Combining Student Choice of Reading Passage with a Repeated Reading Intervention to Increase Oral Reading Fluency

By

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Reading skills are critical to student success in school. Unfortunately, approximately 10 million children in the United States struggle with some aspect of reading during the first three years of school. Without appropriate and early intervention to address reading fluency, a gap in academic performance can develop between a struggling reader and most of his or her peers, and can follow this struggling reader through his or her academic career (Stanovich, 1986). Due to a paradigm shift taking place in the nation's education system, research investigating the effectiveness of various reading instruction techniques and interventions, including interventions targeting reading fluency, is important. One particular intervention that targets reading fluency and is extensively supported in the literature is repeated reading (Therrien, 2004).

Educators and educational textbooks suggest that providing students choices is an important part of the learning process. A large body of research also exists concerning the importance oral reading fluency. Although there is evidence of the importance of oral reading fluency in education, and an emphasis in education on allowing students to make choices in the learning process, there is a lack of research investigating the effect of

providing a choice of reading passages to readers when attempting to improve oral reading fluency. The purpose of the present study is to address the current gap in the literature and to identify if providing a choice of reading passage within an intervention increases oral reading fluency.

The current study involved providing students with a choice between two reading passages in combination with an evidence-based reading fluency intervention: repeated reading. Specifically, the study investigated whether the choice component would substantially improve reading fluency scores as compared to providing the evidence-based intervention without passage choice. Three participants were exposed alternating treatments of a repeated reading intervention and an opportunity to choose between two different passages before completing a repeated reading intervention. No significant differences in mean oral reading fluency scores were found between the two intervention conditions for each participant. However, moderate to significant gains from pre- to post-intervention were made among all participants. Results suggest that providing a choice of reading passage did not increase oral reading fluency scores among these particular students, but did provide evidence in support of the efficacy of the repeated reading intervention.

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TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

Introduction

Statement of the Problem

Reading skills are essential to student success in school. Particularly in the upper elementary grades, knowing how to read is important to learning common grade level objectives (Francis, Shaywitz, Stuebing, Shaywitz & Fletcher, 1996). Unfortunately, reading skills are unacceptably low in the United States (National Assessment of Educational Progress, 2005). According to the National Reading Panel report (2000), approximately 10 million children in the United States struggle with some aspect of reading during the first three years of school. A child's poor reading ability can lead to low academic motivation and poor academic self-efficacy. Without appropriate and early intervention to address reading difficulties, a gap in academic performance can develop between a struggling reader and most of his or her peers, and can follow this struggling reader through his academic career (Stanovich, 1986).

In an effort to address specific student needs such as reading performance, a paradigm shift is currently taking place in the nation's education system (Reschly, 2008). In addition to assessing student progress in meeting specific learning objectives, experts are pushing for increased accountability in education, especially in the provision of instruction and intervention. Specifically, increased accountability means providing evidence-based instruction and interventions targeting specific skill deficits. Evidence-based instruction and interventions are procedures that have been empirically supported through research (Reschly, 2008). Therefore, research investigating the effectiveness of various reading instruction techniques and interventions is critical to addressing the needs of struggling readers.

Oral reading fluency (i.e., reading with accuracy and speed) is one aspect of reading that appears to be important in the early elementary school setting. Oral reading fluency is

commonly measured in schools in order to gauge student progress and evaluate the effectiveness of reading instruction. Furthermore, a student's success and learning in the classroom largely depends on oral reading fluency, as it is a necessary component for proficient reading comprehension (National Reading Panel, 2000). A large body of research exists concerning the importance oral reading fluency. Reading fluency is a skill that requires several additional skills, including decoding (i.e., understanding letter sounds and how they are put together to make words) and word recognition (i.e., identifying high-frequency words), both of which are foundational reading skills. Reading fluency is also an indicator of speed and accuracy. Finally, reading fluency is strongly associated with reading comprehension (Fuchs, Fuchs, Hosp & Jenkins, 2001). For example, Fuchs et al. (2001) found oral reading fluency to be a strong predictor of performance on reading comprehension measures, with a correlation of .91.

Given the importance of reading fluency in the development of proficient readers, it would make sense that research focus on identifying effective interventions for dysfluent readers. Several researchers have suggested a repeated reading procedure to enhance reading fluency (e.g., Samuels, 1997; Therrien, 2004). Repeated reading involves reading the same text multiple times in order provide practice to a reader and help him or her improve reading speed and accuracy through subsequent reads (Samuels, 1997). While it has been implemented and evaluated in multiple variations, repeated reading typically incorporates both practice and feedback. An extensive body of research points to the effectiveness of the repeated reading procedure in increasing oral reading fluency (Dowhower, 1987; Herman, 1985; National Reading Panel, 2000; Rashotte &Torgesen, 1985; Rasinski, 1990; Samuels, 1997; Shapiro, 2011; Therrien, 2004).

Providing students choices in the learning process is another commonly supported practice in the field of education. Glasser's (1997) Choice Theory suggests that students need to learn in an environment where the student has more choice over learning activities. Moreover, students should perceive learning activities as useful. Educators and educational textbooks emphasize that providing students choices is an important part of the learning process (Alvermann, Phelps, & Ridgeway, 2007; McCombs, 1995). Previous research and other educational resources (e.g., textbooks) have suggested that choice influences the learning process in multiple ways. First, choice can impact learning by enhancing student motivation or interest (Alvermann et al., 2007). Second, choice can play a role in making learning meaningful for the student (Alexander, 2006; Glasser, 1997). Third, choice offers students a sense of control over their learning, which may impact academic performance (Weiner, 1986). Finally, students who are provided the opportunity to make decisions may also experience an increase in self-efficacy to complete a variety of academic tasks (McCombs, 1995).

Previous research has also explored variations of providing choices on different aspects of reading, from intervention delivery to students choosing how to be instructed in reading (Daly, Garbacz, Olson, Persampieri, & Ni, 2006; Flowerday, Schraw, & Stevens, 2004). Furthermore, researchers have examined how choice influences motivation, feelings of control over learning, and attitudes toward reading and academic tasks (Wigfield, Guthrie, Tonks, & Perencevich, 2004). However, the research is mixed regarding choice's influence on various aspects of reading. For example, Wise, Bolls, and Schaefer (2008) found that participants that were offered multiple options of reading content engaged in more intense cognitive processing and more accurately recognized the details of the stories that they read. However, when Flowerday, Schraw, and Stevens (2004) provided some participants a choice of content to complete reading

and writing assignments, the choice appeared to negatively affect quality of essay content written by the participants.

While many studies explore choice as it relates to reading instruction, motivation, and attitudes, fewer studies have explored allowing students to choose between various reading passages (Daly et al., 2006; Flowerday et al., 2004; Wigfield et al., 2004). Furthermore, providing choice as part of an intervention targeting oral reading fluency has yet to be explored. More specifically, research has not yet investigated providing students choice of reading passage within the context of a reading fluency intervention such as repeated reading.

Purpose of the Study and Research Questions

The purpose of the present study was to address the current gap in the literature by asking if adding student choice of reading passage to an already established oral reading fluency intervention (i.e., repeated reading) would have a positive impact on oral reading fluency. By providing students with a choice between two reading passages in combination with an evidence-based reading fluency intervention, the study's primary research question asked whether the choice component would have any differential effects on reading fluency when compared to providing the evidence-based intervention alone (i.e., without a choice).

CHAPTER II

Review of the Literature

Importance of Literacy in Student Learning and Achievement

According to the National Reading Panel (2000), more than 17.5% of students in the United States struggle with some aspect of reading during the first three years of school. This is equivalent to about 10 million children. About 75% of students identified in third grade as having reading difficulties are likely to have deficits in reading in ninth grade (Francis et al., 1996). Stanovich (1986) explained that student difficulties in reading often lead to many cognitive and emotional consequences (i.e., inability to read and understand vocabulary, frustration, low motivation) that, in turn, affect school performance and achievement. Unfortunately, reading achievement among students in the United States is disappointingly low (National Assessment of Educational Progress, 2005). According to the National Assessment of Educational Progress (NAEP), reading proficiency among fourth grade students is unacceptably low, with 36% not having achieved a basic level of proficiency in reading (Hosp & MacConnell, 2008; Reschly, 2008). This is consistent across ethnic groups but more pronounced among African American, Latino, and Native American populations (National Assessment of Educational Progress, 2005). Therefore, it is crucial for educators to focus on providing effective reading instruction and intervention to struggling readers.

In our education system, a student's chance of success is often influenced by instructional variables (e.g., opportunities to practice reading, exposure to print materials), individual differences (e.g., cognitive ability, personal interests), and motivation. Specific to reading, there are several skills that are known to predict future reading achievement. For example, phonological awareness (i.e., an understanding of phonemes or word parts in speech and an

ability to cognitively manipulate them) is strongly associated with the development of future reading skills (Stanovich, 1986). Furthermore, students who are equipped with the vocabulary knowledge and skills to be successful in reading are likely to take advantage of more opportunities to read, increase their vocabulary and comprehension skills, and therefore achieve higher on many academic tasks. As these students progress through their academic careers, strong readers will gain more academic knowledge than struggling readers. They will also be more likely to seek opportunities that are conducive to learning and reading, such as reading aloud in class or reading independently for enjoyment. On the other hand, below average readers who do not receive the extra support necessary to catch up might miss opportunities to build vocabulary and content knowledge, and continue to struggle in school (Stanovich, 1986). Unlike high-achieving readers, these students are not likely to seek out beneficial learning opportunities. For example, a struggling reader will be less likely to learn new vocabulary through exposure to print material. As a result, the gap between high achieving and struggling readers grows wider.

Previous research has supported this positive relationship between high achieving readers and greater academic achievement, and has pointed to the importance of fostering reading skills in early elementary grades. Dockrell, Lindsay, and Palikara (2011) examined the relationship between academic achievement and literacy among a sample of students with a specific language impairment. At age 14, the researchers found literacy (measured in the study by decoding and comprehension of text) to be a significant predictor of academic achievement at age 16, and reading skills were important for other skills such as spelling and writing. The impact that literacy can have on many aspects of academic success is tremendous. Dockrell et al. (2011) assert that addressing literacy issues, particularly at the secondary level, is crucial. A student's

ability to comprehend and learn from printed materials is essential to academic development and success (Stanovich, 1986).

In an effort to address specific student needs such as reading performance, a paradigm shift is currently occurring in the nation's education system (Reschly, 2008). When assessing student progress in meeting learning objectives, education systems, including special education, are transitioning from a refer-test-place model to an experimental model. That is, educational decisions are becoming increasingly based on data collected via scientific methods. With this paradigm shift, there is an increased expectation of accountability. For example, if a student is not making adequate progress in reading (e.g., a student's fluency is not meeting grade level standards and/or increasing at an expected rate), educators are expected to respond with evidence-based instruction and interventions targeting specific skill deficits identified through ongoing assessment. Evidence-based interventions and instruction are procedures that have been empirically supported by research (Reschly, 2008). Specific to reading, research investigating the effectiveness of reading interventions targeting reading fluency is critical in order to address reading difficulties.

Importance of Reading Fluency

Reading fluency, or reading speed, reading accuracy, and appropriate vocal expression (Shapiro, 2011), is often used to measure reading ability because of its strong indication of reading ability. Furthermore, reading fluency combines several reading skills. Reading fluency requires decoding (i.e., understanding letter sounds and how they are put together to make words) and word recognition (i.e., identifying high-frequency words), both of which are foundational reading skills. Reading fluency is also a measure of speed and accuracy. Students

who are able to read efficiently, with appropriate speed and accuracy, are often able to read a passage and remember what was read (Shapiro, 2011).

Not surprising, reading fluency is strongly associated with reading comprehension (Fuchs et al., 2001). The speed and accuracy at which a reader is able to decode and recognize words will strongly influence the reader's ability to comprehend the text. If reading a passage is both time and effort intensive, students will likely have difficulty remembering details of the text and making connections to prior knowledge, both of which are important for comprehension (National Reading Panel, 2000). Fuchs et al. (2001) found that oral reading fluency was a strong predictor of performance on standardized reading comprehension measures, with a correlation of .91. Oral reading fluency performance was found to be an even stronger predictor than other direct measures of comprehension, such as answering comprehension questions, completing cloze passages, and story recall (Fuchs et al., 2001). Since reading fluency is so closely tied to reading comprehension, students who are dysfluent readers will be dramatically affected in the learning process, as subsequent grade levels typically require greater amounts of reading to learn academic content (Dudley, 2005).

Repeated Reading Intervention

Given the importance of reading fluency, it is becoming increasingly imperative that dysfluent readers receive the appropriate support. Furthermore, students need to receive supports or interventions that have been shown to be effective at addressing this deficit. Therefore, it is important to implement evidence-based interventions targeting specific skill deficits to support struggling readers. Effective interventions that work to improve oral reading fluency typically contain aspects of practice and feedback. Shapiro (2011) recommends multiple opportunities to practice reading in order to increase oral reading fluency. Reading the same text multiple times

will provide practice to a reader and will help him or her improve reading speed and accuracy with subsequent reads (Samuels, 1979). Samuels (1997) compares practicing reading to practicing a sport or music. Frequent practice allows for a skill to become more automatic, which makes a task associated with the skill less effortful. When a task requires little effort, mastery is more likely to be achieved. Corrective feedback is also beneficial. Corrective feedback involves providing the correct word when the student hesitates for several seconds when reading, asks for the pronunciation, or mispronounces a word in the passage. Therrien's (2004) meta-analysis found corrective feedback to be advantageous, as participants who were provided corrective feedback made significant gains in oral reading fluency (effect size equaled 1.37). Corrective feedback was also found to facilitate word recognition and comprehension.

Repeated reading is a common intervention targeting oral reading fluency. Simply stated, repeated reading involves a student reading and re-reading a passage. It is often implemented to increase a student's oral reading fluency because of its ease of implementation and multiple opportunities for practice. Furthermore, repeated reading includes components of practice and feedback, both of which have been supported by previous research to be effective at increasing reading fluency. Repeated reading's effectiveness is widely supported in the literature. In his meta-analysis of repeated reading research, Therrien (2004) indicated that repeated reading interventions were found to be effective with both nondisabled student populations and students with disabilities. In addition, the intervention not only has been found to increase fluency and comprehension on the particular passage used during the intervention phase, but improvements in comprehension and reading fluency made as a result of the intervention transfer to other passages (Therrien, 2004). The National Reading Panel (2000) also conducted an analysis of an instructional method that is often used for improving reading fluency: guided repeated oral

reading. Guided repeated oral reading is similar to the repeated reading procedure, as it involves the student reading passages aloud while the teacher provides specific guidance and feedback. In a meta-analysis of sixteen studies, guided repeated oral reading was found to have a significant, positive impact on reading fluency, word recognition, and comprehension over a wide range of grade levels.

Further support for repeated reading as an intervention for reading fluency is found throughout the literature. For example, Herman (1985) implemented repeated reading procedures with eight secondary level students using methods from Samuels' (1979) original repeated reading procedure. Reading rate and scores on comprehension measures improved significantly over a three month period. Furthermore, the results appeared to generalize to other reading passages, as the same improvements in fluency and comprehension were reflected in novel reading materials. These results provide some evidence for the broad benefits the repeated reading procedure can have on a wide range of age groups and reading materials.

Previous research has also examined the effectiveness of multiple variations of the repeated reading intervention procedure. Dowhower (1987) investigated the effects of two variations of the repeated reading procedure on second grade students' reading fluency. Students were reading at a transitional stage, where decoding skills were generally average or better for their age, but reading rates were below average. Students were exposed to either a read-along condition (i.e., listening to passages on tape, reading simultaneously with a fluent reader, and then rehearsal) or an independent practice condition (i.e., rehearsing passages independently and receiving word identification help upon request). Results revealed that participants' reading comprehension, fluency, and accuracy improved, regardless of which repeated reading procedure they were exposed to. Furthermore, students began reading with more correct prosody, or

meaningful voice inflection, indicating potential for greater comprehension of the reading material. These findings suggest that the repeated reading procedure allows for some flexibility, provided that the essential element of rehearsal is included during implementation.

Another variation of repeated reading involves requiring the student to read a passage repeatedly until a specific performance criterion is met. Samuels (1979) used a procedure that involved the child reading a passage of approximately 50-200 words, and required subsequent repeated readings of the same passage until the a criterion level achievement of 85 words read per minute was reached. In addition, Therrien's (2004) meta-analysis found that repeated reading interventions that incorporated performance criteria reached a mean fluency effect size of 1.70. This large effect size provides evidence in support of the effectiveness of setting a performance criterion in conjunction with the repeated reading intervention.

In his work with a sample of third grade students, Rasinski (1990) discovered other variations of the repeated reading procedure to be effective in increasing reading speed. Rasinski (1990) compared a more standard repeated reading procedure to a variation of the repeated reading procedure that involved listening to a fluent reader read the passage. In the study, half of the participants were exposed to a "repeated listening condition" followed by a repeated reading condition, and the other half were exposed to these conditions in reverse order. Both conditions involved a pre-test phase, two practice sessions, and a post-test phase. Increases in reading speed and accuracy in word recognition were observed in both groups. No significant differences between the groups or interventions were detected, indicating that multiple variations of the repeated reading procedure have the potential to be effective.

Rashotte & Torgesen (1985) implemented variations of the repeated reading procedure with a sample of elementary students with learning disabilities. They investigated whether the

amount of overlapping words in a passage affects fluency and comprehension gains, and whether repeated reading is more effective than the absence of performing repeated readings of a passage. Their investigation revealed that the repeated reading intervention is more effective than non-repetitions of reading when the texts have a high degree of overlap of words. However, when there was little overlap between passages, the repeated reading procedure was not more effective at increasing comprehension and fluency scores in students with learning disabilities than simply not engaging in repeated readings. Speculations about individual differences to explain the results of this study were presented, and it is possible that the repeated reading procedure might be more effective and generalize to other texts more effectively for some individuals than others (Rashotte & Torgesen, 1985).

Among the research examining variations of the repeated reading procedure, a majority of studies have included corrective feedback in the procedure. On the other hand, all have included practice through repetition, with the goal of increasing reading rate and accuracy. Therrien's (2004) meta-analysis suggests that corrective feedback appears to have greater success in improving reading fluency when compared to no corrective feedback. Therrien (2004) examined mean effect sizes between two variations of repeated reading interventions: providing corrective feedback during the intervention and offering no corrective feedback. Students who received feedback obtained a mean fluency effect size of 0.51, and students who did not had a mean fluency effect size of 0.46 (Therrien, 2004). However, when only considering interventions conducted by adults rather than peers, mean fluency effect size for interventions that include corrective feedback increased to 1.37. All adult-run interventions incorporated corrective feedback (Therrien, 2004).

Choice and Learning

Along with implementing interventions aimed at targeting specific skills, another commonly supported practice in education is allowing students to make choices. Choice theory, an idea introduced by Glasser (1997), is founded on the premise that learning, for human beings, is a by-product of the need to have relationships with others in an environment where activities that are useful and authentic, and where choice is present. Previous research and other educational resources (e.g. educational textbooks, teacher education programs) have suggested that choice influences the learning process in several ways. Choice can impact learning through student motivation or interest (Alexander, 2006). It can also play a role in making learning meaningful for the student (Alexander, 2006; Glasser, 1997; Rhodes & Shanklin, 1993). Choice can also offer students a sense of control over their learning, which may impact academic performance (Alvermann, Phelps & Ridgeway, 2007; McCombs, 1995; Weiner, 1986). Finally, students who are granted the opportunity to make decisions may also experience an increase in self-efficacy to complete a variety of academic tasks (McCombs, 1995). For instance, a student who selects an option that they are confident in will likely feel as though they will be able to succeed academically.

A student may perceive learning to be meaningful when that student is able to make choices in the learning process. There is also a greater probability that the student will be motivated and interested in learning when given choices. Alexander (2006) asserts that in order to make learning meaningful for a student, teachers need to allow for students to engage in some self-exploration and allow them to often make choices that can influence the learning environment. For example, allowing students to choose a topic for a project may stimulate more interest in the task because students are able to select topics of interest or those that they might

have some previous experience. Choice can also have an impact on the amount of effort put forth by students and can encourage students to challenge themselves. Students will be more likely to challenge themselves when presented with a task they have chosen to engage in.

By providing opportunities to select learning topics or materials, students may find learning more purposeful. By allowing students to choose some of the things that they are learning, they may choose material that will be meaningful for them, and a connection can be made between the student and the lesson. Learning objectives become more important to students when they feel that the material is relevant and purposeful (Glasser, 1997). Teachers may also benefit from this approach. Rhodes and Shanklin (1993) argue that a teacher will have more success in communicating the purpose of reading and writing to students if they provide choices in terms of activities, materials, and working time lines.

If students are offered choices in the classroom, they may feel as though they have some control over their own learning. Students who have an increased sense of control over their learning often achieve higher in school and gain a stronger sense of self-worth and confidence (Weiner, 1986). Alvermann et al. (2007) argue that students who are given choices may be positively motivated to engage in the lesson and read about something they are interested in and, therefore, perceive themselves as competent readers. McCombs (1995) states that students need to feel competent and in control. Students seek experiences that provide choices in order to access the control and feelings of competence they desire. If students are provided choice, they are likely to feel that they play a more meaningful role in the classroom, and have some influence over what material they will learn (McCombs, 1995).

Choice in Reading

As with learning in general, reading is also likely influenced by choice in multiple ways. Motivation, student interest, control over one's learning, increased self-efficacy, and opportunities to make meaningful connections to reading material are all potential underlying influences (Flowerday, et al., 2004; Wigfield,et al., 2004; Wise et al., 2008). Previous research has investigated these variables as they relate to oral reading fluency and other academic performance indicators. However, other research has investigated the effect of various types of choice on reading fluency, but not directly explored other variables such as motivation.

Daly et al. (2006) has specifically looked at the effect of choice and students' reading fluency without exploring these potential underlying variables. A choice of reading instruction was provided to two students receiving fluency interventions. The two participants were middle school students identified with behavioral disorders. The students were provided the option of whether or not they would like to receive instruction in reading prior to reading a passage. They were also asked to choose the type of instruction they would receive from a list of options. Finally, students were allowed to choose how many minutes of instruction they would like to receive, with the maximum being ten minutes of instruction. The options for types of instruction included modeling, practice, error correction, and performance feedback. Students were provided with a contingent reward upon meeting certain reading criteria. Results indicated that both participants' oral reading fluency increased when choice of instruction and contingent rewards were given. Furthermore, both students chose the practice condition a majority of the time, as one participant chose to practice 71% of the time, while the other chose to 77% of the time. Of all other strategies, these students found it most beneficial to allow for time to practice reading in order to achieve their reading goals (Daly et al., 2006).

Within the research regarding the relationship between choice and reading, changes in motivation and self-efficacy are two variables that are most commonly explored. Wigfield et al. (2004) examined choice as a component of a reading program and its effect on reading motivation and self-efficacy. Two reading programs were implemented with third grade students, one of which was referred as CORI (Concept Oriented Reading Instruction). CORI incorporated practices designed to increase a student's sense of autonomy, or feeling of control over their own learning. Teachers provided students with a wide selection of texts or topics within a certain theme to discuss. The authors argued that choice has to be meaningful in order for it to matter to students and build motivation in the activity. Teachers also encouraged questions from students so that the students could choose which direction they wanted to take the discussion. Teachers were encouraged to allow students to have their own unique way to learn the material, rather than adopting one approach for all students. Students who did not participate in the CORI group participated in a method called Multiple Strategy Instruction (SI). This approach did not involve student choice, but rather focused on teaching students about different reading strategies and appropriate situations to use each one. Students that participated in the CORI reading program showed gains in students' reading motivation and self-efficacy, while the SI group did not.

Student interest, engagement, and opportunities to participate in personally meaningful learning may also be introduced when choices are offered. Wise et al. (2008) examined the effect of choice in terms of available news stories for participants to read, and undergraduate students were either given 5 or 15 different news stories to choose from. Participants that received more options were found to engage in more intense cognitive processing and more

accurately recognized the details of the stories that they read. Results may suggest support for the notion that choices allow for students to engage in more meaningful learning.

However, choice may not always be beneficial during reading tasks. Flowerday et al. (2004) examined the relationship between choice and reading, but more specifically on reading engagement, attitude, and learning. A sample of undergraduate students was separated into two groups. One group was given a choice between doing reading and writing assignments in Packet A or B, and the other group was not given an option and was assigned a packet. All packets contained the same materials, but participants were not aware of this. Students were asked to read a two-page passage and then complete a post-reading interest inventory, a multiple-choice test, two short essays, and an attitude checklist. Students who were not given a choice wrote higher quality essays but choice did not have an impact on attitude toward the task. In fact, providing choice appeared to have a negative effect on quality of essay content written by the participants. However, when the experiment was replicated with a different text, no significant effects were found in terms of choice.

Gaps in Research and the Present Study

A number of studies have examined the impact of choice in reading outcomes, but in various ways. Choice in instructional approaches has been investigated, as well as how choice influences students' self-efficacy and motivation have been explored (Daly et al., 2006; Wigfield et al., 2004). How choice has influenced student attitude and writing performance has also been explored, as well as its relationship to cognitive processing of online media (Flowerday et al., 2004; Wise et al., 2008). Regarding reading intervention research, there are a great number of studies supporting the efficacy of the repeated reading procedure to increase oral reading fluency (Dowhower, 1987; Herman, 1985; National Reading Panel, 2000; Rashotte &Torgesen, 1985;

Rasinski, 1990; Samuels, 1997; Shapiro, 2011; Therrien, 2004). However, a lack of research exists looking specifically at how choice of reading passage influences oral reading fluency. In addition, providing choice as part of an intervention targeting oral reading fluency has yet to be explored. More specifically, research has not yet investigated providing students choice of reading passage within the context of a reading fluency intervention such as repeated reading. By adding passage choice to a previously established reading intervention, the current study investigated the effects of this combination on oral reading fluency, as compared to an evidence-based intervention (i.e., repeated reading) alone. The current study also examined participants' social acceptability of the two interventions (i.e., repeated reading, repeated reading plus choice). Social acceptability can play a significant role in perceptions of intervention effectiveness and self-efficacy.

CHAPTER III

Method

Participants and Setting

Three elementary school students participated in the study. Participants were recruited by contacting elementary school principals and reading teachers from a small, Midwestern city. School staff referred participants based on a need for additional reading practice to increase their oral reading fluency. All participants were students who attended local elementary schools. Participant demographics including name, gender, grade, age, ethnicity, and educational disability status are provided in Table 1. All participants had an estimated cognitive ability within the average range and were not English Language Learners.

Table 1.
Participant Demographics

Name	Gender	Grade	Age	Ethnicity	Ed. Disability Status
Colin	Male	2	8	White	None
Sam	Male	5	11	White	None
James	Male	3	10	Hispanic	OHI (ADHD)

OHI: Other Health Impaired
ADHD: Attention Deficit Hyperactivity Disorder

The study was conducted as part of a summer reading program at a medium sized university in the upper Midwest. The study took place in a clinic setting on the campus of the university. A graduate student in school psychology was trained in the intervention procedures and functioned as a research assistant. She implemented interventions and assisted in data collection. All sessions were conducted in the late morning hours.

Dependent Measures

Correct words per minute. The primary dependent variable under analysis was correct words per minute (CWPM). CWPM were computed by subtracting the number of reading errors

(i.e., mispronunciations, non-pronunciations or long pauses that did not result in a response, omissions or skipping or not reading a word, line skipping, and substitutions) from the total number of words read in one minute. For a word to be considered correct, the student pronounced the word correctly or self-corrected within three seconds. CWPM were calculated after the final read-through during each intervention session. CWPM were also calculated after completing each high content overlap (HCO) passage (Rashotte & Torgesen, 1985).

The reading probes (i.e., passages) were obtained from easycbm.com, a website that provides curriculum-based measurement materials (see Appendices B and C). Researchers at the University of Oregon developed the reading materials. Each grade level had 17 passages. In order to provide choices without altering the reading level of each passage, an additional copy of each probe was developed by the researcher. Only the name and gender of the main character was changed for each alternate copy. Therefore, each grade level had 34 passages. Each reading probe contained a student and researcher copy, and the researcher copies contain numbered lines in order to aid the researcher in computing the correct words read per minute. Each researcher copy also contained a brief description of the story that the researcher read to the student prior to the intervention session. For example, a description stated, "This is a story about Abby." The average word count for the passages used was 256.07 and ranged from 241-297 words.

High content overlap (HCO) passages were used to assess the generalizability of reading improvements (See Appendix D). The passages contained 80-85% of the same content as the passages used during the intervention phases. Character names and other words (i.e. substituting "him" for "her") were changed so that content was slightly different. The average word count for these passages used was 255.41, and ranged from 244-280 words.

Social acceptability. Social acceptability was assessed using a questionnaire developed by the examiner based on a similar questionnaire developed by Axelrod and Zank (2012). The questionnaire asked participants to rate their overall satisfaction with the reading intervention program. Questions addressing perceived effectiveness of the interventions and general attitudes about the reading sessions were also included. Participants completed the questionnaires during the final reading session. They were asked to either agree, disagree, or select "Not Sure" in response to whether they enjoyed each reading intervention and whether they believed it was helpful. Responses were coded to a three-point Likert scale (*Agree* = 3, *Not Sure* = 2, *Disagree* = 1). They were also instructed to not include their names. A sample of the participant questionnaires is included in Appendix G.

Procedure

On the first day of the reading intervention program, parents of the participants met with the researcher to discuss the intervention and the program including procedures, method of data collection, and confidentiality. Parents were asked to provide consent for their child to participate in the study and given additional information about the study via an information letter (See Appendices E and F). Parents also provided informed consent for their child to participate in the reading program using the clinic's consent to treat process. Parents were notified of any potential risks and the benefits of participation, terms of confidentiality were explained, and they were assured that withholding consent would not penalize them or their child in any way.

All participants were assigned to the same intervention conditions. Baseline, intervention, and follow-up conditions took place in clinic rooms at the university. Participants took part in the reading program for 50 minutes per day for four days each week. Colin participated in three baseline sessions prior to the intervention sessions, and five post-

intervention follow-up sessions. He also participated in twenty-six intervention sessions; thirteen repeated reading and thirteen repeated reading plus choice intervention sessions. Sam participated in three baseline sessions and five follow-up sessions. He also participated in twenty-one intervention sessions; eleven repeated reading and ten repeated reading plus choice intervention sessions. Finally, James participated in twenty intervention sessions; ten repeated reading and ten repeated reading plus choice intervention sessions. He also participated in three baseline and five follow-up sessions. The duration of the program was five weeks for Colin and Sam, and four weeks for James.

Survey level assessment. During the first two days of the study, reading instructional level was determined for all participants using a survey level assessment procedure. Participants' oral reading fluency was assessed by having them read three passages from their most recently completed grade level. For example, a participant that just completed their fourth grade year was instructed to read three fourth grade leveled passages. Each child's median score on the three passages was calculated and compared to grade level norms from easycbm.com. If the child's median correct words per minute (CWPM) score was not at least above the 20th percentile for the grade level, the participant read three passages one grade level lower. The participant repeated this process until the median score was at least above the 20th percentile for the grade level of each set of passages. The participant's instructional level was determined at the level at which he could read passages at or above the 20th percentile for that grade level (Shapiro, 2011).

Baseline. Baseline data were obtained by having each participant read three instructional level passages for 1-min each. Feedback (e.g., corrections of misread words) was not provided to participants during the baseline condition.

Intervention conditions. During the intervention condition, the participants were exposed to two conditions. Condition 1 was the repeated reading (RR) intervention alone whereby the researcher chose the passage, and Condition 2 was the repeated reading intervention conducted with one of two passages chosen by the participant (C+RR). The order of the intervention conditions was counter-balanced to reduce the chance that order of intervention implementation was affecting participants' oral reading fluency performance.

Repeated reading. The repeated reading intervention required the participant to read the entire one-page passage two times. During the first two readings, the participant was immediately corrected if he made a reading error (i.e. mispronunciation) and provided the correct word if he hesitated for 3-5 seconds. After the second reading, the participant read the passage for one minute, and the researcher recorded errors and calculated CWPM. During the final reading, errors were not immediately corrected. However, the correct word was provided after 3-5 seconds if the participant hesitated, and it was counted as an error. Finally, the participant read the corresponding HCO passage for one minute, and the researcher calculated the CWPM.

Repeated reading plus choice. First, the researcher presented two copies of a passage. Only the sex and name of the protagonist differed between the two passages. Second, the researcher read the brief description of each passage, such as, "This is a story about a girl named Amy, and this is a story about a boy named Jacob." Third, participants selected one of the two stories to read. Fourth, the participant began the repeated reading intervention. During the first two readings, the participant was immediately corrected if he made a reading error (i.e. mispronunciation) and provided the correct word if he hesitated for 3-5 seconds. After the second reading, the participant read the passage for one minute, and the researcher recorded errors and calculated CWPM. During the final reading, errors were not immediately corrected.

However, the correct word was provided after 3-5 seconds if the participant hesitated, and it was counted as an error. Finally, the participant read the corresponding HCO passage for one minute, and the researcher calculated the CWPM.

Follow-up. Follow-up data were collected using five easycbm.com passages from each participant's instructional level. Participants read each passage for one minute (e.g., passage #1 for one minute, passage #2 for one minute) and CWPM were calculated for each passage. Feedback (e.g., corrections of misread words) was not provided to participants during the baseline condition.

Experimental Design and Data Analysis

The study was conducted using an alternating treatments (e.g., multielement) design with two competing conditions. A repeated reading intervention phase was alternated with a repeated reading/choice combination intervention for each of the three participants. The order of the interventions was counterbalanced each day (e.g., Day 1: repeated reading, repeated reading plus choice; Day 2: repeated reading plus choice, repeated reading). Visual inspection of the data was used to assess the primary research question.

Treatment Integrity

Intervention integrity checklists (see Appendix A) were created that outlined the steps of each intervention condition. The researcher or research assistant used the checklists during the intervention sessions in order to follow the correct sequence of implementation. Two separate checklists were used throughout the study: a repeated reading (RR) intervention checklist, and a repeated reading plus choice (C+RR) intervention checklist. 96% of all intervention sessions were audio recorded to monitor intervention integrity. More specifically, 92.3% of Colin's sessions, 100% of Sam's, and 95% of James's sessions were recorded. A graduate student

trained in the intervention procedures listened to each audio recording. The graduate student was responsible for determining the number of procedural steps completed correctly and incorrectly by following the checklists for both the repeated reading (RR) and choice and repeated reading (C+RR) interventions. Treatment integrity was calculated by dividing the number of steps followed correctly by the total number of steps, and multiplying by 100. Treatment integrity during the sessions observed was 98.78%. Intervention integrity percentages for each participant are found in Table 2.

Inter-rater Agreement

Inter-rater agreement was calculated for 96% of intervention sessions. To assess inter-rater agreement, a graduate assistant trained in the intervention procedures listened to the recordings and calculated the correct words read in one minute by each participant. This second rater then calculated the percentage of agreement by dividing the number of agreements by the sum of the number of agreements and disagreements. The fraction was then multiplied by 100 to obtain a percentage. The greater the percentage, the greater agreement between the two raters in terms of recording correct words read per minute. The average inter-rater agreement value was 99.5%. Inter-rater agreement percentages for each participant is found in Table 2.

Table 2.
Mean Percentage of Intervention Integrity and Inter-rater Agreement

Participant	Intervention Integrity	Inter-rater Agreement
Colin	98.41%	99.56%
Sam	99.52%	99.56%
James	98.42%	99.15%
Overall	98.78%	99.50%

CHAPTER IV

Results

Survey Level Assessment

Survey level assessments were conducted in order to identify participants' reading instructional levels. Results of the survey level assessments are found in Table 3. Colin's instructional level was determined to be at the fourth grade level according to easycbm.com standards. Colin's median CWPM in second grade material was 86 with 0 errors, and 72 CWPM with 4 errors in fourth grade material. Sam's instructional level was also identified at the fourth grade level, which was one level below his current grade. Sam obtained a median score of 118 CWPM with 9 errors on fifth grade material, and 126 CWPM with 2 errors on fourth grade material. Finally, James's instructional level was determined to be at the second grade level, also one level below his current grade. His median CWPM was 46 with 2 errors on third grade material, and 52 CWPM with 5 errors on second grade material.

Research Questions

Figures 1, 3 and 5 display participants' CWPM during baseline, intervention condition, and follow-up phases. Visual analysis of Figures 1, 3 and 5 suggests little separation among the two intervention conditions indicating that combining choice with the repeated reading intervention did not substantially increase oral reading fluency when compared to repeated reading alone. Table 4 provides participant CWPM means and ranges for baseline, intervention condition, and follow-up phases. For two of the participants, mean CWPM for the repeated reading condition and mean CWPM for the choice plus repeated reading condition were virtually identical. However, for one participant (i.e., James) the mean CWPM score for the choice plus

repeated reading condition (M = 82.90) was slightly higher than the repeated reading condition (M = 75.20).

For all three participants, CWPM at follow-up (M = 109.47) was higher than at baseline (M = 84.44). Colin made substantial gains from baseline (M =72.67) to follow-up (M = 109.80). Sam also made substantial gains from baseline (M = 113.00) to follow-up (M = 141.20). James made strong gains from baseline (M = 67.67) to follow-up (M = 77.40). When the intervention was withdrawn, two participants maintained or improved their fluency scores during the follow-up condition. Colin generally maintained his fluency scores from the intervention phase (M = 118.24) to follow-up (M = 109.80). Simon's fluency scores improved from the intervention phase (M = 136.66) to follow-up (M = 141.20). James's CWPM decreased slightly from the intervention phase (M = 79.05) to follow-up (M =77.40). These outcomes are notable, as gains were generally maintained on novel passages following the withdrawal of the intervention. Baseline to intervention comparisons and baseline to follow-up comparisons are depicted as a percentage of non-overlapping data points (PND) in Table 5.

Figure 1 depicts Colin's performance during baseline, intervention, and follow-up conditions. Colin obtained a mean baseline score of 72.67 CWPM and an overall intervention phase mean score of 118.24 CWPM. His mean intervention score for repeated reading was 118.62 CWPM, and mean score for the repeated reading plus choice intervention was 117.85 CWPM. Finally, his mean follow-up score was 109.80 CWPM. Figure 2 depicts Colin's performance on HCO passages for both RR and C+RR intervention conditions. His overall mean score on the HCO passages was 96.35 CWPM. His mean score on HCO passages following the repeated reading intervention was 97.54 CWPM and 95.15 CWPM following the repeated reading plus choice intervention. There was a small difference between Colin's mean

scores on the HCO passages, suggesting no difference in generalization of fluency skills between the repeated reading condition ($M = 97.54$) and the repeated reading plus choice condition ($M = 95.15$). However, a large decrease in Colin's overall mean HCO score ($M = 96.35$) from his overall mean intervention score ($M = 118.24$) indicates that intervention transfer was not strong. Colin's scores suggest that there was no notable difference between intervention conditions, but a significant increase in CWPM from baseline to follow-up.

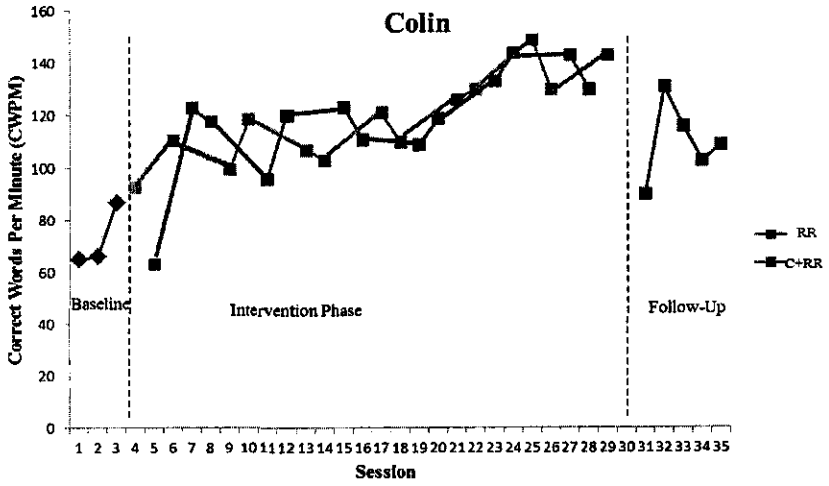

Figure 1. *Baseline, Intervention, and Follow-Up Fluency Scores for Colin*

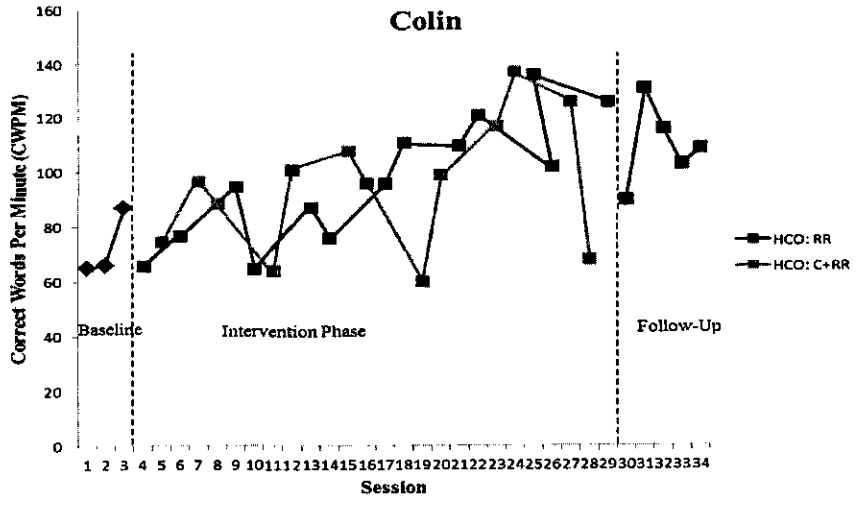

Figure 2. *Comparison of HCO Passage Scores Between Interventions for Colin*

Figure 3 illustrates Sam's performance during baseline, intervention, and follow-up conditions. Sam obtained a mean baseline score of 113.00 CWPM and an overall intervention phase mean score of 136.66 CWPM. His mean intervention score for repeated reading was 136.91 CWPM, and mean score for the repeated reading plus choice intervention was 136.40 CWPM. Finally, his mean follow-up score was 141.20 CWPM. Figure 4 depicts Sam's performance on HCO passages for both RR and C+RR intervention conditions. His overall mean score on the HCO passages was 129.90 CWPM. His mean score on HCO passages following the repeated reading intervention was 133.36 CWPM, and 126.10 CWPM following the repeated reading plus choice intervention. The difference between Sam's scores on the HCO passages suggest that the repeated reading condition (M = 133.36) may have facilitated greater generalization of fluency skills to similar passages than the repeated reading plus choice condition (M = 126.10). In addition, a modest decrease in Sam's overall mean HCO score (M = 129.90) from his overall mean intervention score (M = 136.66) suggests that intervention gains generalized to other passages. Sam's intervention scores indicate that there was no notable difference between intervention conditions, but a significant increase in CWPM from baseline to follow-up provides support for the interventions' effectiveness. In addition, his scores demonstrated a modest increase from the intervention phase to follow-up, indicating that even after withdrawing the intervention, he continued to make progress.

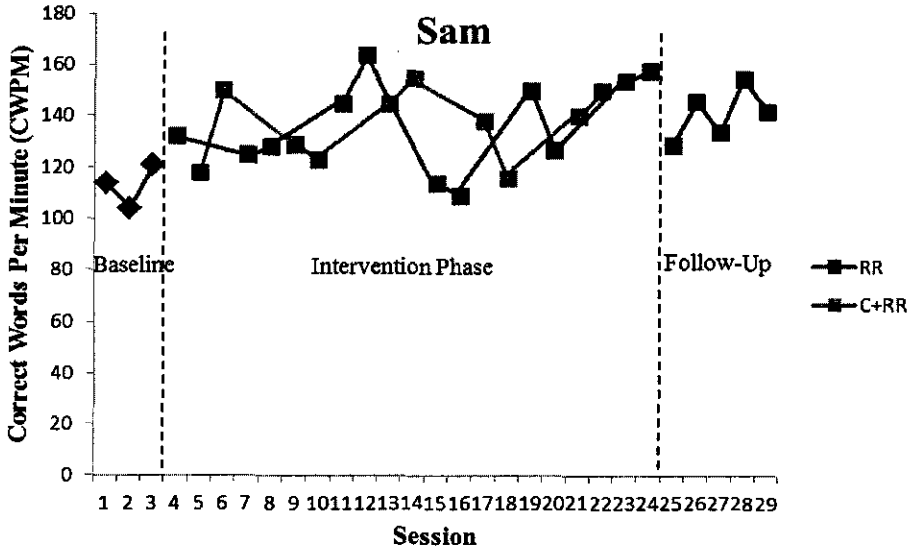

Figure 3. *Baseline, Intervention, and Follow-Up Fluency Scores for Sam*

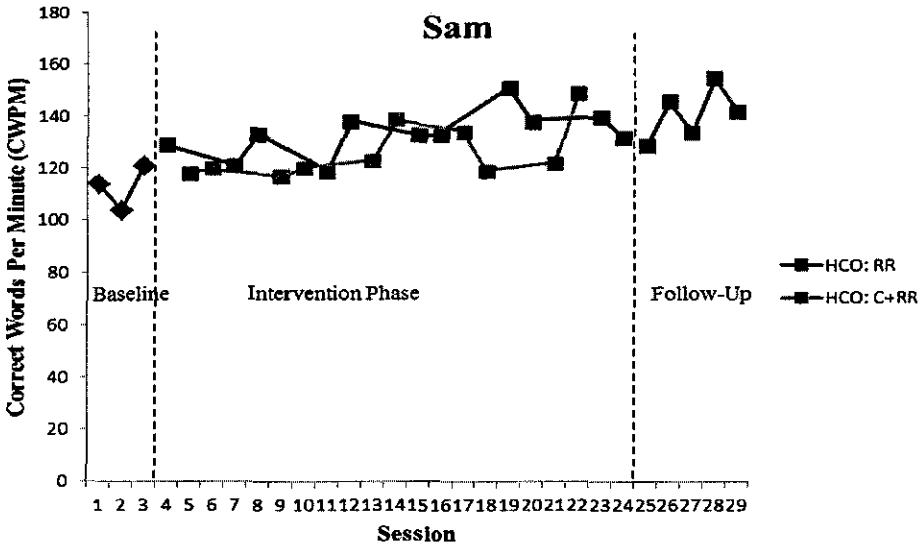

Figure 4. *Comparison of HCO Passage Scores Between Interventions for Sam*

Figure 5 illustrates James's performance during baseline, intervention, and follow-up conditions. James obtained a mean baseline score of 67.67 CWPM and an overall intervention

phase score of 79.05 CWPM. His mean intervention score for repeated reading was 75.20 CWPM, and mean score for the repeated reading plus choice intervention was 82.90 CWPM. Finally, his mean follow-up score was 77.40 CWPM. Figure 6 depicts James's performance on HCO passages for both RR and C+RR intervention conditions. His overall mean score on the HCO passages was 67.05 CWPM. His mean score on HCO passages following the repeated reading intervention was 64.70 CWPM, and 69.40 CWPM following the repeated reading plus choice intervention. The modest difference between James's scores on the HCO passages suggests that the repeated reading plus choice condition ($M = 69.40$) may have facilitated greater generalization of fluency skills to similar passages than the repeated reading condition ($M = 64.70$). However, a decrease in James's overall mean HCO score ($M = 67.05$) from his overall mean intervention score ($M = 79.05$) suggests that the interventions did not generalize well to other passages. James's scores provide support for the effectiveness of the interventions, and a modest difference between the two intervention conditions, with the choice component appearing to have slightly higher CWPM scores than repeated reading alone. James also made strong gains from baseline to follow-up, and only small decreases from the overall intervention phase to follow-up, suggesting that skills developed during the intervention phase were maintained following the withdrawal of the intervention.

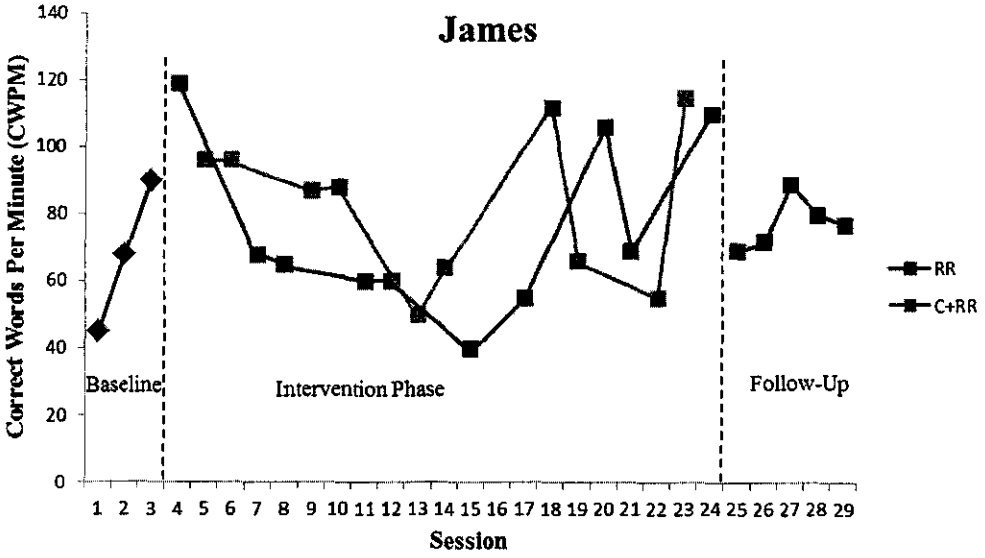

Figure 5. *Baseline, Intervention, and Follow-Up Fluency Scores for James*

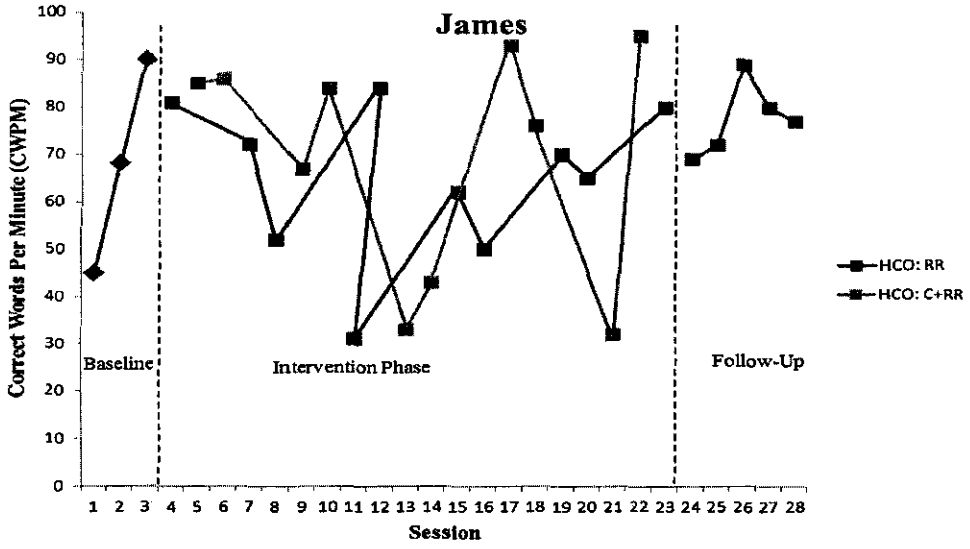

Figure 6. *Comparison of HCO Passage Scores Between Interventions for James*

Treatment acceptability. Table 5 represents participants' responses to the intervention acceptability questionnaire for both intervention conditions. Two participants completed

treatment acceptability questionnaires. There was general agreement between participants on most items. Participants agreed that both interventions were helpful for them ($M = 3.00$), and they enjoyed practicing reading using these strategies ($M = 3.00$). They also agreed that reading the stories was not boring ($M = 1.00$) and reading the passage three times was helpful ($M = 3.00$). However, there was some disagreement about whether they would suggest these reading activities to a friend ($M = 2.50$), as one indicated *Not Sure* while the other indicated *Agree.* Both reported that they enjoyed choosing the passage ($M = 3.00$) but were not in agreement about whether choice was helpful ($M = 2.50$), as one participant selected *Agree* and one indicated *Not Sure.* Overall, participants generally did not rate one intervention more acceptable than the other.

Table 3.
Survey Level Assessment Scores at Grade Level and Instructional Level (CWPM)

Participant	Grade Level	Instructional Level
Colin	86, 75, 92 (Grade 2)	72, 72, 58 (Grade 4)
Sam	96, 118, 141 (Grade 5)	140, 126, 113 (Grade 4)
James	46, 30, 53 (Grade 3)	45, 52, 59 (Grade 2)

Table 4.
Baseline, Intervention, and Follow-Up Scores per Participant (CWPM): Means and Ranges

Participant	Baseline		Repeated Reading		Repeated Reading plus Choice		Follow-Up	
	M	*Range*	*M*	*Range*	*M*	*Range*	*M*	*Range*
Colin	72.67	65-87	118.62	93-149	117.85	63-144	109.80	90-131
Sam	113.00	104-121	136.91	109-164	136.40	116-155	141.20	129-155
James	67.67	45-90	75.20	40-119	82.90	50-115	77.40	69-89

Table 5.
Percentage of Non-overlapping Data from Baseline to Intervention and Follow-Up

Participant	Baseline to Intervention			Baseline to Follow-Up
	RR	C+RR	Combined	
Colin	100.00%	92.31%	96.15%	100.00%
Sam	81.81%	80.00%	80.95%	100.00%
James	30.00%	40.00%	35.00%	0.00%

Table 6.
Participant Acceptability Questionnaire: Repeated Reading (RR) and Choice and Repeated Reading (C+RR)

Question	RR	C+RR	Total
	M	*M*	*M*
1. Reading the story 3 times was helpful for me.	3.00	3.00	3.00
2. Reading the story 3 times was boring.	1.00	1.00	1.00
3. I like to practice reading using Repeated Reading.	3.00	3.00	3.00
4. I think that reading the passage 3 times helped me become a better reader.	3.00	3.00	3.00
5. I liked when I was allowed to choose which story to read.		3.00	3.00
6. I think that choosing the story helped me read better.		2.50	2.50
7. I would suggest this reading activity to a friend.	2.50	2.50	2.50

Agree: 3; Not Sure: 2; Disagree: 1

CHAPTER V

Discussion

The purpose of the present study was to address the current gap in the literature by examining if adding student choice of reading passage to a previously established oral reading fluency intervention (i.e., repeated reading) would have an impact on participants' oral reading fluency. School staff referred three children to a university-based summer reading program based on a need for additional reading practice to increase their oral reading fluency. Participants were provided with a choice between two reading passages in combination with an evidence-based reading fluency intervention to determine if the choice component had any affect on reading fluency as compared to providing the evidence-based intervention and no choice.

Contrary to what may be intuitively predicted, providing students choice of reading passage to a repeated reading intervention did not produce higher fluency scores when compared to the repeated reading intervention alone. Two participants' (i.e., Colin, Sam) mean fluency scores for the repeated reading plus choice (C+RR) intervention were not notably higher than their mean scores for the repeated reading (RR) intervention alone. James's mean scores for each intervention condition differed slightly, but arguably not enough to conclude adding choice of passage was beneficial. In addition, visual analysis of each participant's graph (see Figures 1 through 6) revealed significant overlap between the repeated reading plus choice (C+RR) and repeated reading (RR) conditions.

It is possible that results did not support Glasser's (1997) Choice Theory because the theory does not specifically address the impact of choice on reading or in the context of a reading intervention. It is also possible that choice may not truly have as strong an impact on student achievement and performance as claimed by Glasser's theory, again particularly in the context of

a reading intervention. Allowing students to make choices in the learning process, including when reading, appears to make sense intuitively. Rhodes and Shanklin (1993) suggest that teachers will have greater success in communicating the purpose of reading to students if they allow for choices in terms of working time lines, activities, and materials. Therefore, one might predict and even have anecdotal evidence that allowing students to choose reading content or instructional methods will influence engagement, motivation, and performance in the learning process. So, one might have expected that the participants in the present study would perform better when allowed to choose the passage they were going to read during the intervention phase. However, the present study did not offer support that providing choice of reading passage substantially increases reading fluency, as compared to providing an intervention without it.

Perhaps choice also did not matter in the present study because only one specific skill, reading fluency, was examined. Wise et al. (2008) found that undergraduate participants that received more options of reading content had higher comprehension scores and appeared to engage in more meaningful learning than participants with fewer choices. That is, these participants were found to engage in more intense cognitive processing and more accurately recognized the details of the stories that they read. However, Flowerday et al. (2004) found that undergraduate participants who were allowed to choose reading materials did not write higher quality essays related to the stories, suggesting that choice was not beneficial in this particular case. Adding choice to the repeated reading intervention might not have impacted participants' oral reading fluency because of the focus on one skill and the way in which that skill was measured (i.e., WCPM). It is also possible that providing choice of reading passage did not demonstrate substantial benefit in the present study because reading fluency was a developing skill for the current participants. The undergraduate students in previous studies likely had

reading skills that were already developed, so interest and motivation could have potentially played a stronger role in their performance. Said slightly different, perhaps providing choice influences variables other than academic skills, such as interest and motivation, which indirectly influences performance. The focus of the current study was to examine the effects of choice of reading passage combined with an already established intervention on a targeted academic skill (i.e., oral reading fluency), not potentially underlying variables associated with skill development.

Colin and Sam demonstrated significant gains in their oral reading fluency over the course of the study, and James made strong gains as well. However, the duration of James's participation in the reading program was shorter than the other two participants, suggesting he did not receive the same amount of the intervention as Colin or Sam. Progress in terms of increasing reading fluency from pre- to post-intervention for each participant adds to the literature supporting the effectiveness of a repeated reading intervention to improve oral reading fluency (Dowhower, 1987; Herman, 1985; National Reading Panel, 2000; Rashotte &Torgesen, 1985; Rasinski, 1990; Samuels, 1997; Shapiro, 2011; Therrien, 2004). This is not surprising given the intervention's extensive evidence base. In fact, Therrien's (2004) meta-analysis suggested that repeated reading interventions were found to be effective with both disabled and nondisabled student populations, and optimally effective when the procedure incorporates both practice and corrective feedback, both of which were elements in the present study. In addition, academic engaged time, as well as the intensity of instruction, can have a tremendous impact on students' progress in multiple areas of academic performance, including reading fluency. Each participant was exposed to at least twenty intervention sessions over a five-week period, for 50-min per day. Practicing reading can be compared to practicing a sport or rehearsing music, as a

skill becomes more automatic and effortless with increased opportunities for repetition (Samuels, 1997). With quality academic engaged time and opportunities to practice reading over the course of several weeks, it is possible that each participant's reading fluency became increasingly automatic.

Previous research suggests repeated reading interventions can help students generalize oral reading fluency skills to novel passages (Dowhower, 1987; Herman, 1985; Therrien, 2004), and the current study provided modest support for this. Specifically, results from all three participants indicated a modest decrease in fluency from the intervention to the HCO passages. That is, all three participants obtained lower overall mean fluency scores on the HCO passages as compared to their overall mean intervention scores (RR and C+RR conditions). However this suggests that fluency skills from intervention passages appeared to transfer somewhat to other passages, as fluency scores were not drastically different between intervention and HCO conditions. This is not surprising, given the 80-85% overlap in content between the intervention and HCO passages.

Social acceptability. Responses from participants on the Participant Acceptability Questionnaires suggested an overall acceptability of both the repeated reading condition and the repeated reading plus choice condition. These findings are consistent with previous research, which has found high social acceptability among participants engaging in repeated reading interventions (Rashotte & Torgesen, 1985). Participants agreed that reading the passage multiple times was helpful and not boring. Participants also agreed that they liked being able to choose which passage they were going to read. However, one participant was not sure whether choosing a passage helped him read better. In spite of receiving some valuable qualitative information on participant perspectives, these questionnaires did not offer information about whether these

perspectives influenced reading performance before, during, and after the intervention phase. Social acceptability can play an important role in increasing the likelihood that readers will continue to read more, or at least have a positive attitude toward reading, which is important because with each subsequent repetition, readers usually improve the speed in which they are able to read (Rashotte & Torgesen, 1985).

Limitations and Suggestions for Future Research

While results point to an increase in oral reading fluency from pre- to post-intervention for all three participants, it is unclear as to whether this is solely due to the reading interventions that were implemented. By simply exposing participants to conditions where they learn and practice a skill, learning effects can occur. That is, once an individual learns a new skill or is practicing academic skills, the individual does not typically regress in performance while interventions or other supports are in place (Riley-Tillman & Burns, 2009). In addition, an alternating treatments design often makes it difficult to detect differences in conditions for one given participant (Riley-Tillman & Burns, 2009). It is possible that improvements were incremental, and learning that occurred in one session (i.e. repeated reading plus choice) carried over into the next session (i.e. repeated reading). Future research might consider investigating this same research question via large group comparisons in order to eliminate the need to administer both conditions to the same participant.

Visual analysis of Figures 1 and 5 reveal another limitation of the current study's procedure. Riley-Tillman and Burns (2009) strongly recommend collecting baseline data until there is a stable trend before implementing an intervention. Baseline data for both Colin and James indicated an upward trend in performance. Consequently, it is difficult to say whether progress made during the intervention phase was the result of the intervention, because the

participants appeared to be increasing their fluency without additional supports prior to the intervention phase. Perhaps the reason for the increasing trend during the baseline phase involved participants practicing their reading with the baseline reading passages and developing their reading fluency skills. While participants did not read the same passage during the baseline phase or receive feedback, they did engage in the practice of reading.

The study's small sample size and participant characteristics limits the generalizability of the results. Drawing conclusions about the effectiveness of choice of reading passage paired with a previously established reading intervention should be done with caution. It is possible that results could have differed with additional participants. That is, had other participants been recruited with differing skill levels or a special education backgrounds, it is possible that choice of reading passage could have made a more significant impact for these participants. In addition, one of the three participants was not reading below grade level standards according to the survey level assessment. Therefore, it is debatable whether participating in interventions targeting oral reading fluency was necessary for that particular participant. If he had been a struggling reader, perhaps providing a choice of passage may have had more benefit. It would be advantageous for future research to replicate the current study with other populations. For example, research should investigate the impact of providing choice on students at a variety of grade levels, reading levels, or students with learning disabilities. Results of these studies could have the potential to inform instruction, and identify whether this approach would be most effective with specific types of students.

The present study was conducted in a university clinic setting, which also limits the generalizability of the results. A benefit of the present study was that participants were able to work in quiet, secluded rooms with limited distractions. Often, teachers do not have the

advantage of implementing interventions in settings with minimal distractions. In addition, participants were able to work one-on-one with an interventionist, which is not typical in most general education settings. Finally, providing choice to the student in the present study will likely not look the same in a classroom setting. Often, choice of reading material in school will involve more salient differences, such as allowing a student to choose from a wide variety of reading material in a library. In this way, the choice that was provided to participants in the present study is quite limited compared to the scope of choices that may be available in an academic setting.

Related, results may have differed depending on what type of content was manipulated for each passage. The present study only included a choice between two passages that were exactly the same, with the exception of the name and gender of the main characters. Had other story content such as plot, length, or other elements of the story been changed, results may have varied. It is recommended that future research examine this same research question with modified types of choice made available. For example, incorporating variations in the plot, length of the story, or other characteristics of each story should be explored to determine if specific differences between the passages would influence whether choice had an impact on specific students. For example, perhaps choice as it was presented in the present study did not have an impact on fluency for the current participants, but more drastic changes in story content, such as vastly different plots, would have an effect on participants' performance.

Potentially influential variables related to choice and reading are student motivation and interest. Previous research has examined these variables as they relate to reading and choice, but they were not examined in the present study. Previous research has also suggested that offering choice in the learning process influences self-efficacy on a variety of academic tasks, and could

also allow students to perceive some control over their learning environment. Finally, specific types of choices, such as choice of intervention or whether they would like to be instructed in reading may make learning more meaningful for a student (Alexander, 2006; Alvermann, et al., 2007; Flowerday et al., 2004; Glasser, 1997; Wigfield et al., 2004). Collecting data on these variables may have provided some valuable insight as to whether choice would have had an impact in specific intervention sessions. It is recommended that future research explore choice within the context of motivation and interest in reading, such as examining a student's interest in the stories or their attitudes about reading each passage. Assessing the impact of motivation and interest as it correlates with performance would be informative in explaining why choice may or may not be effective for each student. If motivation was a significant mediating or moderating variable, then choice may have made an impact. Future research could potentially investigate this using experimental analysis in the context of academic skills (see Burns & Wagner, 2008).

Implications for Educators

The present study adds to the extensive body of research supporting the effectiveness of a repeated reading intervention to increase students' oral reading fluency (Dowhower, 1987; Herman, 1985; National Reading Panel, 2000; Rashotte &Torgesen, 1985; Rasinski, 1990; Samuels, 1997; Shapiro, 2011; Therrien, 2004). All participants were exposed to the repeated reading intervention for each session, and all participants made modest to significant gains in oral reading fluency from pre- to post-intervention. As a result, it is recommended that educators consider this intervention as one approach to target poor reading fluency among their students.

Two of the participants' mean CWPM at follow-up decreased a small amount following the intervention phase, while one participant increased his CWPM following the withdrawal of the intervention. These data provide further evidence for the effectiveness of intensive, targeted

interventions to increase oral reading fluency. Each of these participants was exposed to 50-min of reading intervention, four days per week, for at least four weeks. Therefore, it was not surprising that either modest decreases or even an increase in oral reading fluency occurred for one participant following the intervention phase, especially given previous research supporting the effectiveness of intensive oral reading fluency intervention (Shapiro, 2011).

Although results did not find providing choice of reading passage to participants offered substantial benefit compared to the repeated reading intervention alone, results did not provide evidence that choice of reading passage was detrimental to the participants' oral reading fluency. Mean and median CWPM scores did not decrease from pre- to post- intervention. Therefore, it may be argued that it is acceptable for teachers to allow students to choose the reading material they will practice with, provided the material is within the student's instructional level.

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Appendix A

Repeated Reading

- [ ] Sit with the student in a quiet location without too many distractions.

- [ ] Have two copies of the passage. "Assessor Copy" with the total number of words is for you, the interventionist. "Student Copy" is for the child.

- [ ] Have the student read the entire passage.

- [ ] If the student asks for help with any word, read the word aloud. If the student requests a word definition, give the definition.

- [ ] When the student has completed the passage, have him or her read the entire passage again.

- [ ] Now, have the student read the passage for the third time for ONE minute.
  - As he or she reads, follow along and mark incorrect words on your form.

- [ ] When the time is up, record the number of correct words per minute at the end of the passage.

- [ ] Grab the two copies of the High Content Overlap (HCO) passages.

- [ ] Have the student read the HCO passage for ONE minute. While the student is reading, record the errors on your copy of the story.

- [ ] When the time is up, record the number of correct words per minute at the end of the HCO passage.

Choice + Repeated Reading

- [ ] Sit with the student in a quiet location without too many distractions.

- [ ] Have two copies of the first passage. "Assessor Copy" with the total number of words is for you, the interventionist. "Student Copy" is for the child. Have two copies of another passage, an "Assessor Copy" and a "Student Copy." Therefore, you should have two different reading passages.

- [ ] Present the two "Student Copy" passages to the student. Read the story descriptions on the top of each "Assessor Copy" passage, and ask the student which one he or she would like to read.

- [ ] Have the student read the entire passage he or she selected.

- [ ] If the student asks for help with any word, read the word aloud. If the student requests a word definition, give the definition.

- [ ] When the student has completed the passage, have him or her read the entire passage again.

- [ ] Now, have the student read the passage for the third time for ONE minute.
  - As he or she reads, follow along and mark incorrect words on your form.

- [ ] When the time is up, record the number of correct words per minute at the end of the passage.

- [ ] Grab the two copies of the High Content Overlap (HCO) passages.

- [ ] Have the student read the HCO passage for ONE minute. While the student is reading, record the errors on your copy of the story.

- [ ] When the time is up, record the number of correct words per minute at the end of the HCO passage.

Appendix B

Student Copy **Form 2-1A**

Jessie was a rabbit. She was small and very, very quiet. She had soft grey fur and a snow white tail. She lived in a big field with many other animals. There were lizards and snakes. She saw them mostly in the summer when it was hot. There were tiny mice. They liked to run really fast. The mice got nervous if they were out in the open for very long, so Jessie did not see them too often. Many birds lived in the field too. Some were small. Others were big. Jessie was not afraid of these birds. But there was one type of bird that Jessie was afraid of. Her mom told her to be careful when this type of bird was around. So Jessie always looked carefully before she went into the field to play. She wanted to know if there was a hawk around!

One day Jessie was hopping around the field. She stopped now and then to eat bits of grass. She also stopped to check to make sure there were no hawks in the sky. Then, she found a patch of extra tasty grass. It was sweet and moist. It tasted better than anything Jessie had ever eaten before. After a little while, Jessie remembered what her mother had said. She checked the sky for danger. She saw a hawk flying far up in the sky. She turned and ran back to the bushes where her home was hidden. She was lucky the hawk had not seen her.

Assessor Copy

Form 2-1

Student Name: _____ Date: _____

1. Place the Student Copy in front of the student. Point to the names on the Student Copy as you read them:
   "This is a story about Jessie. I want you to read this story to me. You'll have 1 minute to read as much as you can. When I say "begin," start reading aloud at the top of the page. Do your best reading. If you have trouble with a word, I'll tell it to you. Do you have any questions? Begin."
2. Start the timer.
3. While the student is reading, mark errors with a slash (/).
4. At 1 minute, mark the last word read with a bracket (]).
5. When the student gets to a logical stopping place, say **"Stop."**

Jessie was a rabbit. She was small and very, very quiet. She had	13
soft grey fur and a snow white tail. She lived in a big field with many	29
other animals. There were lizards and snakes. She saw them mostly in	41
the summer when it was hot. There were tiny mice. They liked to run	55
really fast. The mice got nervous if they were out in the open for very	70
long, so Jesse did not see them too often. Many birds lived in the field	85
too. Some were small. Others were big. Jessie was not afraid of these	98
birds. But there was one type of bird that Jessie was not afraid of. Her	112
mom told her to be careful when this type of bird was around. So	126
Jessie always looked carefully before she went into the field to play.	138
She wanted to know if there was a hawk around!	148
One day Jessie was hopping around the field. She stopped now and	160
then to eat bits of grass. She also stopped to check to make sure there	175
were no hawks in the sky. Then, she found a patch of extra tasty grass.	190
It was sweet and moist. It tasted better than anything Jessie had ever	203
eaten before. After a little while, Jessie remembered what her mother	214
had said. She checked the sky for danger. She saw a hawk flying far up	229
in the sky. She turned and ran back to the bushes where her home was	244
hidden. She was lucky the hawk had not seen her.	254

Total Words Read: _____ - # of Errors: _____ = CWPM: _____

Appendix C

Student Copy **Form 2-1B**

Peter was a rabbit. He was small and very, very quiet. He had soft grey fur and a snow white tail. He lived in a big field with many other animals. There were lizards and snakes. He saw them mostly in the summer when it was hot. There were tiny mice. They liked to run really fast. The mice got nervous if they were out in the open for very long, so Peter did not see them too often. Many birds lived in the field too. Some were small. Others were big. Peter was not afraid of these birds. But there was one type of bird that Peter was afraid of. His mom told him to be careful when this type of bird was around. So Peter always looked carefully before he went into the field to play. He wanted to know if there was a hawk around!

One day Peter was hopping around the field. He stopped now and then to eat bits of grass. He also stopped to check to make sure there were no hawks in the sky. Then, he found a patch of extra tasty grass. It was sweet and moist. It tasted better than anything Peter had ever eaten before. After a little while, Peter remembered what his mother had said. He checked the sky for danger. He saw a hawk flying far up in the sky. He turned and ran back to the bushes where his home was hidden. He was lucky the hawk had not seen him.

Assessor Copy **Form 2-1B**

Student Name: _____ Date: _____

1. Place the Student Copy in front of the student. Point to the names on the Student Copy as you read them:

"This is a story about Peter. I want you to read this story to me. You'll have 1 minute to read as much as you can. When I say "begin," start reading aloud at the top of the page. Do your best reading. If you have trouble with a word, I'll tell it to you. Do you have any questions? Begin."

Peter was a rabbit. He was small and very, very quiet. He had	13
soft grey fur and a snow white tail. He lived in a big field with many	29
other animals. There were lizards and snakes. He saw them mostly in	41
the summer when it was hot. There were tiny mice. They liked to run	55
really fast. The mice got nervous if they were out in the open for very	70
long, so Peter did not see them too often. Many birds lived in the field	85
too. Some were small. Others were big. Peter was not afraid of these	98
birds. But there was one type of bird that Peter was afraid of. His	113
mom told him to be careful when this type of bird was around. So	126
Peter always looked carefully before he went into the field to play.	138
He wanted to know if there was a hawk around!	148
One day Peter was hopping around the field. He stopped now and then	159
to eat bits of grass. He also stopped to check to make sure there were	174
no hawks in the sky. Then, he found a patch of extra tasty grass. It	189
was sweet and moist. It tasted better than anything Peter had ever	202
eaten before. After a little while, Peter remembered what his mother	213
had said. He checked the sky for danger. He saw a hawk flying far up in	226

the sky. He turned and ran back to the bushes where his home was hidden. He was lucky the hawk had not seen him.

241
254

Appendix D

Student Copy **Form 2-1/HCO**

Jackie was a rabbit. She was tiny and very, very quiet. She had soft white fur and a snow white tail. She lived in a large field with many different animals. There were lizards and snakes. She saw them mostly in the summer when it was hot. There were little mice. They liked to run very fast. The mice got scared if they were out in the open for too long, so Jackie did not see them very often. Many birds lived in the field too. Some were small. Others were large. Jackie was not afraid of many birds. But there was one type of bird that Jackie was scared of. Her mom told her to be careful when this type of bird was near. So Jackie always looked carefully before she went into the field to play. She wanted to know if there was a hawk around!

One day Jackie was hopping around the field. She stopped now and then to eat some grass. She stopped to check to make sure there were no hawks in the sky. Then, she found a patch of extra tasty grass. It was fresh and moist. It tasted better than anything Jackie had ever eaten before. After a little while, Jackie remembered what her mother had said. She looked to the sky for danger. She saw a hawk flying far up in the sky. She turned and quickly ran back to the bushes where her home was hidden. She was lucky the hawk had not found her.

Assessor Copy **Form 2-1/HCO**

Student Name: _____ Date: _____

Jackie was a rabbit. She was tiny and very, very quiet. She 12
had soft white fur and a snow white tail. She lived in a large field with 28
many different animals. There were lizards and snakes. She saw 38
them mostly in the summer when it was hot. There were little mice. 51
They liked to run very fast. The mice got scared if they were out in 66
the open for too long, so Jackie did not see them very often. Many 80
birds lived in the field too. Some were small. Others were large. 92
Jackie was not afraid of many birds. But there was one type of bird 106
that Jackie was scared of. Her mom told her to be careful when this 120
type of bird was near. So Jackie always looked carefully before she 132
went into the field to play. She wanted to know if there was a hawk 147
around! 148

One day Jackie was hopping around the field. She stopped 158
now and then to eat some grass. She stopped to check to make 171
sure there were no hawks in the sky. Then, she found a patch of 185
extra tasty grass. It was fresh and moist. It tasted better than 197
anything Jackie had ever eaten before. After a little while, Jackie 208
remembered what her mother had said. She looked to the sky for 220
danger. She saw a hawk flying far up in the sky. She turned and 234
quickly ran back to the bushes where her home was hidden. She 246
was lucky the hawk had not found her. 254

Total Words Read: _____ - # of Errors: _____ = CWPM: _____

Student Copy **HCO/Form 2-3B**

Jamie came rushing into the house. She had exciting news to tell her mother. She had heard the news at school. She knew her mother would also be excited. A magic show was coming to town! The show would take place at school. It was going to be on Sunday afternoon. Jamie hoped she could go. She wanted her mom to go with her. Jamie told her mother about the magic show. Her mom said they could go. Jamie could not wait! She had heard about magic shows before. She had seen them on television. She had read about them in magazines. But she had never seen a magic show in person.

Jamie asked her mother if the magic show would be scary. She did not want to be afraid. Her mother told her that it would not be scary. Her mother told Jamie that the magic show would be fascinating to watch. She said they would try to see what the magician was doing. She told her daughter that magicians could be very sneaky. The day of the magic show came, Jamie and her mother went to school to go watch. They sat near the front so they could see the magician's hands. For the first trick, the magician made a dollar bill disappear. He held it in his left hand. He showed them all where it was. Then he put a white handkerchief over his left hand. He said a magic word. When he moved the handkerchief, the dollar bill was gone!

Assessor Copy **HCO/Form 2-3B**

Jamie came rushing into the house. She had exciting news to tell	12
her mother. She had heard the news at school. She knew her mother	25
would also be excited. A magic show was coming to town! The show	38
would take place at school. It was going to be on Sunday afternoon.	51
Jamie hoped she could go. She wanted her mom to go with her. Jamie	64
told her mother about the magic show. Her mom said they could go.	76
Jamie could not wait! She had heard about magic shows before. She	88
had seen them on television. She had read about them in magazines.	101
But she had never seen a magic show in person.	112
Jamie asked her mother if the magic show would be scary. She	124
did not want to be afraid. Her mother told her that it would not be	139
scary. Her mother told Jamie that the magic show would be fascinating	150
to watch. She said they would try to see what the magician was doing.	163
She told her daughter that magicians could be very sneaky. The day of	174
the magic show came, Jamie and her mother went to school to go	187
watch. They sat near the front so they could see the magician's hands.	202
For the first trick, the magician made a dollar bill disappear. He held it	214
in his left hand. He showed them all where it was. Then he put a white	228
handkerchief over his left hand. He said a magic word. When he moved	242
the handkerchief, the dollar bill was gone!	254

Appendix E

Interventions Targeting Oral Reading Fluency

Summer Reading Program 2012

June 5, 2012

Dear Parents,

Your child is invited to participate in a study conducted by Kaitlin Andreasen, Karissa Danes, and Dr. Michael Axelrod at the University of Wisconsin-Eau Claire. Kaitlin and Karissa are School Psychology graduate students at the University of Wisconsin-Eau Claire, and Dr. Axelrod is an Associate Professor and Director of the Human Development Center at the University of Wisconsin-Eau Claire. Your child is being recruited for participation in this study because of his/her involvement in the Academic Intervention Clinic's Summer Reading Program. The length of the study will be the duration of the Summer Reading Program: July 2nd - August 2nd, 2012.

The purpose of this study is to investigate the effectiveness of two specific reading interventions on oral reading fluency (i.e. reading accuracy and speed) and reading comprehension. If you consent to having your child participate in this study, he or she will be assigned to one of two interventions.

Intervention 1:
Intervention 1 participants will read reading passages three times in order to build fluency and comprehension. However, participants in this intervention will be provided with choices regarding which reading passages they want to read.

Intervention 2:
Intervention 2 participants will read passages four times in order to build fluency and comprehension. However, participants in this intervention will also review words which were read incorrectly with the researcher.

Data will be collected on your child's oral reading fluency, or correct words read per minute. Data will also be collected on your child's scores on reading comprehension measures during each reading session. In addition, your child will be asked to complete an acceptability survey that asks your child to report his/her perception of the reading interventions.

Risks involved with this study are minimal and unlikely. Your child may experience mild levels of frustration, particularly if he/she has significant difficulties in reading. To minimize frustration, your child will be reading passages at his/her instructional level. Should your child experience frustration, the researchers will respond to your child with breaks and encouragement. Your child will benefit from additional practice in reading, and possibly increase his/her reading rate and accuracy by the completion of the study.

The records of this study will be kept confidential by the researchers. If a report is published with your child's data, we will not include any information that will make it possible to identify him or her. Once collected, the data will be stored in a locked room at the University, and only first names will be written on any data sheets. Names will be changed on all information submitted for publication or presentation. Upon request, we would

be willing to provide an electronic document with a summary of the research results when the study is completed. Results can be obtained by contacting Kaitlin Andreasen at andreakm@uwec.edu or Karissa Danes at daneske@uwec.edu.

Please understand that your child's participation in this study is completely voluntary and you may withdraw your child at any time during the study. Your decision whether or not to allow your child to participate will not affect your or your child's current or future status with the Academic Intervention Clinic or the University of Wisconsin-Eau Claire.

Please contact Kaitlin Andreasen, Karissa Danes, or Dr. Axelrod should you have any questions about participation in this study. Kaitlin Andreasen can be contacted at andreakm@uwec.edu, Karissa Danes at daneske@uwec.edu, and Dr. Axelrod at axelromi@uwec.edu. You may also contact Dr. Don Bredle, Chair of the University of Wisconsin-Eau Claire's Institutional Review Board, should you have questions regarding your child's participation in this study. Dr. Bredle can be contacted at bredledl@uwec.edu or at 715-836-2373. You will be given a copy of this form to keep for your records.

Sincerely,

Karissa Danes
School Psychology Graduate Student
University of Wisconsin-Eau Claire
daneske@uwec.edu

Kaitlin Andreasen
School Psychology Graduate Student
University of Wisconsin-Eau Claire
andreakm@uwec.edu

Appendix F

Parental Consent Form

Interventions Targeting Oral Reading Fluency

Kaitlin Andreasen, University of Wisconsin—Eau Claire School Psychology Graduate Student, Karissa Danes, University of Wisconsin—Eau Claire School Psychology Graduate Student and Dr. Michael Axelrod, Ph.D., Director of the Human Development Center and Associate Professor in the Psychology Department, are conducting a study investigating the effectiveness of two interventions targeting oral reading fluency and reading comprehension. If you consent to your child's participation, he or she will be assigned to one of two interventions. Intervention 1 participants will read reading passages three times in order to build fluency and comprehension. However, participants in this intervention will be provided with choices regarding which reading passages they want to read. Intervention 2 participants will read passages four times in order to build fluency and comprehension. However, participants in this intervention will also review words which were read incorrectly with the researcher. Participants in both interventions will be asked to complete a brief comprehension measure with questions pertaining to the reading passage. In addition, your child will be asked to complete a brief acceptability survey that will ask him or her to report perceptions of the reading interventions.

This document is to certify that I, _____, herby freely agree to give my consent to allow my child to participate in the described study as part of the research program at the University of Wisconsin—Eau Claire.

- The research study and my child's role in the research study has been fully explained to me by Kaitlin Andreasen and Karissa Danes, and I understand the explanation as well as what will be expected of my child through participation in the study. An informational letter including the procedures of this study and description of any risks, discomforts, and benefits associated with participation has been provide and discussed in detail with me.
- I have been given an opportunity to ask questions, and all such questions have been answered to my satisfaction.
- I understand that I am free to withdraw my consent and discontinue my participation at any time.
- I understand that participation in this study is voluntary and not a requirement for being a part of the Summer Reading Clinic through the Human Development Center at the University of Wisconsin- Eau Claire.
- I understand that the length of the study will be the duration of the Summer Reading Clinic (July 2nd-August 2nd).
- I understand that this study has minimal risks. However, there is a risk of frustration that my child may experience, particularly if he or she has significant difficulties in reading. To minimize frustration, my child will be reading passages at his or her instructional reading level. In cases in which frustration is evident, the researchers will promptly respond to my child with encouragement and breaks when necessary.
- I understand that all data from this study will be stored in a locked office. I also understand that all data will be de-identified when transferring my child's reading records to the research database.
- I understand that I have the right to request an electronic document with a summary of the research results when the study is completed by contacting the researchers via email.
- I understand that if I have any questions or concerns about the treatment of the children in this study, I may contact the Chair of the Institutional Review Board at the University of Wisconsin-Eau Claire at the address below. Although this person will ask my name, I understand that all inquires will remain confidential.

Dr. Don Bredle
Chair, Institutional Review Board for the Protection of Human Subjects
University of Wisconsin- Eau Claire
Schofield 17
105 Garfield Avenue
Eau Claire, WI 54701-4004
715.836.2373

- I understand that I may also contact the primary researchers at the address below should I have any questions about the purposes of procedures associated with the study.

Kaitlin Andreasen
School Psychology Graduate Student
University of Wisconsin- Eau Claire
andreakm@uwec.edu
612.816.6617

Karissa Danes
School Psychology Graduate Student
University of Wisconsin- Eau Claire
daneske@uwec.edu
651-270-6990

STATEMENT OF CONSENT
I have read the above information. I give my consent to allow my child to participate in the research.

Signature _____ Date _____

Printed name _____

Appendix G

Participant Acceptability Questionnaire: Repeated Reading

Please circle your response or fill in the blank for the following questions. There are no right or wrong answers, and please be honest

1. Reading the story 3 times was helpful for me.

Agree Not Sure Disagree

2. Reading the story 3 times was boring.

Agree Not Sure Disagree

3. I like to practice reading using Repeated Reading.

Agree Not Sure Disagree

4. I think that reading the passage 3 times helped me to become a better reader.

Agree Not Sure Disagree

5. I would suggest this reading activity to a friend.

Agree Not Sure Disagree

6. My favorite part of Repeated Reading was:

_____

_____

_____

7. My least favorite part of Repeated Reading was:

_____

_____

_____

Participant Acceptability Questionnaire: Choice and Repeated Reading

Please circle your response or fill in the blank for the following questions. There are no right or wrong answers, and please be honest

1. Reading the story 3 times was helpful for me.

Agree Not Sure Disagree

2. Reading the story 3 times was boring.

Agree Not Sure Disagree

3. I like to practice reading using Repeated Reading.

Agree Not Sure Disagree

4. I think that reading the passage 3 times helped me to become a better reader.

Agree Not Sure Disagree

5. I liked when I was allowed to choose which story to read.

Agree Not Sure Disagree

6. I think that choosing the story helped me read better.

Agree Not Sure Disagree

7. I would suggest this reading activity to a friend.

Agree Not Sure Disagree

8. My favorite part of Choice and Repeated Reading was:

_____

_____

_____

9. My least favorite part of Choice and Repeated Reading was:

_____

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