Drop Out Prevention Specialist, School Based Counselors, Classroom Teacher(s) and student interns direct services for students and their families. In this position I advocate for all students to be educated in the best educational environment with the least restrictions. I&RS's focus is to link children and their families to community based services, such as tutoring, therapy, medical and other social services. I&RS's goal is to exhaust all in-school and community services prior to referral to the Child Study Team for evaluation. I also provide onsite individual and group therapeutic counseling for general and special education students. Interventions and topics include: conflict resolution, anger management, crisis intervention, child abuse and neglect issues, sexual abuse issues, self esteem, working with children of prisoners, grief, stress management, ADHD strategies and Behavior modification and other classifications and diagnoses. I am the Anti-Bullying Specialist providing workshops to students, staff

and parents regarding bulling issues pursuit to the new law. Team leader of a districtwide crisis management/first responder team. Conduct district-wide professional development trainings. Trained to input SEMI data.

Adjunct Professor 2004–Present
Metropolitan College of New York, New York, New York

Teaching several courses in the Audrey Cohen School for Homan Services and Education: Developing Empowering Professional Relationships I the Workplace, Purpose Centered Groups, Purpose Centered Teaching, remedial mathematics; second semester mathematics; Management Systems for Improvement of Productivity. Supervision of Intern students, 15–30 students per semester.

Instructor 2002–2004
University of Hartford, Bridgeport, Connecticut Campus

Developed a curriculum for their Welfare to Work program students planning to open home based child-care centers. Each semester I taught a class on professional and personal goal setting.

School Social Worker 9/05–Present
Plainfield Public Schools, Plainfield, New Jersey

Presently I provide social work counseling to students and parents; conduct psycho-social assessment and diagnosis of behavioral disabilities with recommendations and/or environmental manipulations at the school, home and/or in the community with periodic reevaluations. I also participate in case conferences involving cooperation with other pupil personnel workers, school personnel and community agencies. Additionally I make referrals to public or private agencies with appropriate follow-up. Serving on several committees in the school as well as various community agencies. Serving the learning community with information regarding community resources. Maintenance of appropriate school records and providing written reports and communications as required. Participation as a resource person in in-service training, professional development and planning. I act as a consultant to resolve problems concerning issuance of credits; evaluate transcripts. Participates, as requested, in planning, implementation and followup phases of proficiency testing; participates in the Individual Education Plan (IEP) process as required; supervises student social work interns; performs other duties as assigned.

Executive Director 10/93–8/95
Suitability, New York, New York

Responsible for all fundraising, administrative duties and programming activities for intensive job readiness training programs and events. Created responsive and tailored workshops and informational seminars to meet the needs of participants as well as community and corporate partners.

Executive Director 4/90–9/93

Union County Fair Housing Council, Inc. Plainfield, New Jersey

The focus of the agency was to enforce fair housing laws for the County of Union. Individual counseling in the following areas was provided: discrimination, how and where to look for apartments, placement assistance, eviction, financial management, landlord-tenant problems, and first time home buying. Responsible for all administrative functions such as accounting, taxes and payroll. Developed a very successful home ownership program for low-income families. Increased the budget by 40% over 3 years.

Community Service

We Care For Children, Inc., Board Member 2002–2005

Plainfield Neighborhood Empowerment Program Chairperson 1999–2000

Planned Parenthood of New Jersey, Board Member 1997–1998

Healthy Mothers/Healthy Babies, Chairperson 1992–1995
Appointed by the Mayor of the City of Plainfield to serve on this coalition. Instrumental in increasing membership. Reviewed and selected agencies to receive grant awards. Monitored compliance of agency awardees.

Habitat for Humanity, Board Member 1992–1995

Member of the family selection committee. Played a significant role in the formulation of procedures and guidelines to ensure an equal opportunity for each applicant.

Licenses and Certifications

Certified National Tester—No Child Left Behind 2003–2008

Certified School Social Worker March 2006

Honors and Awards

Recipient of the Advocacy Award for Community Initiative 2005
Yeshiva University, New York, New York

PSI CHI International Honor Society 2010

Professional Affiliations

National Association of Social Workers 2002–Present

Women in Development 2003–2005

New Jersey Education Association 2005–Present

Plainfield Chamber of Commerce 2006–Present

Other Experience

Fieldwork Committee September 2004

Convened by Dean Lugo to assess the current state of the school's relationship to the field internships, especially concerning matters of accountability and record keeping. My role was to develop a six-page questionnaire consisting of eleven questions, conduct focus groups at each campus and render a statistical report. Additionally I was charged with obtaining research on fieldwork credits at other colleges and universities.

Accreditation Committee October 2004

This committee was convened by Dean Lugo on October 15, 2004, to investigate accreditation possibilities for the Bachelor of Professional Studies program in the School for Human Services. There is only one accrediting agency for human service programs: the Council for Standards in Human Service Education (CSHSE). The National Organization for Human Service Education (NOHSE) does not itself grant accreditation, but can help in the process. It is important to note that purpose-centered education, was created by the School for Human Services (now MCNY) set the model for many of CSHSE's standards. Based on this my hypothesis is that in many cases MCNY's status quo will be in compliance with CSHSE'S standards and there will be no need for a recommendation. The task of this committee is to summarize of each standard accompanied by a brief description of MCNY's status quo in regard to compliance and recommendations, if any. The committee has also been charged to include a summary of recommendations as well as a 4-year plan of action, including a budget on how to get accredited. At this time the committee is divided into two teams. The 23 standards have been appropriately distributed to the teams to research and reporting including the cost factor. My role was to ensure that each team is meeting and remaining on task in a timely manner and to compile all the information obtained.