Improving Reading Comprehension for Children Living in Poverty

By Corri Hammond

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ABSTRACT

The purpose of this research was to determine the impact of one-on-one conferencing with FARMS students during guided reading. The measurement tool used during this study was the Fountas and Pinnell Reading Benchmark System. Participants were given the assessment prior to the intervention (Winter of 2017) as well as after the intervention (Spring of 2018). Participant achievement growth for reading comprehension as well as reading text level were not statistically significant different between FARMS and non-FARMS students, thus the null hypothesis was supported. Further research on this topic with a larger sample size and extended treatment schedule would be beneficial to determine best practices for teaching reading.
CHAPTER I
INTRODUCTION

Overview

For most, reading is a part of everyday life. Children born into poverty often do not have resources to strengthen their reading (Sirin, 2005). Further, research completed by Hart and Risley (2003) found that children of poverty heard thirty million fewer words than their affluent peers. This puts children in poverty at risk for reading and vocabulary difficulties throughout their schooling. Engle and Black (2008) stated that between 30 and 40% of kindergarteners are not ready for school due to a plethora of reasons ranging from cognitive skills to physical development.

Schools are often critiqued based on test scores and student performance, but when children enter school at a disadvantage, schools have wide gaps to fill. Early reading intervention for children born into poverty is one possibility for closing achievement gaps.

Statement of Problem

The purposes of this study are to investigate the effect of small group reading instruction with one-on-one conferencing on fourth grade reading comprehension for students participating in the Free or Reduced Meals (FARMS) Program compared to students not participating in the FARMS Program.

Hypothesis

FARMS students in a fourth-grade reading class who participate in small group reading instruction, with or without one-on-one conferencing, will show no significant difference in their reading comprehension compared to non-FARMS students.
Operational Definitions

Free and Reduced Meals Program

The Free and Reduced Meals Program (FARMS) is a program for families whose yearly or monthly income is below set guidelines. This program allows families to apply for school lunches that are free or provided at a reduced price.

Reading Comprehension

Reading comprehension can be defined as the reader’s ability to make connections between themselves and the text, including making meaning of the text. Reading comprehension can be measured by asking questions about, within, and beyond the text.

Fountas and Pinnell Benchmark Assessment System

Fountas and Pinnell (F&P) (2008) reading levels are a system created by Irene Fountas and Gay Su Pinnell to support guided reading. Books are leveled based on an alphabetical system. Grade levels have corresponding reading levels developed by Fountas and Pinnell. In order to determine a student’s reading level, teachers conduct a series of running records using the Benchmark Assessment System created by Fountas and Pinnell.

Guided Reading Instruction

During guided reading, students are instructed in a small group setting (8-10 students). Teachers follow a before, during, and after reading plan. Students read books at their F&P level as found through the Benchmark Assessment System (BAS).
CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this literature review is to explore the relationship between poverty and reading comprehension. Section one provides information on children living in poverty. It explores the impact of low socioeconomic status on school readiness. Section two provides information about reading comprehension and defines the constructs of reading comprehension and critical literacy. Within this section, the relationship between children living in poverty and reading comprehension is examined. Critical literacy strategies are also explored in section two. Section three of this paper includes information regarding the impact of parent involvement in school on reading comprehension. Finally, section four reviews four specific reading interventions to promote reading comprehension.

The Effect of Poverty on Reading Ability

Childhood poverty is continually on the rise. A child is considered to be living in poverty when his or her family is officially living below the poverty line, “defined as income of $24,036 or less in 2015, for a family of four with two children” (Child Trends Databank, 2016). Children living in poverty are likely to suffer from poor health, lack of educational materials, and high rates of criminalization (Phoenix, 2008). Due in part to these environmental issues, children living in poverty generally have difficulty in school.

School Readiness

When determining school readiness, many aspects of development are involved, including cognitive skills at the time of entering school as well as social, emotional and physical development (Ryan, Fauth, & Brooks-Gunn, 2012). Engle and Black (2008) stated that between
30 and 40% of kindergarteners are estimated to not be school-ready due to lack of educational resources and physical necessities met. These kindergarteners tend to come from low-income backgrounds and lack environments conducive to learning. Children living in poverty often have lower cognitive and academic performance and more behavior problems. For instance, these children often score lower on achievement tests and have higher dropout rates and truancies.

**At-Risk**

Students who are at-risk for school failure and other problems often live in poverty. Characteristics placing children “at risk” include, but are not limited to, challenges of poverty, violence, having more than four children in the home, single parent home(s), speaking English as a second language, and disadvantages in the community (Carter, 2008). Students with some or all of the characteristics that make them “at-risk” may suffer from excessive absences, suspensions, and low academic achievement that may cause them to struggle academically.

Poverty can affect a child from the very basic level of health, which then impacts learning. As Maslow theorized, if one’s basic needs are not met, psychological and self-fulfillment needs will not be met (as cited in Berk, 2014). If a child does not have their physical and mental demands met, he or she is likely to be unprepared for learning. He or she may not have nutrition to sustain attention and alertness, books at home to read, educational toys or even someone to communicate with due to parents who work long hours just trying to get by. Thus, children living in poverty begin school with significant disadvantages. Economic disparities affect students not only at the individual level, but the school level as well. Sirin (2005) found that students from higher socioeconomic statuses (SES) are provided with at home resources that many of their low SES peers don’t receive and that these students have better access to high quality schools and classroom environments, which can contribute to higher success rates.
Reading Comprehension

The definition of reading comprehension has changed throughout the years, but always stays within the context of constructing meaning. One definition of reading comprehension is that it is the reader’s ability to make connections between what they already know—their prior knowledge—and what they’re reading (McLaughlin, 2012). This means that the reader must be able to think about the meaning of the text and connect it to their prior knowledge about the topic. Although this sounds fairly simple, there are many skills and strategies needed in order to make these connections and consequently understand the meaning of the text.

Comprehension Skills and Strategies

Some of the major skills needed for comprehension to take place are the ability to read and understand unknown words, text structure, and new information. While doing this, readers must also have the ability to generate and answer questions periodically throughout the text. Some factors that may help one’s ability to comprehend text include prior knowledge and experience with the world, as well as understanding language and print (Fisher, Lapp, & Frey, 2011). Children living in poverty often have less worldly knowledge because of a lack of environmental exposure and experiences (Ryan et al., 2012). This may impede their ability to use prior knowledge when identifying or determining unknown words and when constructing meaning from text. Due to deficiencies in the extensive list of skills impacting reading comprehension, many students who are defined as being “at-risk,” lack school readiness and have major gaps in reading comprehension that are far more difficult to close than their higher SES peers.
Critical Literacy

One way to close the achievement gap may be to take a critical literacy perspective. Critical literacy views comprehension in a way that suggests readers should understand text at deeper levels (McLaughlin, McLaughlin, & DeVoogd, 2011). Literacy was once thought to be the ability to read and write. However, over the years, the idea that there are many types of literacies has emerged. In critical literacy, readers are considered to be active in the process of reading. Readers aren’t just taking in the message of the text; rather they are questioning, examining, and disputing the message as they read texts. Readers are able to consider the source or author and the written message to determine if they should believe or take action for or against the message. Another aspect of critical literacy is when reading for pleasure, readers can choose if they would like to take action or not and experience emotions based on their understanding of the authors’ messages.

To promote critical literacy within students, teachers and students are asking complicated questions about morality, ethics, language, power, people, and lifestyles during and after reading (McLaughlin et al., 2011). Instead of just reading to understand, readers are encouraged to read to critique and think about whose voices are heard or missing in the text. In doing so, readers build relationships between their own ideas and those presented in the text. As an example, one method used to encourage students to ask questions, critique the ideas presented, and dive deeper into the meaning of the text via critical literacy would be to participate in a Socratic Seminar wherein children sit with words or issues and discuss it amongst each other. Students are encouraged to build upon each other’s ideas by agreeing and disagreeing with one another.
Parent Involvement

Since students of low SES are at risk of achieving at lower levels and reading is a key to achievement at school and in life, understanding the factors that may put children at risk for school failure or challenges can be beneficial. Parental involvement is an extremely important aspect of a child’s schooling that can positively or negatively impact a child’s academic achievement. Although the definition of parental involvement can vary, Larocque, Kleiman, and Darling (2011) define it as “the parents’ or caregivers’ investment in the education of their children” (p. 116). Even when families want to be involved, families from diverse backgrounds are often unsure how to become involved, resulting in a decrease in involvement. As stated in the study, this was “particularly true for African American families, Hispanic families, and those from low-income backgrounds” (p. 116).

Increasing parental involvement could positively impact students from all socioeconomic backgrounds. Bandura found that people learn through observing others (Berk, 2014). Teachers can promote constructive involvement by coordinating school events, providing volunteer opportunities and providing parents with strategies to help students with homework that can directly impact a child’s reading abilities, if practiced by the parents. As stated earlier, children coming from low SES may not have the at-home resources that their higher SES peers have. By incorporating parents into the school environment, educators may be able to provide parents with more strategies and resources to promote reading at home. Knowing children from low-income backgrounds tend to begin school at a disadvantage (Engle & Black, 2008), schools and teachers can provide families with books and strategies for increasing reading comprehension. Teachers can model for the parents the value of education and reading to their child.
Reading Interventions

Below are descriptions of instructional interventions that may improve reading comprehension in children who live in poverty or are “at risk.”

Small Group Reading Instruction

With an increase in diverse learners comes an increase in diverse educational needs. In order for a teacher to effectively differentiate instruction, one must first identify the level of understanding and needs of each individual learner. Once individual student needs are identified, students can be grouped based on those needs. Kamps, Abbott, Greenwood, Wills, Veerkamp, and Kaufman (2008) suggest an ideal small group size is three to six students. However, some programs and curricula that are meant to be taught in a small group setting may call for groups of eight to twelve students. When working with children in a small group setting, the teacher is able to work more closely with each student. The study found that most participants who received reading instruction in small groups were able to go from below grade level to on grade level or even exceed on grade level expectations for reading. The findings also support small group instruction helps those students identified as “at risk.” It is important to note that all reading instruction should be evidence-based whether it is conducted in a whole group or small group setting.

Reciprocal Teaching

According to the Institute of Education Sciences (2010), “reciprocal teaching is an interactive instructional practice that aims to improve students’ reading comprehension by
teaching strategies to obtain meaning from a text” (p. 1). To use reciprocal teaching, one must model and lead the discussion of the comprehension strategies. As students become familiar, there is a gradual release in responsibilities to the students. The comprehension strategies that are the main focus of this instructional practice are generating questions, predicting, summarizing, and clarifying. All strategies are to be used in reference to a passage of text. Critical literacy uses the four comprehension strategies above, but takes readers a bit deeper by including student discussion of aspects of a text; hence, this is a way of teaching that can be incorporated into reciprocal teaching discussions. Since the goal of critical literacy is for students to critique the text, students must be given the opportunity to generate questions, predict, summarize, and clarify ideas as well as discuss them (McLaughlin et al., 2011). Both of these interventions can work together to strengthen reading comprehension for all learners. When using this practice in a small group setting, students are able to get direct instruction regarding their individual needs. If a group of students are struggling to generate questions about a text, a teacher can group these students together into a small group to practice reciprocal teaching and the comprehension strategy of generating questions. The combination of these instructional techniques and beliefs can greatly increase the chances of students being able to master the skill of generating questions, as was seen in research completed by Kamps et al. (2008).

Text Dependent Questioning

Text dependent questions are “questions whose answers require inferences based on careful attention to the text” (Boele, 2016). As stated by McLaughlin (2012), “comprehension is the construction of meaning” (p. 432). If one takes a critical literacy stance, readers are not just taking the author’s ideas as their own; instead they are questioning, challenging, and evaluating
those ideas (McLaughlin et al., 2011). Boele (2016) believes that text is a starting place, but not all that should be used for comprehension. In order to create text dependent questions that not only reflect the text, but also transcend the text, one must use the text as a starting point. Questions should be created based on levels of comprehension—within the text, about the text, and beyond the text. This belief is directly related to that of critical literacy. When readers are able to go beyond the text to construct meaning, they are taking a critical stance.

Text dependent questions that reflect the text are questions that are explicitly and directly related to the text. Text dependent questions focused on main ideas, for example, make the readers dig a little deeper into their comprehension. However, many readers may have different ideas about the author’s main idea depending on the purpose for reading. Some main idea questions could be, “What information is the most important?” or “How can you synthesize this information?” Questions requiring inferences and predictions can also be used as text dependent questions. These questions make the reader dig even deeper into comprehension, for they have to take the information stated in the text and apply their own understanding of the world around them to draw inferences or make predictions. This is a major focus in the Common Core Standards but has always been used in reading instruction.

Lastly, Boele (2016) categorizes the author’s message or theme as another text dependent question process for comprehension. Questions about these forces the reader to look at the author’s message and support their claims with evidence from the text. These processes of comprehension can be used in the form of text dependent questions, and all of these types of questions rely heavily on the text at hand. In order to promote a critical literacy stance, the
teacher and reader should go beyond these text-based questions to push the comprehension deeper.

In order to push comprehension deeper, into a more critical stance, the reader must use the text as a form of evidence for claims made by the student. For example, by reading a text, a student will be able to use the ideas of the author to question, evaluate, and eventually come up with a claim of their own. The ideas provided by the students can be agreed with, disagreed with, extended, or challenged by other students, using the text as one form of evidence (Boele, 2016). Including this step in text dependent questioning allows for students to transcend the text.

SQ4R Technique

The SQ4R strategy stands for Survey, Question, Read, Reflect, Recite, Review. This strategy is designed for descriptive and explanatory texts. Basar and Gurbuz (2017) describe the strategy in stages. During the survey stage, the student looks at the text features (headings, subheadings, illustrations, etc.) in order to gather information to make predictions. The question stage of this strategy is when the student prepares questions they think will be answered in the text. This step sets a purpose and goal for reading. The read stage is when the student reads the text carefully. During this stage, it is important for the student to make note of the answers to the questions generated in the previous stage. Next, in the reflect stage, the students are to think and reflect about the information obtained from reading the text. This is when students can verbally or nonverbally answer the questions. After reflecting, students are to recite what they read, decide if they understood their reading, and review their answers to their questions. This stage forces the student to refresh and correct their understanding of the subject of the text. This stage is similar to Piaget’s theory of cognitive development (Berk, 2014), when children try to make
sense of new information by adapting it to something they know or changing what they thought based on new information that cannot fit their prior schemata. Finally, in the review stage, the student reviews the reading once more in order to summarize the subject, review information they did not previously understand, and discuss questions they struggled to answer.

Basar and Gurbuz (2017) studied fourth graders using this technique and found that the SQ4R technique “significantly improves the reading comprehension skills of students” (p. 138). This process allows for students to review the text, answer questions, and determine important details provided by the text. In addition to this technique, incorporating questions that force readers to question the author’s ideas would allow for a greater understanding of the subject. Incorporating this technique into their reading in a small group setting could help teachers ensure the method is implemented properly and have a positive impact on students’ reading comprehension as seen by the Kamps et al. (2008) study.

Summary

Many students living in poverty have significant deficits in their school readiness that increase as children get older (Sirin, 2005). These can negatively impact reading comprehension. Reading is critical for academic success and is a skill with which children living in poverty often struggle. This literature review described instructional interventions in order to bridge the reading achievement gap between low-income children and their higher-income peers.
CHAPTER III

METHODS

The goal of this study was to determine the impact of one-on-one conferencing with FARMS students during guided reading.

Design

This study used a quasi-experimental pre- and post-test design to compare reading comprehension scores between students who had individual conferences during Guided Reading and students who did not. The independent variable was one-on-one conferencing during Guided Reading while the dependent variables were the changes of reading comprehension scores and reading levels on the Fountas and Pinnell (F&P) Reading Benchmark Assessment System from Winter to Spring. The results were disaggregated by FARMS and Non-FARMS status. Limitations of the study include a small participant group and length of intervention (4 weeks).

Participants

Research was conducted at a targeted Title I suburban elementary school in Anne Arundel County, Maryland, where 22% of students received free or reduced meals. The school educates about 450 students from grades Pre-Kindergarten to Fifth Grade. The students at the school were of mixed races such as Hispanic, African American, and Caucasian.

There were 23 students involved in this study between the ages of nine and ten. The sample was convenience. The selected population was 43% male and 57% female. Among those students, 57% are considered FARMS as seen on through Performance Matters—an Anne Arundel County program used to contain student information. 17% were English Language Learners, and 4% received special education services. Three of the participants were Hispanic,
twelve were Caucasian, two were mixed race, four were African American, one was Asian, and one was American Indian.

Participants were placed in two groups, which each included some FARMS students and some non-FARMS students. The control group who did not receive individual conferences was 55% FARMS students. The experimental group who did receive individual conferences was 58% FARMS students.

**Instrument**

The instrument used for this study was the Fountas and Pinnell Reading Benchmark System (2008), most commonly known as F&P. This instrument assesses students’ independent, instructional, and frustration reading levels (A to Z). Students in the fourth grade that are reading on grade level should be reading books at levels Q, R, and S. To use the instrument, the assessor provides the student with a book, either fiction or non-fiction. The student reads the book aloud to the assessor while the assessor makes notes on errors and self-corrections. Once the student finishes the book, the assessor asks a variety of questions about the book. This allows the assessor to score the reader’s comprehension of the book (score of 0-9). Based on the accuracy (a percentage) and score for comprehension, the reader either reads independently, instructionally, or frustration on that level. This system was chosen by Anne Arundel County Public Schools as a reliable measure of reading ability. An outside evaluation team for Fountas and Pinnell stated, “After two and a half years of editorial development, field testing, and independent data analysis, the Fountas & Pinnell Benchmark Assessment System texts were demonstrated to be both reliable and valid measures for assessing students’ reading levels” (p. 2).
Procedure

Students in the researcher’s fourth grade class were placed in two experimental groups. Both groups were mixed with FARMS and non-FARMS students. Students were first assessed using the F&P Benchmark system. Reading levels were found for all 23 participating students. Students were then grouped for Guided Reading instruction based on their reading levels. Students in the control and experimental group for this study were mixed throughout the Guided Reading groups.

For Guided Reading, students were given books on their instructional level. Students in the experimental group were provided with individual conferences one to two times a week. During the conference, students read portions of the text aloud to the researcher and the researcher asked a couple comprehension questions. Feedback was provided based on the reading and answers to the questions. One strength and one area to work on were given to and modeled for the student. The student then practiced the new reading goal with the researcher. During the next conference, the researcher and student reviewed the previous goal and continued with the conference. During conferences, the researcher took notes on strengths and weaknesses.
CHAPTER IV

RESULTS

The purpose of this study was to see the impact individual conferences had on reading comprehension. The quasi-experimental design examined students’ reading text level and comprehension changes from December to March. The intervention group received individual conferences while the non-intervention group did not receive individual conferences.

Table 1

_F&P Score Change from Fall to Winter for Intervention and Non-Intervention Students_

<table>
<thead>
<tr>
<th>Score Change from Winter to Spring</th>
<th>Group</th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
<th>Median</th>
<th>Significance Using Median Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text Level</td>
<td>Intervention</td>
<td>0.167</td>
<td>12</td>
<td>.577</td>
<td>0</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Non-Intervention</td>
<td>0.364</td>
<td>11</td>
<td>.924</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Comprehension</td>
<td>Intervention</td>
<td>0.833</td>
<td>12</td>
<td>1.337</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Non-Intervention</td>
<td>0.818</td>
<td>11</td>
<td>2.483</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Reading levels were converted from letters to numbers. The conversions are as follows-


Intervention students had higher average comprehension score growth but lower average text level growth than their counterparts. However, both intervention and non-intervention students had the same median comprehension and text level changes. As a result, there is no statistically
significant difference in both comprehension and text level changes between the intervention and non-intervention groups.

Table 2

*Reading Benchmark Results for Intervention Versus Non-Intervention Students- By FARMS*

<table>
<thead>
<tr>
<th>Score Change from Winter to Spring</th>
<th>Student Group</th>
<th>Treatment Status</th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
<th>Median</th>
<th>Significance Using Median Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FARMS</td>
<td>Intervention</td>
<td>0.43</td>
<td>7</td>
<td>0.535</td>
<td>0</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>FARMS</td>
<td>Non Intervention</td>
<td>0.67</td>
<td>6</td>
<td>1.033</td>
<td>0</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Non-FARMS</td>
<td>Intervention</td>
<td>-0.2</td>
<td>5</td>
<td>0.447</td>
<td>0</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Non-FARMS</td>
<td>Non- Intervention</td>
<td>0</td>
<td>5</td>
<td>0.707</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FARMS</td>
<td>Intervention</td>
<td>0.57</td>
<td>7</td>
<td>1.512</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>FARMS</td>
<td>Non Intervention</td>
<td>0.82</td>
<td>6</td>
<td>0.983</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-FARMS</td>
<td>Intervention</td>
<td>1.20</td>
<td>5</td>
<td>1.095</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Non-FARMS</td>
<td>Non- Intervention</td>
<td>0.80</td>
<td>5</td>
<td>3.768</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

For both FARMS and non-FARMS students, the intervention group underperformed the non-intervention group on text-level growth. FARMS students in intervention also underperformed in comparison to those in non-intervention in comprehension-score change. However, there were no statistically significant differences on both comprehension and text level between intervention and non-intervention FARMS students.
Table 3

*Reading Benchmark Results for FARMS Versus Non-FARMS Students- By Intervention Status*

<table>
<thead>
<tr>
<th>Score Change from Winter to Spring</th>
<th>Treatment Status</th>
<th>Student Group</th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
<th>Median</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intervention</td>
<td>FARMS</td>
<td>0.43</td>
<td>7</td>
<td>0.535</td>
<td>0</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Intervention</td>
<td>Non-FARMS</td>
<td>-0.20</td>
<td>5</td>
<td>0.447</td>
<td>0</td>
<td></td>
</tr>
<tr>
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<td>Non-Intervention</td>
<td>FARMS</td>
<td>0.67</td>
<td>6</td>
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<td>No</td>
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<tr>
<td></td>
<td>Non-Intervention</td>
<td>Non-FARMS</td>
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<td>5</td>
<td>0.707</td>
<td>0</td>
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<td>Non-Intervention</td>
<td>FARMS</td>
<td>0.83</td>
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<td>0.983</td>
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<td>Non-FARMS</td>
<td>0.80</td>
<td>5</td>
<td>3.768</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

For students in intervention, FARMS students had a higher average growth in text level but a lower average growth in comprehension than non-FARMS students. However, the growth differences on text level and comprehension between FARMS and non-FARMS students were not statistically significant.
CHAPTER V
DISCUSSION

The null hypothesis, that FARMS students in a fourth-grade reading class who participate in small group reading instruction, with or without one-on-one conferencing, will show no significant difference in their reading comprehension compared to non-FARMS students, is supported for text level and comprehension change from Winter to Spring.

Implications of Results

Students who participated in the intervention had a higher comprehension score change than their counterparts. The intervention included one-on-one conferencing, which directly related to comprehension development. However, students in intervention underperformed in the average text level change. This could be due to the short intervention period.

In relation to FARMS status, FARMS students in intervention as well as non-intervention outperformed non-FARMS students in average text level change. For reading comprehension, FARMS students in intervention underperformed non-FARMS students, but non-FARMS students outperformed FARMS students not in intervention. In conclusion, results vary slightly and groups of students outperformed in certain areas and underperformed in other areas. However, no statistically significant results were found, supporting the null hypothesis.

Threats to Validity

There were several possible threats to validity within this research. First, the sample of students was based on convenience. The sample size was rather small with only 23 students. From the sample of 23, students were grouped based on their FARMS status (FARMS versus non-FARMS). Once students were grouped based on FARMS status, they were grouped into an
intervention and non-intervention group. These groups were small, which could have affected the validity of results. If the groups were larger, a more significant difference may have been found.

Students in the researcher’s fourth grade class, which included both intervention and non-intervention students, participated in whole group reading instruction. During whole group instruction, students were provided with direct instruction on a variety of aspects of text that may have assisted in students having a deeper comprehension understanding.

The intervention and non-intervention groups were tested for reading level and comprehension score in the Winter and again in the Spring. Fourth graders are expected to move across three text levels during their fourth grade year. With the intervention lasting a small portion (4 weeks) of the school year, students were not expected to increase more than one level, if at all. This short treatment schedule may have impacted the results. If the intervention lasted the entire school year, results may have been different.

**Connections to Literature**

McLaughlin (2012) noted changes in what was believed to be best practices of teaching reading comprehension. Depending on the theorist, researcher, or date of research, the belief of how comprehension should be taught varies.

Research conducted by Everbeck (2017) incorporated the idea that individual conferences are beneficial when moving students across reading levels. This study showed all students increased their text level over two thirds of the school year. All students in this study participated in individual conferences geared toward their specific needs. Since all students participated in the treatment, a comparison between intervention and non-intervention could not be made. Unlike
her study, this study did not show an increase in all students’ text levels. Also, half of the students participated in the treatment to determine if individual conferencing was beneficial.

**Implications for Future Research**

The findings of this study did not show any statistically significant differences between intervention and non-intervention students’ reading level and comprehension. Research with a greater sample size may reveal new findings about the benefits of individual conferences during small group instruction. Along with a greater sample size, a longer treatment schedule may also yield new results. Another implication for future research is to utilize this treatment schedule for students in other grade levels. As students progress through elementary and middle school, the expected increase in reading text level gets smaller. For example, students in first grade are expected to increase their reading from a level D to G. In fourth grade, students are expected to increase their reading from a level Q to S. Research to determine the text level growth may result in different findings depending on grade level expectation. Therefore, further research is needed to determine the benefit of individual conferences on FARMS and non-FARMS students.

**Conclusion**

The goal of this study was to determine if FARMS students in a fourth-grade reading class who participate in small group reading instruction, with one-on-one conferencing, would show a significant difference in their reading comprehension compared to non-FARMS students. The results of this study did not show any significant difference between intervention groups or FARMS status for reading level or comprehension. Further research on this topic with a larger sample size and extended treatment schedule may yield different results. Students participating in conferences for a longer period may allow for additional practice with comprehension strategies that would increase their comprehension score, in turn increase their reading text level.
REFERENCES


