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Effect of a repeated reading and utility value intervention on the fluency of an 8th grade student with a learning disability

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Effect of a Repeated Reading and Utility Value Intervention on the Fluency of an 8th Grade Student with a Learning Disability

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Table of Contents

Abstract......................................................................................................................................................... iv

CHAPTER ONE: INTRODUCTION ........................................................................................................... 1
   Introduction to Student ................................................................................................................................. 1
   Individuals with Disabilities Act .............................................................................................................. 2
   Common Core State Standards ............................................................................................................... 2
   Conclusion .................................................................................................................................................. 3

CHAPTER TWO: LITERATURE REVIEW ............................................................................................... 4
   Introduction .................................................................................................................................................. 4
   Section 1 - Fluency Interventions: Phonological Awareness ................................................................. 4
   Section 2 - Fluency Interventions: Meta-analyses of Fluency Interventions ........................................ 7
   Section 3 - Fluency Interventions: Repeated Reading ........................................................................ 10
   Section 4 - Reading Relevancy Interventions ........................................................................................ 17
   Conclusion ............................................................................................................................................... 22

CHAPTER THREE: PROCEDURE ......................................................................................................... 24
   Introduction ............................................................................................................................................... 24
   Description of the Student .......................................................................................................................... 24
   Intervention Procedure ............................................................................................................................. 25
   Data Collection ........................................................................................................................................ 27
   Conclusion ............................................................................................................................................... 28

CHAPTER FOUR: RESULTS ................................................................................................................. 29
   Pre-intervention Results of the QRI-5 .................................................................................................... 29
   Pre-intervention Results of the Adolescent Motivation to Read Profile ................................................. 31
   Summary of Pre-intervention Results ..................................................................................................... 32
   Post-intervention Results of the QRI-5 .................................................................................................... 32
   Post-intervention Results of the Adolescent Motivation to Read Profile .............................................. 35
   Summary of Post-intervention Results .................................................................................................... 35
   Analysis of Data ....................................................................................................................................... 36
   Conclusion ............................................................................................................................................... 38

CHAPTER FIVE: CONCLUSIONS .......................................................................................................... 39
   Introduction ............................................................................................................................................... 39
   Connection to Existing Research ............................................................................................................ 39
   Connection to Common Core State Standards ......................................................................................... 41
   Strengths and Limitations of Study .......................................................................................................... 42
   Recommendations for the Student ........................................................................................................... 43
   Conclusion ............................................................................................................................................... 44

Works Cited ............................................................................................................................................... 46

Appendix A ............................................................................................................................................... 49
Appendix B ............................................................................................................................................... 51
Appendix C ............................................................................................................................................... 52
Abstract

An intervention focused on teacher assisted guided reading, repeated reading, and a reading motivation technique was implemented to increase the fluency of a special education student with a Learning Disability (LD) in an 8th grade mid-western school. Previous research has indicated that both repeated readings and reading motivation techniques increase academic achievement (Hawkins, Hale, Sheeley, and Ling, 2011; Hulleman and Harackiewicz, 2009), but few investigations have integrated these interventions. This research used a utility value technique along with texts of gradually increasing difficulty, facilitated by oral reading and feedback provided by an individual educator, to increase a student’s reading speed and accuracy. An analysis of pretest and posttest results, as measured by the Pearson Qualitative Reading Inventory (QRI-5; Leslie & Caldwell, 2011) and Adolescent Motivation to Read profile (Pitcher et al., 2007), indicated small but notable improvements in value attributed to reading, as well as increased performance on word lists, correct words per minute, and accuracy.
CHAPTER ONE: INTRODUCTION

Introduction to Student

Zarina is an 8th grade student diagnosed with a specific learning disability. For the chronological age level of 13.8, as assessed by the Weschler Intelligence Test for Children (Wechsler, 2004), her verbal comprehension and perception reasoning skills are average, while her working memory and processing speed was determined to be below average. She has a weak ability to repeat digits heard, and her processing speed was depressed due to a weak ability to reproduce simple designs quickly. Considering these scores as a whole, she is of average general intelligence.

Her overall academic performance is measured at a late 4th to 5th grade level. Based on the Fountos-Pinnell reading scale (Pinnell & Fountas, 2007), she is quantified at the early 5th grade reading level. She is rated to perform at the “frustration range” in the majority of reading subtypes, as evidenced in the Woodcock-Johnson reading norms for her age level (Woodcock, R.W., 1987). Particular struggles occur in Reading Comprehension, Basic Reading, and Brief Reading subtests. Her passage comprehension and word attack abilities are equivalent to the mid-2nd grade level.

Information processing struggles lie in her fluency and text comprehension, which may be interrelated. Reading accommodations in the general education classroom include extended time, frequent breaks, small group setting, and the use of a highlighter and bookmark. Therefore, instructional methods should be focused on improving skills as they relate to overall fluency.

She displays maladaptive social, emotional, and behavioral characteristics. Previous IEPs have indicated that she is easily angered, especially when receiving consequences of negative attention. Additionally, she doesn’t use classroom time appropriately, which is manifested in
inappropriate hallway behavior and walking out of class. Social skills instruction on her current IEP occurs twice a week, focusing on emotional awareness and dealing with anger and conflict.

**Individuals with Disabilities Education Act**

The Individuals with Disabilities Education Act (IDEA) is a law concerning the academic services provided to children with disabilities throughout the United States. All students, regardless of ability, are entitled to a free and appropriate public education (FAPE) in the least restrictive environment (LRE). Students with disabilities should be provided with an appropriate academic environment and opportunities to develop academic skills and foster future educational, vocational, and independent living opportunities, which is documented through their Individualized Education Program (IEP).

According to the document created by her IEP team, Zarina’s special education and related services are defined by specialized instruction in reading, math, and social skills. Her specialized reading instruction occurs for 30 minutes each day outside the regular education classroom in a small group pull-out setting, while her specialized math instruction regulates 60 minutes inside the regular education classroom. Her specialized instruction in social skills occurs in a small group setting outside of the general education classroom for 30 minutes two times a week to improve her emotional awareness and behavioral challenges. In all other subjects Zarina participates fully with the general education classroom.

**Common Core Standards**

The Common Core State Standards (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2012) provide the criterion that defines academic mastery across curricula for students at all educational levels in the United States. These benchmarks are broken up into proficiency levels dictating the depth at which a student
understands a given academic concept. In English Language Arts, eighth grade students are charged with being able to “Cite the textual evidence that most strongly supports an analysis of what the text”, “draw inferences from the text”, and “make connections between individuals, ideas, or events” (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2012, p. 1). The intervention used in this research incorporates the eighth grade common core state standards in English Language Arts with the identified reading needs of Zarina.

Conclusion

Though she functions at the fifth grade reading level, Zarina will approach eighth grade common core reading concepts through appropriately leveled texts to improve her reading fluency, an area in which she exhibits the most notable weakness. The selected research methods, which the following chapters will describe, are designed to moderate her reading challenges and support her access to eighth grade material. Although the texts she will be interacting with are identified as fifth and sixth grade texts, she will be demonstrating her abilities to perform eighth grade material. By designing an intervention that targets her current skills, while also acknowledging processing deficiencies affiliated with her disability, this research will attempt to improve her reading speed and accuracy. The intervention will utilize the research-based methods of repeated readings and a reading motivation technique to facilitate growth in fluency skills.
CHAPTER TWO: LITERATURE REVIEW

Introduction

Synthesizing Zarina’s performance on reading assessments, as well as current IEP goals and accommodations, interventions concentrating on fluency development are the focus of this research. Fluency, as defined by the National Reading Panel (2000), consists of the speed, accuracy, and proper expression that students need to demonstrate to comprehend and retrieve the material they are interacting with. The purpose of Chapter 2 is to introduce scholarly research supporting the critical elements of my investigation, focusing on fluency interventions, such as repeated reading and phonological awareness, and interventions to promote interest through reading relevancy.

Section 1 - Fluency Interventions: Phonological Awareness

An essential component of emerging readers is their ability to decode familiar and unfamiliar words by applying letter-sound correspondences in spelling and reading. The National Reading Panel (2000) determined that instruction in this skill, phonemic awareness, was highly effective at improving the reading abilities of students from the primer to 6th grade level. As students exert less cognitive effort applying phonics, they read with increased speed and accuracy, demonstrating improved fluency. Though this particular intervention ultimately applies alternative fluency intervention techniques, the merit of phonological awareness instruction on the fluency abilities of students deserves mention.

Research by Taub and Szente (2012) explored the relationship between phonological awareness and rapid automatized naming (RAN) on the reading fluency of students from traditionally underrepresented groups. Though significant research has been conducted in the exploration of these two abilities, few investigations have undertaken research with minority
populations. Students from traditionally underrepresented, minority backgrounds may develop phonemic awareness skills differently; therefore, the purpose of this study was to investigate the relative contribution of RAN and phonological awareness in these populations.

The study included 86 participants attending 1st through 4th grade within an inner-city charter school located in a high-poverty, urban environment. The majority of participants were of African American descent (97%), and all of the students were from economically disadvantaged families, since they were eligible for free and reduced lunch. Though not a traditional public school, the charter school followed the same curriculum as the other district-based schools in the area. After obtaining parental permission, a battery of tests was conducted by graduate students over a 5-day period. Two instruments were used to assess the students’ phonological awareness skills, RAN skills, and reading fluency. To assure competency assessments were administered individually by graduate students supervised by university-based faculty.

A statistically significant relationship was found between rapid automatized naming and reading fluency, as well as the phonemic awareness skill of blending and reading fluency. The relationship between segmenting and fluency was not statistically significant. Therefore, these analyses suggest that RAN and phonological awareness were valid and reliable predictors of participants’ reading fluency. Considering RAN along with phonological awareness was also found to account for more accurate prediction of reading fluency than phonological awareness alone, suggesting that RAN is a skill embedded in phonological awareness.

The findings from the study provide support for the use of RAN assessments to identify students at-risk for reading difficulty; however, the results suggest that teachers should focus classroom-based interventions on the acquisition and development of phonological awareness skills—in contrast to improving RAN-based skills. If RAN is related to phonological awareness,
then at-risk students with low RAN scores should benefit from interventions designed to improve phonological awareness skills. Based on this research, utilizing a reading assessment to determine the rapid automatized naming skills of students will inform researchers of overall reading fluency, but interventions shouldn’t be based on improving these naming abilities. Instead, interventions should focus on improving blending abilities through isolating deficits in phonemic awareness skills.

Exploring these results with a different population, Alamprese, Macarthur, Price, and Knight (2011) investigated the impact of an enhanced decoding and spelling curriculum on the development of adult basic education (ABE) learners’ reading skills. Very little research has been conducted relating to the efficacy of reading programs with adult basic education learners. Alamprese et al explored the degree to which a structured decoding and spelling curriculum increased the fluency of adult basic education learners.

Participants in the study included sixteen ABE programs that offered class-based instruction to low to intermediate-level learners. Students were randomly assigned to either the treatment group or the control group. Seventy-one reading classes, 34 instructors, and 349 adult learners with pre and posttests participated in the study. All participants were sufficiently fluent in English to participate in English reading classes. The majority (65%) had been born or educated in the United States since primary grades, while the remaining 35% were born and educated outside of the United States.

For each cohort of classes, instruction lasted approximately 8 months or about 30 weeks. Surrounding the adult basic education, test administrators conducted pretest and posttest measures of decoding and spelling abilities. Reading instructors in the treatment programs taught
decoding and spelling using the study-developed curriculum, while instructors in the 8 control programs used their existing reading instruction.

The results of the study found that significantly greater gains occurred in the treatment group relative to the control group on a measure of word attack skills. Though there were gains in the other treatment conditions (word recognition, spelling, fluency, or comprehension), none were significantly different from the control group. During classes in the treatment condition, approximately half of this time was devoted to the enhanced decoding curriculum, which likely resulted in the significant difference in groups. Considering this study, conducting lessons relating to a decoding curriculum can make a significant difference in word attack abilities, regardless of the age of the learner.

Interventions aimed at increasing the phonemic awareness skills of individuals, regardless of age or ability, have been shown to impact reading fluency. Research by Alamprese, Macarthur, Price, and Knight (2011) indicated the decoding programs assist in increasing word attack abilities, while Taub and Szente (2012) found that phonemic awareness abilities directly influence reading fluency. The impact of these interventions is notable, though it was deemed inappropriate for application in this research. Though the targeted student could benefit from supplementary phonemic awareness development, since she functions at the 5th grade level academically the focus of the fluency intervention will apply repeated readings.

Section 2 - Meta-analyses of Fluency Interventions: Repeated Reading

Providing support to the National Reading Panel’s claims, at least two meta-analyses compiled research indicating that repeated reading interventions assists students to become more fluent readers. Chard, Vaughn, and Tyler (2002) conducted a meta-analysis investigating interventions that increase fluency in students with learning disabilities. Fluent reading, defined
as speed and accuracy, is an important skill for all readers to develop. Students with learning disabilities (LD) often struggle to read fluently, leading to difficulties in reading comprehension. Though improving reading fluency is seen as a critical skill for struggling readers, it is not clear which features of interventions are beneficial for this population. The purpose of these meta-analyses was to synthesize research to provide clarity as to which aspects of repeated reading interventions are most effective at building reading fluency for students with learning disabilities.

The researchers analyzed 24 published and unpublished studies that reported findings on intervention features, including repeated reading with and without a model, sustained reading, number of repetitions, text difficulty, and specific improvement criteria. Studies were chosen based on criteria that limited them to focusing on features necessary for their research, including a) a targeted intervention for elementary-age students with LD, b) the purpose of the study specifically targeted reading fluency, and c) was performed within the last 25 years.

Student assistants coded the research studies using a comprehensive coding protocol designed to determine key aspects of the included studies. Coders participated in a 3-hour training session in which the specific categories and codes were described and discussed, and coding was practiced on sample studies. During the study, overall inter-rater agreement ranged between .85 and .97, with a mean of .92.

Their meta-analyses suggest that effective interventions for building fluency include several components. These include a) an explicit model of fluent reading, b) multiple opportunities to repeatedly read familiar text independently and with corrective feedback, and c) established performance criteria for increasing text difficulty. The findings of their synthesis supports earlier research suggesting that opportunities to practice reading and rereading familiar
text is one way for students with LD to enhance their reading fluency. Furthermore, fluency is improved in readers with learning disabilities by providing efficacious corrective feedback and adjusting the difficulty level of text as they progress. To create an effective fluency intervention my research must include these criteria: corrective feedback, opportunities to reread texts, and appropriately increased text difficulty.

To advance these findings, Therrien (2004) performed a meta-analysis to examine the efficacy of repeated reading for assisting the fluency abilities of students with or without disabilities. This analysis extends the research of the National Reading Panel by isolating repeated reading apart from other interventions. The three components of repeated reading Therrien addressed include a) whether “repeated reading effective in increasing reading fluency and comprehension”, b) ascertaining the “components within a repeated reading intervention [that are] critical to the success of the program”, and c) the degree to which students with disabilities benefit from repeated reading (2004, p. 253).

The articles analyzed were selected based on the date published (1977-2001), type of research (quantitative and experimental), and population (students aged 5-18 years). 33 articles were isolated using identified search terms on ERIC and PsychInfo, as well as references contained within the fluency chapter of a national child development report. Nine of these articles were filtered out based on effect size, and six more were eliminated because they didn’t “provide the pertinent information needed to compute mean gain effect sizes”, finishing with 18 coded articles (Therrien, 2004, p. 253).

The findings of the meta-analysis indicated the efficacy of repeated readings. First, it reaffirmed research dictating that repeated reading improves the comprehension of students with or without disabilities. By differentiating research methodology, Therrien was able to determine
that repeated readings cause significant increases in fluency and comprehension regardless of whether the post-test results were ascertained using novel articles or ones that are read repeatedly, though repeated articles intuitively produced a larger effect size. Further details of their findings describe fluency interventions as most effective when administered by an adult, readings are repeated 2-4 times, and corrective feedback is provided on miscues, replicating the findings of Chard, Vaughn, and Tyler (2002), with the exception of the importance given to increasing text difficulty. Corrective feedback resulted in an effect size that was “more than four times larger” than interventions that used a fixed number of passage repetitions, noting it’s importance towards increasing fluency (Therrien, 2004, p. 257).

These meta-analyses investigated the critical elements of effective fluency interventions, providing the framework for further research regarding repeated readings. As noted in each, repeated reading is effective at increasing reading fluency when the procedure implements multiple interactions with the same text, corrective feedback, and adult administration, while increasing text difficulty may also exert an influence. When analyzing post-test results either a novel or repeated text can be utilized, both of which culminate in improvements in fluency. Through in depth investigations documented in Section 3, recent research has provided specific procedures utilized in effective fluency interventions employing repeated readings.

**Section 3 - Fluency Interventions: Repeated Readings**

The National Reading Panel (2000) describes that two instructional approaches are typically used to increase reading fluency: guided repeated oral reading and independent silent reading. *Guided repeated oral reading* consists of reading and rereading a text, with the assistance of guidance such as a teacher or tutor, until a level of proficiency is met. While research relating to independent silent reading has proved inconclusive, the Panel determined
that “guided repeated oral reading has a significant and positive impact on word recognition, reading fluency, and comprehension for students of all ages” (National Reading Panel, 2000, p. 3-28). Further research has supported and extended the findings of the Panel’s discussion of fluency interventions, particularly the elements that underlie the efficacy of guided repeated oral reading.

Quality teachers implement only the most effective methods in their classrooms, which requires considerations of lesson preparation, instructional time commitments, and impact on student achievement. Understanding teacher needs in fostering reading fluency, Kostewicz, D. E., & Kubina Jr, R. M. (2010) were interested in investigating the efficacy of interval sprinting compared to repeated reading. These two techniques are designed to increase fluency by providing error feedback, with a small procedural difference: interval sprinting breaks down passages into smaller chunks, while repeated reading leaves the same passages as a whole. The researchers hypothesized that the smaller chunks of interval sprinting might facilitate student abilities to read more words correctly per minute.

Research was conducted using three participants: two ten-year old males and an eight-year old male, all of which have reading deficits. Participants were recruited through community referrals of special education teachers affiliated with university faculty. Each session occurred for 20-30 minutes at the participant’s home over summer vacation on every available weekday, interrupted occasionally by participant commitments.

This intervention measured the impact of repeated readings and interval sprinting on words read correctly in a passage. The repeated readings condition involved the participants reading a passage twice for one minute, with the second reading opportunity taking place after the experimenter recorded miscues and provided verbal feedback in the form of error corrections.
On the other hand, the interval sprinting condition entailed the participant reading a passage of equal length, broken into 6 parts, for 10 seconds each. After reading each 6 parts of the passage, the experimenter would provide error corrections and the participant would repeat the process.

This research followed an alternating treatment design, wherein each participant is given both conditions of the treatment during each session (repeated reading and interval sprinting), which are then compared to the first reading baseline. Though this type of research submits transfer effects, as students will improve reading through practice, it is an effective method to quantify improvements in a single subject.

Results of this research indicate the effectiveness of both interval sprinting and repeated readings, both of which facilitated improvements in correct words per minute among participants. The results displayed little difference between the two methods. This process provides validation for repeated reading involving error feedback, which facilitated increases in reading fluency as defined by words read correctly per minute.

Another intervention, led by Huang, Nelson, and Nelson (2008), sought to determine the impact of a tutor-moderated intervention on the fluency of elementary aged students. Components deemed essential from previous research on increasing the fluency skills of students were integrated into this intervention. These included repeated oral feedback and multiple repeated readings. This research expanded on previous investigations by incorporating tutors; including high school students and a collaborative tutoring effort between home and school. By implementing and extending procedures from previous research-based methods, the researchers hypothesized that student reading fluency would increase, manifested through improvements in words correctly read per minute and high frequency word abilities.
Two second grade students from a K-12 Colorado charter school participated in this research. Though they demonstrated basic decoding and phonemic abilities each was referred to the reading research because they didn’t respond to initial interventions in their classroom. Two high school students, as well as one of each of the student’s parents, were trained to administer the treatment at home. The research occurred 6 times per week over a 10-week period.

The first portion of the intervention occurred with the high school tutor, beginning with the tutor modeling fluent reading of an appropriately leveled reading passage, followed by the student repeating the same passage. After reading the passage, the tutor provided corrective feedback on miscues, and if more than 10 words were missed, a more appropriate text was selected. The process was repeated again, this time followed by comprehension questions. The tutor then sent the book and worksheet home with the student for further practice with the home tutor, a parent.

Both students made significant increases in words read correctly per minute, as well as a one-grade improvement in oral reading accuracy and comprehension. These results validate earlier research regarding the efficacy of repeated readings. Additionally, this study proposes the possibility that tutor-based interventions can provide effective assistance in increasing a student’s reading fluency.

Additional extensions to the standard repeated reading technique has included implementing pre-recorded texts. Swain, Leader-Janssen, and Conley (2013) conducted a case study to examine the effectiveness of three fluency interventions including repeated reading, an audio listening passage preview, and a teacher modeled listening passage preview. The study focused on increasing the fluency skills of a struggling fifth grade student. The researchers
implemented all three types of fluency interventions during each session to determine their impact.

The case study subject was a fifth-grade boy from a mid-western city who did not qualify for special education services. He was enrolled in a university program targeting students with learning needs, which offered 60-minute tutoring sessions. While 15 minutes of each hour involved homework assistance, the fluency intervention occurred for nine sessions, each 45 minutes long, over a 7-week period.

Researchers used curriculum-based measurement to determine the results of each intervention. Repeated reading consisted of moderate length passages (~400 words) that are read, reread, and scored for accuracy measured by miscues. During audio listening passage previews, the student listened to two audio recordings of a reading passage as read by a computer, followed by a reading of the passage which the student is scored on words read per minute. Finally, the teacher modeled listening passage involved the instructor reading a passage as the student read along, followed by scoring of the student’s reading of the passage.

Results from the assessments indicate that the student’s fluency skills improved through all three intervention measures. This improvement was manifested through improvements in words correctly read per minute, which the student completed at two to three times the expected growth rate. Though his audio listening scores dropped from the post-test, a 5-month follow-up assessment indicated that each intervention method produced performance above the expected result. Although the student made growth during the intervention in all three measures, when the intervention was discontinued, the student did not continue to make growth.

The techniques used to foster reading fluency in this case study relates significantly to my research. Repeated readings and teacher-modeled previews have been found to increase the
fluency of a student as measured by words correctly read per minute. By providing a student immediate guidance on a reading passage a teacher models appropriate fluency and demonstrates accuracy.

Interested in the role vocabulary played in repeated reading performance, Hawkins, Hale, Sheeley, and Ling (2011) compared the effects of two intervention conditions on the reading fluency, comprehension, and comprehension rate of six high-school students reading below grade level. The study evaluated the effects of repeated readings of longer passages with an error correction intervention. Additionally, the study examined the effects of adding vocabulary- previewing activities to repeated reading procedures to investigate the effects on comprehension. It was hypothesized that both interventions would have positive effects on reading performance, with the vocabulary previewing intervention leading to the highest performance levels.

Participants included six students enrolled in an urban high school in the mid-western United States. The school served 976 students in Grades 9 – 12 with 43.10% of the student population qualifying for free or reduced lunch. Approximately 72% of the student population was Black, 24% White, 3% multiracial, and 1% Hispanic. Study participants were enrolled in Grades 10 and 11 but were reading between the fourth- and eighth-grade levels. Of the six study participants, three were Black, two were White, and one was American Indian. All participants received special education services, each qualifying under the Specific Learning Disability category.

Each student participated in each of the three conditions, randomly assigned to the order in which these were conducted. The three conditions include Repeated Reading (RR), Repeated Reading with Vocabulary Previewing (RR + VP), and control. In the RR condition, experimenters provide corrective feedback on word errors after the first reading of the passage
and review the words with the participant, before finally rereading the passage and answering comprehension questions. The RR + VP condition begins with a vocabulary preview in which participants read each word aloud and provide the correct definition, before following the same procedure in the RR condition. Sessions were conducted in a quiet classroom in the school during each student’s study hall time. Sessions were held 3 – 5 days a week and lasted between 10 and 20 minutes.

Both interventions had positive effects on reading performance as compared to the control condition. Results indicated that the RR + VP condition led to the greatest improvements in reading fluency and comprehension levels for all participants. For five participants, reading comprehension rate was greatest under the RR + VP condition. The interventions had positive effects on student performance both during the intervention sessions and over time, suggesting that these interventions may be an effective instructional technique for students with significant learning needs.

This study relates to my research in the techniques it used to foster reading fluency. Error correction is a critical element in developing this skill. This research implemented error correction through immediate feedback on a reading passage by reviewing and repeating unknown words taken directly and immediately from a text. Additionally, previewing texts through vocabulary interventions will also increase reading fluency and comprehension.

Synthesizing the findings of these articles, interventions focused on increasing reading fluency through repeated readings must involve elements of corrective feedback, multiple opportunities to interact with a text, adult administration. Additionally, vocabulary previews, structured home tutoring, audio listening passages, and interactions with texts of increasing text difficulty can supplement repeated reading procedures. Using the method of repeated reading is
an appropriate fluency intervention for Zarina, and the procedures listed in the research of section 3 will inform the method for my research. To mediate the gains I expect Zarina to acquire through my repeated reading intervention, I will utilize a relevancy intervention to foster student interest and performance.

**Section 4 - Reading Relevancy Interventions**

In the National Reading Panel’s report on research-based components of reading instruction they noted the omission of research regarding the “motivational factors in learning to read”, speculating that motivation influences reading performance and interest (2000, p. 2-97). Recent psychological research has investigated the impact of interest in academic performance. It is theorized that when a student has an interest or can find value in educational content their achievement in future activities increases. Identifying interventions that promote interest and motivation in students has been a common challenge for both educators and psychologists, but recent research has gained traction. Though few investigations have been conducted using reading as it’s focus, recent research has indicated that fostering motivation can influence and directly impact academic performance on ensuing activities. When students consider an academic text to be relevant or interesting, this consequently influences increased performance in future assessments or activities.

While little research has examined the influence of motivation on reading performance, psychological research has been investigating the impact of interest and motivation for some time. Consolidating decades of interest research, Hidi and Renninger (2006) proposed a *Four Phase Model of Interest Development* to explain the evolution of interest. They proposed that one’s interest gains depth as it progresses from “triggered situational interest, maintained
situational interest, emerging (less-developed) individual interest, and well-developed individual interest” (Hidi & Renninger, 2006, p. 114).

Triggered situational interest is promoted by a change in emotional or cognitive processing in response to environmental stimuli. Through different types of phenomena, this interest is then cultivated to a sustained, focused attention that persists over a period of time, which their model defines as maintained situational interest. As one engages with this interest over a longer period of time, they might be considered emerging individual interest which is characterized by stored knowledge and value, increased curiosity, and self-driven investigations. Finally, one might develop a well-developed individual interest, which builds off an emerging interest by individuals deepening their commitment to long-term endeavors pertaining to this interest.

Facilitating triggered situational interest is a critical hurdle for educators to promote student learning. Applying this model to the classroom, Hidi and Renninger offer several suggestions for educators to foster interest. These include interventions that might require lesson planning (“select or create resources that promote problem solving and strategy generation”), instructional time commitments (“provide opportunities for students to ask curiosity questions”), or unprepared encouragement (“providing support so that students can experience a triggered situational interest”) (Hidi & Renninger, 2006, p. 115).

To investigate this model in a middle school setting, Paige (2011) analyzed the relationship between extrinsic motivation and its effects on oral reading proficiency, comprehension, and academic achievement. Aligning with Hidi and Renninger’s four phase model, the following hypotheses were proposed in this research: a) that extrinsic motivation is positively related to oral reading proficiency, b) oral reading proficiency is positively correlated
with reading comprehension, and c) reading comprehension is positively correlated with academic performance. The relationships between these constructs are therefore bidirectional, affecting one another and being affected by each.

Participants in the study were 112 sixth grade and 115 seventh grade students, recruited from a school with a population approximately 91% African-American, 5% Hispanic, 2% Asian, and 2% Caucasian. Further demographic information detailed that 41% of students at the school were eligible to receive free or reduced lunch. Students were recruited through parent permission slips sent out to the entirety of sixth and seventh grade students.

Students were given a battery of assessments to quantify their reading motivations, oral reading proficiency, reading comprehension abilities, and overall academic achievement. No experimental group was used in this investigation.

Paige found that there is a significant, medium sized relationship between extrinsic motivation for reading and oral reading proficiency. Confirming hypothesized results, Paige found a significant large relationship between oral reading proficiency, comprehension, and academic achievement. This result indicates that if a student is operating under some type of extrinsic motivation (such as a teacher’s ability to foster interest, or social facilitation by a classmate), they are likely to give increased effort resulting in improvements in performance. Additional studies have used experimental methods in which this extrinsic motivation might be cultivated.

Two studies performed by Hulleman, Godes, Hendricks, and Harackiewicz (2010, p. 4) investigated the influence of utility value on performance and interest. Utility value is defined as “perceiving a topic to be useful and relevant for other activities or life goals.” The first study was a controlled randomized experiment, while the second used a similar procedure in a college
classroom. In each, students were asked to explain how they content they were learning, math and psychology respectively, was relevant in their lives. The researchers hypothesized that students given the utility value condition would have increased interest during testing, sustained interest over time, and increased academic performance.

Participants in the laboratory portion of the study included 107 students in a psychology class from a mid-western university, categorized as 92% Caucasian, 4% Hispanic, 3% Asian, and 1% African American. These students completed an individual experimental session solving 2x2 multiplication problems. Participants in the college classroom portion of the study were 318 introductory psychology students, each of which received extra credit for completing three surveys during class time.

The procedure of the two studies followed a similar structure: presenting a piece of content, practicing/reviewing the content, writing a 1-3 paragraph control/experimental group essay, and finally being assessed on the content. Study 1 involved a 2x2 multiplication technique, which students practiced for 3 minutes before predicting their performance expectations applying the technique. Next participants completed the essay, which involved either describing how the technique relates to their life (experimental) or writing about nearby magazine covers. This procedure ends with a 2x2 multiplication assessment. Study 2 involved participants predicting their performance in a psychology course at the beginning of the semester. The conditions are then differentiated by essay condition: students in the relevance condition wrote essays to a significant person in their life relating the content presented in the introductory psychology course to their lives (experimental), while the control group related course content to a PsychINFO article.
Both studies indicated that students who wrote essays relating the content to their lives (the multiplication technique or psychology course material) increased their perception of its value. This increased value of the content predicted increases in both interest and performance on future activities. This was manifested through increased task interest in study 1, and increased interest and performance in study 2, which applied the first study in a classroom environment. These results were most notable for students with low success expectancies; individuals who predicted poor performance benefited the most after considering the relevance of the content in their lives.

This research has significant implications for students qualifying for special education services. Students with disabilities are more likely to perceive themselves negatively and to predict diminished academic performance. By instituting a motivational technique such as a utility value intervention described in this study, students develop an increased interest in classroom content, and the performance of these students’ increases.

Research by Hulleman and Harackiewicz (2009) extended this research by applying it in a high school classroom, examining a motivational intervention designed to increase student perceptions of the usefulness and relevance of STEM courses. Similar to the research by Hulleman, Godes, Hendricks, and Harackiewicz (2010), this motivational intervention involved fostering utility value through writing essays relating course content to one’s life. Specifically, the researchers predicted that this motivational intervention will be associated with increased performance, interest in science classes, and likelihood to explore science-related career plans.

Participants included 282 high school students from 21 science classrooms taught by eight teachers across three different high schools in a small mid-western city. No further demographic information was provided.
Effect of a Repeated Reading and Utility Value Intervention

Every three or four weeks students were randomly assigned to write either a) an essay about the usefulness of course material in their lives (experimental condition) or b) a summary of the material they were studying. Success expectancies were measured for each student at the beginning of the semester, perceptions of utility value were assessed at mid-semester, and course grades, interest in science, and future science plans were measured at the end of the semester. The essays were then scored to determine the extent to which they could relate their information to their lives.

The essay ratings indicated that students in the relevance conditions made more connections of science materials to their life than those in the control condition. The results demonstrate that a relevance intervention increased perceptions of utility value, particularly for students with low success expectancies. Students with high expectations for success didn’t display differences between experimental conditions, but since their motivation was already high, they weren’t the focus of the intervention. Students who perceived more utility value in their science courses performed better, were more interested in the course material, and reported that they were more likely to enroll in future science courses and pursue science related careers than students who perceived less utility value in their science courses.

Though the focus of my research doesn’t relate to increasing interest and academic success in STEM courses, the ability to motivate an individual with low expectations for academic success is paramount. Providing literary materials that my research subject can relate to her life might increase her overall achievement and interest in various topics. These constructs can be measured through increases in high frequency word abilities and a pre-test/post-test survey relating to utility value.

Conclusion
The National Reading Panel (2000) lists reading fluency as an essential component of young readers, and by considering the procedures in this synthesis of scholarly research, I’m confident my research is designed to might an impact on Zarina’s reading fluency. Studies have shown students improve their reading fluency when provided corrective feedback on repeated reading activities with adult administration. Additionally, considering how the content is relevant in one’s life, interests, or future careers might facilitate further reading growth. With the integration of a reading relevancy technique to a repeated reading intervention, research supports my expectation that improvements in overall reading fluency should occur.
CHAPTER THREE: PROCEDURE

Introduction

The purpose of this case study was to determine the effect that repeated readings, corrective feedback, and reading relevancy has on the fluency abilities of an 8th grade student with a learning disability. Chapter 3 details the description of the student’s background, present level of performance in literacy, and other factors relating to academic performance. Next, the intervention methods are described, including the procedures, timeline, activities, and materials used. Finally, the assessments utilized in data collection are reviewed.

Description of the Student

The student will be known as “Zarina” for the duration of this study to maintain privacy and confidentiality. Zarina is an 8th grade student diagnosed with a specific learning disability. At the time of study, her chronological age was 13 years and 10 months. Zarina attends an urban, public school in the mid-western United States. The school served 276 students at the time of the intervention. Demographically, 87.3% of the students are African-American, 6.5% are Caucasian, 4.3% of the students are Hispanic, 1.4% are two or more ethnicities, and 0.4% are Asian. The percent of students listed with disabilities is 10.9%, and 76.8% of students are economically disadvantaged (Wisconsin Department of Public Instruction, 2013).

Information processing struggles lie in her fluency and text comprehension. Behavioral challenges documented in her IEP may be exacerbated by academic struggles, low interest, and/or limited motivation. She requires accommodations to access the general education reading curriculum, meriting inclusion in this intervention. Therefore, in an attempt to increase Zarina’s reading deficiencies, instructional methods should be focused on targeting skills as they relate to overall fluency.
**Intervention Procedure**

To meet the needs of Zarina, a reading intervention plan was designed to address her need to increase his reading fluency. The intervention was implemented as part of the student’s summer academy through 60 minute individualized literacy tutoring sessions. Zarina participated in ten sessions over the course of 3 weeks, seven of which contained reading intervention lessons. The first, second, and last sessions were used to administer a standardized reading assessment and a reading motivation survey.

The first two days of the intervention consisted of two performance inventories. First, the student was given the Qualitative Reading Inventory-5, (QRI-5; Leslie & Caldwell, 2011) a norm-referenced reading measure designed to determine the student’s word identification, fluency, and reading comprehension abilities as measured through grade-specific high frequency word lists and inferential and explicit questions from a reading passage. The QRI-5 will be described in greater detail in the following section, data collection methods. After determining the student’s reading abilities using the QRI-5, the student completed the Adolescent Motivation to Read Profile reading survey (Pitcher et al., 2007), where she answered twenty questions related to his feelings about reading (see Appendix A).

The reading intervention began on Day 3 and contained of three components: a text relevance pre-test, interaction with the text, and a text relevance post-test. The student first considers the title and text elements to determine how it might relate to the student’s daily life, dreams, aspirations, and future careers, through an open response question and four likert scale multiple choice questions. Next, the student and teacher interacted with the text through a teacher read-aloud, student read-aloud followed by teacher feedback, and finishing with repetition of sentences correcting errors made during student oration of the passage. Finally, the student
completed a text relevance post-test through two open response questions and the same four likert scale multiple choice questions. Based on a list of 16 Fountos-Pinnell leveled texts (Pinnell & Fountas, 2007), the student selected 7 texts to read over the course of the reading intervention sessions.

A. Text Relevancy Pre-Test

Prior to reading the text the student looks at the title and cover to complete an open response question, “Based on the title and cover, how might this text be relevant in your life?” Additionally, the student rated their interest in the story, from 1 being “not applicable at all”, to 5 being “very applicable” in how it relates to their daily life, interests, aspirations, and careers (see Appendix B). The student was given five minutes to complete the activity before interacting with the text.

B. Interaction with the Text

Beginning with a vocabulary introduction, the instructor reads each term and definition aloud from the glossary, and the student repeats each term. The instructor then reads aloud a section of the text, usually around 4-5 pages or 500 words. Following the instructor’s read-aloud, the student repeats the same section as the instructor follows along noting errors on a separate version of the text. Once the designated section is completed, the instructor provides corrective feedback regarding the textual errors, followed by the student repeating the word correctly and rereading the sentence in which the word is embedded. This feedback method is repeated until each error is corrected. The process was continued until the text was finished.

C. Text Relevancy Post-Test

Following interaction with the text the student completed two open response questions: “In what ways is the information in this text important to your daily life?” and “How does the
text relate to your interests, dreams, or future careers?” Replicating the text relevancy pre-test, the student rated their interest in the story, from 1 being “not applicable at all”, to 5 being “very applicable” in how it relates to their daily life, interests, aspirations, and careers (See Appendix C). The student was given five minutes to complete the activity.

**Data Collection**

To quantify reading comprehension, the student was administered a pretest and posttest from the Qualitative Reading Inventory-5 (QRI-5; Leslie & Caldwell, 2011). The QRI-5 starts with a word identification activity to gain an appropriate estimation of the student’s reading level by reading from a series of grade level specific word lists. Upon determination of the approximate reading level, several questions are utilized to establish the student’s prior knowledge on the reading topic. After ensuring appropriate background knowledge, the student’s oral reading is recorded and timed, while the proctor notes miscues in reading. After tabulating the total number of miscues, as well as the number of “meaning changing miscues” (Leslie & Caldwell, 2011, p. 65), the reading abilities of the student will correspond to either the independent, instructional, or frustration level.

Without looking back at the text, the student continues the assessment by retelling events in the story, which can be explicitly drawn or created using inference from the story. These events are recorded, and the proctor asks the student eight reading comprehension questions. The total number of questions answered correctly is calculated without look backs, and after the student is offered an opportunity to re-examine the text, is scored following the look-back. Based on the answers, the reading is determined to be at the student’s independent, instructional, or frustration level. If the selection was at the student’s independent or instructional level, the proctor must take a reading that is a level above the current selection and repeat the process until
a frustration level is reached. The student was given the QRI-5 post-test on Day 10 of the intervention.

Student motivation to read was measured through the multiple choice portion of the Adolescent Motivation to Read Profile reading survey first created by Gambrell, Palmer, Codling, and Mazzoni (1996), but adapted by Pitcher et al. (2007). The survey consists of twenty four-point scale questions assessing self-concept as a reader (10 items) and value of reading (10 items). The student was given the survey on Day 2 of the intervention and on the last day of the intervention (Day 10).

**Conclusion**

Chapter 3 provided an overview of the procedure and data collection processes of the reading intervention that allows other researchers to critique, replicate, and adapt my methodology. Chapter 4 will delve into the results affiliated with the method dictated in this chapter.
CHAPTER FOUR: RESULTS

Pre-Intervention Results of the QRI-5

Word Lists

To determine the reading abilities of Zarina, the QRI-5 was used on Day 1 of the literacy tutoring sessions (data shown in Table 4.1). On the Third Grade word list, Zarina automatically identified 17 words, with self-corrections on the words “crowded” (crowed), “interested” (a long pause), and “entrance” (stunted entr-) to identify all 20 words. On the Fourth Grade word list, she automatically identified 14 words, with self-corrections on the words “crops” (cops), “settlers” (settles), “guarded” (graded), and “memorize” (memor-is), and could not identify “precious” (per-see-us) or “invented” (invaded). Allowing self-corrections, she functioned at an independent level in both the Third and Fourth Grade word lists.

On the Fifth Grade word list, she automatically identified 15 words, with self-corrections on the word “registration” (reg-u-station), and could not identify “biography” (biograph), “tales” (towels), “poison” (poi-sun), or “pioneers” (point-ers). With or without self-corrections, she functioned at an instructional level in the Fifth Grade word list. Finally, for the Sixth Grade word list, she automatically identified 7 words, in addition to a self-correction of the word “possessions” (possession). She was not able to identify the other 12 words, to function at the frustration level.

Table 4.1: Results of QRI-5 Word Lists:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Total Correct Automatic (out of 20)</th>
<th>Percent Total Correct Automatic</th>
<th>Total Correct Identified (out of 20)</th>
<th>Percent Total Correct</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third</td>
<td>17</td>
<td>85%</td>
<td>20</td>
<td>100%</td>
<td>Independent</td>
</tr>
<tr>
<td>Fourth</td>
<td>14</td>
<td>70%</td>
<td>18</td>
<td>90%</td>
<td>Independent</td>
</tr>
<tr>
<td>Fifth</td>
<td>15</td>
<td>75%</td>
<td>16</td>
<td>80%</td>
<td>Instructional</td>
</tr>
<tr>
<td>Sixth</td>
<td>7</td>
<td>35%</td>
<td>8</td>
<td>40%</td>
<td>Frustration</td>
</tr>
</tbody>
</table>
Reading Passages

Following administration of the word list portion of the QRI-5, Zarina was estimated to perform at a fifth grade instructional level (data shown in Table 4.2). To facilitate performance on the reading passages, Zarina first read a passage from the Fourth Grade level. Zarina read the story “The Busy Beaver”. Based on four pre-reading concept questions, Zarina earned 7 out of 12 points (58.3%), demonstrating that she was relatively unfamiliar with the concepts of the text. Performance on the text was defined by committing 11 total miscues and 4 meaning-change miscues, resulting in an instructional accuracy and independent acceptability. She completed the text reading 73.9 words per minute (WPM), including 71.1 correct words per minute (CWPM). She recalled 8 of the 49 ideas (16.3%), and correctly answered 7 of 8 comprehension questions without look-backs, resulting in an instructional level. After look-backs, she determined the correct answer to the implicit question she missed, to perform at the independent level.

Next, Zarina read a passage from the Fifth Grade level, “The Octopus”. Based on four pre-reading concept questions, Zarina earned 5 out of 12 points (41.7%), demonstrating that she was unfamiliar with the concepts of the text. Performance on the text was defined by committing 19 total miscues and 3 meaning-change miscues, resulting in an instructional accuracy and independent acceptability. She completed the text reading 67.7 words per minute (WPM), including 62.7 correct words per minute (CWPM). She recalled 17 of the 54 ideas (31.5%), and correctly answered 7 of 8 comprehension questions with and without look-backs, missing an implicit question, resulting in an instructional level.

The final text, “The Lifeline of the Nile”, was a passage from the Sixth Grade level. Based on four pre-reading concept questions, Zarina earned 4 out of 12 points (33.3%), demonstrating that she was unfamiliar with the concepts of the text, including terms such as
“thrives”, “fertile land”, and “harvest”. Performance on the text was defined by committing 32 total miscues and 15 meaning-change miscues, resulting in a frustration level of accuracy and instructional acceptability. She completed the text reading 50.7 words per minute (WPM), including 45.2 correct words per minute (CWPM). She recalled 14 of the 56 ideas (25.0%), and correctly answered 3 comprehension questions without look-backs (1 explicit and 2 implicit) and 7 questions with look-backs (4 explicit and 3 implicit) resulting in a frustration and instructional level respectively.

<table>
<thead>
<tr>
<th>QRI Measure</th>
<th>Level Four - &quot;The Busy Beaver&quot;</th>
<th>Level Five - &quot;The Octopus&quot;</th>
<th>Level Six - &quot;The Lifeline of the Nile&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction Task</td>
<td>7/12 (58.3%)</td>
<td>5/12 (41.7%)</td>
<td>4/12 (33.3%)</td>
</tr>
<tr>
<td>Total Miscues/Meaning Change Miscues</td>
<td>11 (instructional) and 4 (independent)</td>
<td>19 (instructional) and 3 (independent)</td>
<td>32 (frustration) and 15 (instructional)</td>
</tr>
<tr>
<td>Reading Rate (WPM/CWPM)</td>
<td>73.9/71.1</td>
<td>67.7/62.7</td>
<td>50.7/45.2</td>
</tr>
<tr>
<td>Retelling</td>
<td>8/49 (16.3%)</td>
<td>17/54 (31.5%)</td>
<td>14/56 (25.0%)</td>
</tr>
<tr>
<td>Comprehension - Explicit</td>
<td>Without Look-Backs: 4/4 (100%)</td>
<td>Without Look-Backs: 4/4 (100%)</td>
<td>Without Look-Backs: 1/4 (25%)</td>
</tr>
<tr>
<td>Comprehension - Implicit</td>
<td>3/4 (75%)</td>
<td>3/4 (75%)</td>
<td>3/4 (75%)</td>
</tr>
<tr>
<td>Comprehension - Overall</td>
<td>7/8 (87.5%) Instructional</td>
<td>8/8 (87.5%) Independent</td>
<td>7/8 (87.5%) Instructional</td>
</tr>
<tr>
<td>Pre-intervention Results of the Adolescent Motivation to Read Profile</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To evaluate the self-concept and value Zarina attributes to reading, the Adolescent Motivation to Read Profile was given on Day 2 of the literacy tutoring sessions (data shown in Table 4.8). Overall, she received a raw score of 57 out of 80 (71.25%), or an average value of
2.85 out of 4. Of the twenty questions in the profile, ten are dedicated to both self-concept and value, interchanging every question. With the maximum raw score value of 40, the raw scores of self concept and value were 28 and 29 respectively (70% and 72.5%).

**Summary of Pre-intervention Results**

After administration of the QRI-5 it was determined that Zarina performs at the mid-5th grade level in reading. This is supported by an instructional level of performance on the 5th grade word lists and an independent accuracy level, and instructional comprehension, at the 5th grade text “The Octopus”. In addition to the estimation of the mid-5th grade reading level, the reading profile provides the baseline of the value and self-concept she attributes to reading, 72.5% and 70.0% respectively.

**Post-intervention Results of the QRI-5**

*Word Lists*

To evaluate the effect of the reading intervention, the QRI-5 was used on Day 10 of the literacy tutoring sessions (data shown in Table 4.3). On the Third Grade word list, Zarina automatically identified 19 words, only mistaking “electric” for electronic. On the Fourth Grade word list, she automatically identified 16 words, with self-corrections on the words “favorite” (too long a pause), “settlers” (shelter), and “memorize” (memors), and could not identify “illustrated” (illustration) or “invented” (invited). Allowing self-corrections, she functioned at an independent level in both the Third and Fourth Grade word lists.

On the Fifth Grade word list, she automatically identified 13 words, with self-corrections on the words “obstacles” (ob-scales) and “pouch” (poach), and could not identify “biography” (biograph), “tales” (towels), “poison” (poisonous), “arrested” (arrest), or “pioneers” (point-ers). With self-corrections Zarina functioned at an instructional level in the Fifth Grade word list.
Finally, for the Sixth Grade word list, she automatically identified 10 words, in addition to self corrections of the words “memories” (mem-or), “emerge” (image), and “courageous” (cour-a- jus). She was not able to identify the other 7 words, to function at the frustration level.

Table 4.3: Results of QRI-5 Word Lists - PostTest:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Total Correct Automatic (out of 20)</th>
<th>Percent Total Correct Automatic</th>
<th>Total Correct Identified (out of 20)</th>
<th>Percent Total Correct</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third</td>
<td>19</td>
<td>95%</td>
<td>19</td>
<td>95%</td>
<td>Independent</td>
</tr>
<tr>
<td>Fourth</td>
<td>15</td>
<td>75%</td>
<td>18</td>
<td>90%</td>
<td>Independent</td>
</tr>
<tr>
<td>Fifth</td>
<td>13</td>
<td>65%</td>
<td>15</td>
<td>75%</td>
<td>Instructional</td>
</tr>
<tr>
<td>Sixth</td>
<td>10</td>
<td>50%</td>
<td>13</td>
<td>65%</td>
<td>Frustration</td>
</tr>
</tbody>
</table>

Reading Passages

For comparison purposes, two of the texts administered in the pretest were utilized in the posttest of QRI-5 (data shown in Table 4.5). Since she completed the fifth grade text at an instructional level during the pretest, the first text carried out was “The Octopus”. Based on four pre-reading concept questions, Zarina earned 7 out of 12 points (58.3%), demonstrating that she was relatively unfamiliar with the concepts of the text. Performance on the text was defined by committing 20 total miscues and 1 meaning-change miscue, resulting in an instructional accuracy and independent acceptability. She completed the text reading 68.3 words per minute (WPM), including 63.0 correct words per minute (CWPM). She recalled 16 of the 54 ideas (29.6%), and correctly answered all 8 comprehension questions without look-backs, achieving an independent level.

The next text, “The Lifeline of the Nile”, was a passage from the Sixth Grade level. Based on four pre-reading concept questions, Zarina earned 1 out of 12 points (8.3%), demonstrating that she was unfamiliar with the concepts of the text. Performance on the text was defined by committing 26 total miscues and 13 meaning-change miscues, resulting in an
instructional level of performance on the text. She completed the text reading 59.8 words per minute (WPM), including 54.5 correct words per minute (CWPM). She recalled 7 of the 56 ideas (12.5%), and correctly answered 2 explicit and implicit comprehension questions without look-backs, and an additional explicit question with look-backs, resulting in a frustration level on both accords.

Table 4.5: Results of QRI-5 Reading Passages – PostTest:

<table>
<thead>
<tr>
<th>QRI Measure</th>
<th>Level Five - &quot;The Octopus&quot;</th>
<th>Level Six - &quot;The Lifeline of the Nile&quot;</th>
<th>Level Six - &quot;Abraham Lincoln&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction Task</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Miscues and Meaning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change Miscues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading Rate (WPM/CWPM)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retelling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehension - Explicit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehension - Implicit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehension - Overall</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The final text, “Abraham Lincoln”, was an additional passage from the Sixth Grade level. Based on four pre-reading concept questions, Zarina earned 4 out of 12 points (33.3%), demonstrating that she was unfamiliar with the concepts of the text. Performance on the text was defined by committing 22 total miscues and 10 meaning-change miscues, resulting in an instructional level of performance on the text. She completed the text reading 70.7 words per
Effect of a Repeated Reading and Utility Value Intervention

minute (WPM), including 66.3 correct words per minute (CWPM). She recalled 21 of the 47 ideas (44.7%), and correctly answered 4 explicit and 2 implicit comprehension questions without look-backs, and an additional explicit question with look-backs, resulting in an instructional level on both.

Post-intervention Results of the Adolescent Motivation to Read Profile

To evaluate the self-concept and value Zarina attributes to reading, the Adolescent Motivation to Read Profile was given on Day 10 of the literacy tutoring sessions (data shown in Table 4.8). Overall, she received a raw score of 59 out of 80 (73.75%), or an average value of 2.95 out of 4. Of the twenty questions in the profile, ten are dedicated to both self-concept and value, interchanging every question. With the maximum raw score value of 40, the raw scores of self concept and value were 28 and 31 respectively (70% and 77.5%).

Table 4.8: Results of Adolescent Motivation to Read Profile:

<table>
<thead>
<tr>
<th>Reading Interest Survey</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>57</td>
<td>59</td>
</tr>
<tr>
<td>Average Score</td>
<td>2.85</td>
<td>2.95</td>
</tr>
<tr>
<td>Self-Concept</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Value of Reading</td>
<td>29</td>
<td>31</td>
</tr>
<tr>
<td>Self Concept Average</td>
<td>70.0%</td>
<td>70.0%</td>
</tr>
<tr>
<td>Value Average</td>
<td>72.5%</td>
<td>77.5%</td>
</tr>
</tbody>
</table>

Summary of Post-intervention Results

After the post-test administration of the QRI-5 it was determined that Zarina performs at the late-5th grade level in reading. This is supported by an instructional level of performance on the 5th grade word lists and an independent accuracy level and comprehension, at the 5th grade text “The Octopus”. On the 6th grade texts “The Lifeline of the Nile” and “Abraham Lincoln” she read at an instructional accuracy level with mixed comprehension results, frustration and
The reading profile indicated that the value and self-concept Zarina attributes to reading is at the 77.5% and 70.0% level.

**Analysis of Data**

Changes from the pre-test to post-test reveals several indications of Zarina’s reading growth, especially when interacting with 6<sup>th</sup> grade level material. Performance on the word lists illustrated few differences in post-test scores between the 3<sup>rd</sup> through 5<sup>th</sup> grade level as displayed in Table 4.4. On the 6<sup>th</sup> grade word list improvements were most evident, where Zarina correctly identified 13 words compared to 8 on the pre-test.

Table 4.4: Comparing the Results of QRI-5 Word Lists:

<table>
<thead>
<tr>
<th>Grade</th>
<th>PreTest Total Correct Automatic (out of 20)</th>
<th>PostTest Total Correct Automatic (out of 20)</th>
<th>PreTest Total Correct Identified (out of 20)</th>
<th>PostTest Total Correct Identified (out of 20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third</td>
<td>17</td>
<td>19</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>Fourth</td>
<td>14</td>
<td>15</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Fifth</td>
<td>15</td>
<td>13</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Sixth</td>
<td>7</td>
<td>10</td>
<td>8</td>
<td>13</td>
</tr>
</tbody>
</table>

While comparisons of the 5<sup>th</sup> grade reading passage “The Octopus” indicated minimal change (Table 4.6) in reading miscues and reading rate, there are notable improvements in the performance of 6<sup>th</sup> grade texts. Two 6<sup>th</sup> grade texts were used for comparison purposes: one repeated from the pre-test (“The Lifeline of the Nile”) and the other a novel text (“Abraham Lincoln”).
Comparing performance on the repeated text “The Lifeline of the Nile” in Table 4.7 reveals performance increases in both accuracy (less miscues) and reading rate. These increases are even more pronounced when compared to the novel text “Abraham Lincoln”, where she completed the passage at a faster rate with less miscues.

The Adolescent Motivation to Read Profile also elicited interesting results from pre-test to post-test. There was no difference between the self-concept scores from pre-test to post-test, as shown in Table 4.8. This result was expected since the intervention design wasn’t directed towards this construct. The value Zarina attributes to reading increased 5% from 72.5 to 77.5, a small result but one worth noting. Since value has been shown to contribute to performance improvements (Hulleman and Harackiewicz, 2009), it can be surmised that this increase in reading value may have facilitated increased reading achievement.
Table 4.7: Results of QRI-5 Level Six Reading Passages:

<table>
<thead>
<tr>
<th>QRI Measure</th>
<th>PreTest Level Six - &quot;The Lifeline of the Nile&quot;</th>
<th>PostTest Level Six - &quot;The Lifeline of the Nile&quot;</th>
<th>PostTest Level Six - &quot;Abraham Lincoln&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction Task</td>
<td>PreTest</td>
<td>PostTest</td>
<td>PostTest</td>
</tr>
<tr>
<td></td>
<td>4/12 (33.3%)</td>
<td>4/12 (33.3%)</td>
<td>4/12 (33.3%)</td>
</tr>
<tr>
<td>Total Miscues and Meaning</td>
<td>32 (frustration) and 15 (instructional)</td>
<td>26 (instructional) and 13 (instructional)</td>
<td>22 (instructional) and 10 (instructional)</td>
</tr>
<tr>
<td>Change Miscues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading Rate (WPM/CWPM)</td>
<td>50.7/45.2</td>
<td>59.8/54.5</td>
<td>70.7/66.3</td>
</tr>
<tr>
<td>Retelling</td>
<td>14/56 (25.0%)</td>
<td>7/56 (12.5%)</td>
<td>21/47 (44.7%)</td>
</tr>
<tr>
<td>Comprehension - Explicit</td>
<td>Without Look-Backs</td>
<td>Without Look-Backs</td>
<td>Without Look-Backs</td>
</tr>
<tr>
<td></td>
<td>1/4 (25%)</td>
<td>4/4 (100%)</td>
<td>4/4 (100%)</td>
</tr>
<tr>
<td>Comprehension - Implicit</td>
<td>Without Look-Backs</td>
<td>Without Look-Backs</td>
<td>Without Look-Backs</td>
</tr>
<tr>
<td></td>
<td>2/4 (50%)</td>
<td>2/4 (50%)</td>
<td>2/4 (100%)</td>
</tr>
<tr>
<td>Comprehension - Overall</td>
<td>Without Look-Backs</td>
<td>Without Look-Backs</td>
<td>Without Look-Backs</td>
</tr>
<tr>
<td></td>
<td>3/8 (37.5%) Frustration</td>
<td>7/8 (87.5%) Instructional</td>
<td>3/8 (37.5%) Frustration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3/8 (37.5%) Frustration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7/8 (87.5%) Instructional</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7/8 (87.5%) Instructional</td>
</tr>
</tbody>
</table>

**Conclusion**

Differences in test scores provide support that Zarina gained reading improvements from the intervention. This research was designed to facilitate increases in reading fluency, as measured by rate and accuracy, through a repeated reading and reading relevancy technique. Increases in performance on 6th grade texts and reading passages illustrate this expected growth, while the reading relevancy technique resulted in increases in the value of reading. These improvements supply merit to the success of this intervention, facilitating increases in the reading fluency of Zarina.
CHAPTER FIVE: CONCLUSIONS

Introduction

The intervention implemented in this research centered on repeated reading and reading relevancy to improve the fluency of an 8th grade student attending the summer program of an urban, mid-western school. Chapter five will extend the results of this intervention by connecting them to the common core standards, dictating strengths and limitations, and providing recommendations for the student to continue to make improvements in reading abilities.

Connections to Existing Research

Existing research, as integrated by the National Reading Panel, has revealed that guided repeated oral reading is an effective intervention used to increase reading fluency. Additionally, interventions used to foster student motivation towards academic subjects have been shown to increase performance for students with low expectations for educational success.

As defined by her IEP information and initial performance in the QRI-5, Zarina entered this intervention at the 5th grade level of word identification and comprehension. Approaching 8th grade texts while performing at a 5th grade level might lead to low self concept to succeed academically. Accordingly, Anderman et al found (2001, p. 89) that “self-concept of ability was found to be related positively to gains in the valuing of both mathematics and reading”, underlying the belief that motivation influences academic performance. Zarina is of average overall intelligence but has notable reading challenges; this intervention was designed to target and improve her reading abilities through guided repeated readings and fostering a motivation towards reading texts.

Repeated Reading
Based on previous research, it was expected that interventions focused on repeated readings would improve Zarina’s fluency. Hawkins, Hale, Sheeley, and Ling (2011) showed that a reading intervention focused on repeated readings with error correction and a vocabulary preview led to the positive improvements in reading fluency and comprehension levels for all participants both during the intervention and over time. Additionally, a case study conducted by Swain, Leader-Janssen, and Conley (2013) found that repeated reading, audio listening passage preview, and a teacher modeled listening passage preview all contributed to increases in words correctly read per minute, a critical indicator of reading fluency. Accordingly, the results of the intervention support this research, manifested through performance increases in the QRI-5 word lists, decreases in miscues, and correct words per minute.

Reading Motivation

Applying an intervention in which Zarina considered the value of reading texts in her life was expected to contribute to increase her reading performance and motivation to read. Research by Hulleman and Harackiewicz (2009) demonstrated that a relevance intervention increased perceptions of utility value, particularly for students with low success expectancies, resulting in increased academic performance and interest in STEM courses. Students with a motivated interest in a topic are more likely to “pursue reading, make time to reading, and develop the reading habit”, which in turn makes them better readers (Gambrell, 2011, p. 5). This intervention fostered motivation tangentially, by framing the reading activities by bookending interactions with the text with a text relevancy assessment.

In the research by Hulleman and Harackiewicz (2009), students were assigned to write essays every 3-4 weeks about the usefulness of a science topic in their lives. They found this simple intervention “increased interest in STEM-related courses and careers” and subsequently
improved academic performance (Hulleman and Harackiewicz, 2009, p. 8). Adapting their methodology, Zarina rated and created written responses to how each day’s text applies to her life, aspirations, interests, and future careers. This intervention contributed to an increase in the value afforded to reading as assessed by the Adolescent Motivation to Read Profile. Considering results of previous research, it is speculated to have also mediated the increase in academic performance on the QRI-5 word lists and reading passages.

**Connections to Common Core Standards**

This research used interventions that connect to the Common Core Standards for eighth grade students (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2012). Although the intervention focused on improving reading fluency, and relates only peripherally to standards requiring expansion and comprehension of a text, several of the standards connect to this research. Most notably, one in which students “determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas” is inherent to relating a reading passage to one’s life (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2012, p. 1). Additionally, to make conjectures about how a text is relevant, one must provide an “analysis of what the text says explicitly as well as inferences drawn from the text” (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2012, p. 1). By completing the text relevancy activities Zarina was making inferences about how her life related to text, which involves analysis of explicit ideas in the text. The Common Core Standards are “designed to enable students to meet college and career readiness expectations no later than the end of high school”, and a significant strength of this intervention is how it might

**Strengths and Limitations of Study**

This research offers teachers an intervention to increase reading fluency for an individual student, the methodology of which contains certain strengths and limitations. Motivation is a critical component of the learning process, and a teacher’s ability to foster motivation in their students can be impactful in increasing achievement in their classroom, one that this research attempts to address. The intervention used in this research is a simple technique to foster motivation towards a subject. Since students drive this intervention, by considering ways in which a text relates to their lives, this technique affords both strengths and limitations.

A strength of this intervention is the degree to which it might be applied successfully in the classroom. Offering students an opportunity to consider how reading texts relate to their lives is a methodology that is easy to apply in lessons, and has been shown to impact student achievement in previous research across different curricula (Hulleman and Harackiewicz, 2009). A teacher might easily assign relevancy notebooks in which students write responses to how critical concepts relate to their daily lives or future careers. Additionally, the method with which instructors apply reading feedback can be applied in real time with minimal teacher preparation, which supports its application to individual tutoring opportunities.

Since students drive this intervention, another strength inherent in this research relates to its ability to increase motivation. Students are able to identify the texts that most interest them, increasing a student’s drive to read, which has been shown to help students develop their reading abilities (Gambrell, 2011). By encouraging students to consider how texts relate to their lives,
students impart their own interpretation of the texts and make their learning personally relevant. Student-driven interventions are beneficial, but also encounter certain limitations.

By fostering student independence in reading selection and interpretation, we release the guidance a teacher brings to the learning process. Across subjects, students may not always be able to relate concepts to their lives or interests, which negates the underlying principle of the motivation intervention. Additionally, the motivation intervention only mediates comprehension of a text; though it assists students in comprehending material, it isn’t a technique that directly provides students with guidance in understanding reading concepts.

The research methodology provides another concern: a case study is challenging to generalize to a classroom setting. Since the reading intervention requires feedback on fluency skills, which is addressed through repeating sentences with miscues, it would be challenging to apply outside of individual tutoring. Students would not be able to receive appropriate assistance to increase their reading abilities. Also, this methodology might only be provided to students who have mastered foundational reading skills. Students who struggle through developmental skills such as phonological awareness and decoding would be unlikely to benefit from a feedback method that targets reading fluency.

**Recommendations for the Student**

To continue to develop her reading skills there are several recommendations I would offer her and similar struggling adolescent readers. The first step is to assure automaticity of the most commonly encountered words, such as those prescribed in Sitton’s List of 1200 High Frequency Words (Davis, 2013). This will increase fluency and assist in comprehending material more effectively. Another approach involves the frequency with which Zarina reads level-appropriate material. As one reads more often, significant gains can be made in reading abilities.
Increases in the Adolescent Motivation to Read Survey is an encouraging sign that Zarina values reading and will interact with reading material independently on a more frequent basis.

While Zarina has shown improvements, until she reaches grade level teachers will need to continue to provide accommodations and modifications so that she can access all curricular materials. Based on my experience with Zarina, there are two suggestions I would make to her future instructors to develop her reading skills. First, she should be provided with frequent opportunities to receive feedback on her reading fluency. This can be done with individual attention from teachers or support staff, but might be more effective through paired reading when considered for a classroom setting. When grouped with another student she can gain practice interacting with reading materials and be given guidance on challenging material through peer assistance. Another suggestion for instructors is to offer Zarina an opportunity to consider a purpose for reading, which can be provided by the teacher or through student reflection. By fostering a motivation to read, as shown through this research and those done previously, one will persist and have greater academic outcomes.

**Conclusion**

An intervention focused on repeated readings and student motivation to read was designed to meet the literacy needs of an 8th grade student with a learning disability. Using repeated readings and a relevancy intervention, this student showed a small difference in reading fluency as assessed by the word lists and reading passages of the QRI-5. Of particular note are the increases seen in accuracy and correct words per minute, critical factors in determining reading fluency. Additionally, an Adolescent Motivation to Read Profile was given before and after the intervention, indicating a small increase attributed to the value of reading, which may have mediated the increase in reading performance. This research intervention focused on
increasing fluency by framing activities within the interests and motivations of the student, which produced a small but evident increase in reading performance.
Works Cited


### Adolescent Motivation to Read Profile

#### Figure 1

<table>
<thead>
<tr>
<th>Adolescent Motivation to Read Profile reading survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: __________________________ Date: ______________</td>
</tr>
</tbody>
</table>

**Sample 1:** I am in ____________.
- [ ] Sixth grade
- [ ] Seventh grade
- [ ] Eighth grade
- [ ] Ninth grade
- [ ] Tenth grade
- [ ] Eleventh grade
- [ ] Twelfth grade

**Sample 2:** I am a ____________.
- [ ] Female
- [ ] Male

**Sample 3:** My race/ethnicity is ____________.
- [ ] African-American
- [ ] Asian/Asian American
- [ ] Caucasian
- [ ] Hispanic
- [ ] Native American
- [ ] Multi-racial/Multi-ethnic
- [ ] Other: Please specify ____________

1. My friends think I am ____________.
   - [ ] a very good reader
   - [ ] a good reader
   - [ ] an OK reader
   - [ ] a poor reader

2. Reading a book is something I like to do.
   - [ ] Never
   - [ ] Not very often
   - [ ] Sometimes
   - [ ] Often

3. I read ____________.
   - [ ] not as well as my friends
   - [ ] about the same as my friends
   - [ ] a little better than my friends
   - [ ] a lot better than my friends

4. My best friends think reading is ____________.
   - [ ] really fun
   - [ ] fun
   - [ ] OK to do
   - [ ] no fun at all

5. When I come to a word I don’t know, I can ____________.
   - [ ] almost always figure it out
   - [ ] sometimes figure it out
   - [ ] almost never figure it out
   - [ ] never figure it out

6. I tell my friends about good books I read.
   - [ ] I never do this
   - [ ] I almost never do this
   - [ ] I do this once in a while
   - [ ] I do this a lot

7. When I am reading by myself, I understand ____________.
   - [ ] almost everything I read
   - [ ] some of what I read
   - [ ] almost none of what I read
   - [ ] none of what I read

8. People who read a lot are ____________.
   - [ ] very interesting
   - [ ] interesting
   - [ ] not very interesting
   - [ ] boring

9. I am ____________.
   - [ ] a poor reader
   - [ ] an OK reader
   - [ ] a good reader
   - [ ] a very good reader

(continued)
**Figure 1 (continued)**

*Adolescent Motivation to Read Profile reading survey*

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
</tr>
</thead>
</table>

**10.** I think libraries are
- [ ] a great place to spend time
- [ ] an interesting place to spend time
- [ ] an OK place to spend time
- [ ] a boring place to spend time

**11.** I worry about what other kids think about my reading
- [ ] every day
- [ ] almost every day
- [ ] once in a while
- [ ] never

**12.** Knowing how to read well is
- [ ] not very important
- [ ] sort of important
- [ ] important
- [ ] very important

**13.** When my teacher asks me a question about what I have read, I
- [ ] can never think of an answer
- [ ] have trouble thinking of an answer
- [ ] sometimes think of an answer
- [ ] always think of an answer

**14.** I think reading is
- [ ] a boring way to spend time
- [ ] an OK way to spend time
- [ ] an interesting way to spend time
- [ ] a great way to spend time

**15.** Reading is
- [ ] very easy for me
- [ ] kind of easy for me
- [ ] kind of hard for me
- [ ] very hard for me

**16.** As an adult, I will spend
- [ ] none of my time reading
- [ ] very little time reading
- [ ] some of my time reading
- [ ] a lot of my time reading

**17.** When I am in a group talking about what we are reading, I
- [ ] almost never talk about my ideas
- [ ] sometimes talk about my ideas
- [ ] almost always talk about my ideas
- [ ] always talk about my ideas

**18.** I would like for my teachers to read out loud in my classes
- [ ] every day
- [ ] almost every day
- [ ] once in a while
- [ ] never

**19.** When I read out loud I am
- [ ] poor reader
- [ ] OK reader
- [ ] good reader
- [ ] very good reader

**20.** When someone gives me a book for a present, I feel
- [ ] very happy
- [ ] sort of happy
- [ ] sort of unhappy
- [ ] unhappy

*Note: Adapted with permission from the Motivation to Read Profile (Gamstrell, Pullens, Godling, & Mazzoni, 1996)*
Appendix B

Text Relevancy Pre-test

Date: ________________ Title of Text: ____________________________________________

Based on the title and cover, how might this text be relevant in your life?

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

Rate your interest in this story (1 being not applicable at all, 5 being very applicable)
Circle the number that best applies:

Not applicable - - - - - - - - - - - - - - - - - Very applicable

How it relates to your daily life: 1 2 3 4 5

How it relates to your interests: 1 2 3 4 5

How it relates to your aspirations: 1 2 3 4 5

How it relates to future careers: 1 2 3 4 5
Appendix C

Text Relevancy Post-test

Date: ____________  Title of Text: ________________________________

In what ways is the information in this text important to your daily life?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

How does the text relate to your interests, dreams, or future careers?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Rate your interest in this story (1 being not applicable at all, 5 being very applicable)
Circle the number that best applies:

<table>
<thead>
<tr>
<th>Not applicable</th>
<th>Very applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

How it relates to your daily life: 1 2 3 4 5
How it relates to your interests: 1 2 3 4 5
How it relates to your aspirations: 1 2 3 4 5
How it relates to future careers: 1 2 3 4 5