Spring 2019

Can You Repeat That, Please? Using Repeated Reading With Low-Intermediate Adult English Language Learners

Jennifer Siegfried
Hamline University

CAN YOU REPEAT THAT, PLEASE? USING REPEATED READING WITH LOW-INTERMEDIATE ADULT ENGLISH LANGUAGE LEARNERS

Jennifer L. Siegfried

A capstone proposal submitted in partial fulfillment of the requirements for the degree of Master of Arts in English as a Second Language

Hamline University

St. Paul, Minnesota

May 2019

Primary Advisor: Betsy Parrish
Content Reviewer: Laurie Martin
Peer Reviewer: Sarah Knowles

ACKNOWLEDGMENTS

First, to “Team Thesis” – Betsy, Laurie, and Sarah – I could not have done this without your direction, insight, and encouragement. Betsy, thank you for your tireless guidance and for helping me to see connections to other areas of research. Laurie, thank you for being an unending wealth of knowledge and providing many insights that I would not have considered on my own. Sarah, thank you for asking the tough questions that I knew you would ask in order to make me a better researcher. I admire all that each of you have contributed to the field of adult education and ESL.

I owe a debt of gratitude to my husband, Stefan, who has supported my journey without complaint and at the expense of a great many household tasks.

I would never have considered a Master’s degree if not for my parents, who showed me through both words and actions that education is and should be a lifelong priority. Thanks also to my brother, who provided me with the very specific motivation of sibling rivalry.

Shannon, your enthusiasm for this project and help with data analysis was invaluable.

Kathy, my “work mom,” thanks for pushing me to do this at literally every opportunity.

Finally, to Jeri, my former dean and “accountability buddy,” thank you for your unwavering support. Michaela, thank you for guiding me to this topic and saving me (a little) work. And Adam, thank you for signing off on this research just weeks after joining our program. I’ve been incredibly fortunate to have worked with encouraging and thoughtful administrators who have supported each step of this journey.

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

CHAPTER ONE

Introduction

"We learn to read by reading a lot" (Grabe, 2002, p. 280).

For adults living in the U.S., reading is a part of everyday life. The written word is abundant in U.S. culture. Text is used to communicate news, convey knowledge, share opinions, make decisions, access healthcare, and so much more. But the written word is not equally accessible to all adults living in the U.S. Many adults are reading at proficiency levels that do not allow them to access the full range of information available in text, which may prevent them from accessing healthcare, reaching their income potential, and fully participating in their communities (Batalova & Fix, 2015; McShane, 2005; National Research Council, 2012). Many of these adults are non-native speakers of English who have immigrated to the U.S. in search of better opportunities. These adults may seek out instruction in order to learn the English they need to access these opportunities, so teachers who work with such learners in adult education programs must be prepared to help them learn to access the vast amount of knowledge and language available in text.

Unfortunately, for adults who struggle with reading, "reading a lot" may not be a practical or realistic goal. Adults who struggle with reading face unique challenges in improving their reading, and they are not likely to have the desire to read a lot.

Additionally, many do not have as much time available to dedicate to their education as children attending full-time school do.

Struggling adult readers may have difficulty in one or more components of reading. The goal of reading is comprehension, but other factors can influence how much struggling adult readers understand from a text. Research has found that good reading fluency, or the ability to read efficiently, is a critical component of reading comprehension (Kruidenier, MacArthur, & Wrigley, 2010). For many struggling adult readers, fluency practice is important and necessary component of comprehension.

Reading a lot is an even bigger challenge for adult English Language Learners (ELLs). These learners must learn both spoken and written English simultaneously, and reading is often a lower priority for these learners—and their instructors—than other language skills. Like their native-speaking counterparts, adults who are learning English are also likely to struggle with reading fluency. However, reading fluency is especially important for these learners because of the linguistic and cultural knowledge that is available through text; learners must be competent readers in order to access such information (Kruidenier, MacArthur, & Wrigley, 2010; McShane, 2005; National Research Council, 2012).

For adult education instructors, research-informed practices can help ensure that students' and other stakeholders' goals, such as "reading a lot" and understanding the text that adults encounter on a daily basis, are met efficiently and effectively. By researching reading fluency using the method of assisted repeated reading, or reading a text multiple times with a model reading example, with adult English language learners, I hope to contribute to the growing field of research-informed best practices for adult educators.

Personal and Professional Journey to Research

I first began teaching English as a Second Language (ESL) classes to adults in 2005. It was my first job following the completion of my undergraduate degree, and for a few years, I saw it as just that: a job. I was hired by the adult education department at the local community college to teach a low-level class that was just starting up, and it seemed like a great way to pass the time while I looked for something more permanent. While I took the job seriously, I never thought of it as a long-term path; the thought of pursuing further schooling never crossed my mind. A few years later, I was still working at this "temporary" job when I was offered an additional position teaching adult ESL for a local refugee resettlement agency. That was when I realized that teaching ESL was no longer a job for me—it was a career.

The realization that teaching adults was a legitimate career path sent me on a new trajectory in my professional life. My manager at the refugee resettlement agency encouraged me to take a professional development course in the basics of teaching ESL. This introduction to the academic field of Teaching English to Speakers of Other Languages (TESOL) was eye-opening, and I discovered that the processes and techniques that I had used and observed over the past few years had names, and rationales, and research behind them. I had been a decent teacher before, but taking that course helped me to start thinking more deeply about the process and reflecting on my own practices in the classroom. It also helped me start thinking about graduate school.

In the summer of 2013, I had the opportunity to earn a Graduate Certificate in TESOL at American University in Washington, D.C. It was an intense summer during which I completed 15 graduate credits, and I found myself growing exponentially as an

instructor as well as academically. Many, many aspects of that experience have made a lasting impression on me both professionally and personally, and it was that program that planted the seeds of what would eventually become a research interest for me: best practices in teaching second language reading.

Most of that summer was spent reading countless research articles to meet the requirements of my various classes and projects, but there were two readings in particular that I kept going over in my mind. The first was Grabe's (2002) article, "Dilemmas for the Development of Second Language Reading Abilities," in which he writes "we learn to read by reading a lot" (p. 280). The statement is so simple, yet in the context of adult second language reading, we know that it is not simple at all. Decoding a new language, perhaps with a new alphabet, and trying to understand new words all while attempting to make meaning from a connected text are not likely to come easily to any learner. I began to wonder how teachers could best encourage "reading a lot."

The second article that stuck with me partially answered that question. Renandya and Jacobs' (2002) piece, "Extensive Reading: Why Aren't We All Doing It?" introduced me to the concept of having students read extensively in ESL classes. This inspired me to start experimenting with extensive reading in my intermediate-level ESL classes, and to my surprise, almost all of the students enjoyed it. It was as though they understood the importance of reading, but needed someone—an instructor—to give them the time, opportunity, and support necessary to make reading happen. The technique of using extensive reading in my adult ESL classroom was so positive that I ended up giving presentations on the experience at two state professional conferences in 2015. At the time, I considered my research on reading complete.

Later that same year, however, the financial situation at the refugee resettlement agency took a drastic turn for the poorer, and over 70% of the education staff was let go. Back to working at only one job, I wondered how I would fill my newfound extra time. I remembered how much I learned from that initial course that introduced me to the academic field in TESOL and my time in my graduate certificate program and decided that pursuing a Master's degree through Hamline University was an appropriate course of action.

In the interim, my professional trajectory at the community college program also changed slightly. After twelve years of teaching on the ESL side of our program, my manager approached me about teaching a reading class in our Adult Basic Education (ABE) program. I agreed, and soon found myself in an unfamiliar teaching context, somewhat unsure of myself and deliberating on how to put together a reading course. The student population was different; although many were students who had exited our ESL program, a number of students were younger adults and fluent English speakers who, for a variety of reasons, had not completed high school in the U.S. (and some students brought a negative attitude toward school with them to class!). I remembered what I had learned from those two articles I had read during my certificate program and the research I had done for my presentations on extensive reading and managed to flounder through my first two courses. I felt out of my element, knowing that I could improve my instruction and course design but not quite sure how to go about accomplishing it. When the opportunity to take a new professional development offering on the STudent Achievement in Reading (STAR) initiative came up in the fall of 2017, I jumped at the chance. The STAR program was developed by the U.S. Department of Education's

Office of Career, Technical, and Adult Education (OCTAE) to help states, programs, and instructors implement evidence-based reading instruction into ABE classrooms in order to improve the reading skills of adults reading at an intermediate level (Kratos Learning, n.d.). In this year-long training course, I learned about research-based techniques for teaching alphabetics, vocabulary, fluency, and comprehension - the four components of reading.

It was about midway through the year-long STAR training course that I reached the point of starting my capstone research. Unsure of what to study, I consulted with my manager at the community college, who abruptly answered with "reading!" She encouraged me to go with what I know and to look for a topic that would bridge my experience with ABE reading classes and ESL teaching. As I thought about this, I realized that I found myself keenly interested in reading fluency. Reading fluency was a key component of the ABE reading classes I had been teaching, but many of the English language learners who had matriculated into the class from our ESL program were struggling with fluency more than their native-speaking counterparts. If these advanced language learners were struggling with fluency at the ABE level, what was happening in the lower levels of ESL? More importantly, to inform teaching in our adult ESL classes, would it be possible for some of the reading techniques used in ABE to be effective with lower-level English learners as well?

Rationale for Pursuing the Research

As I pondered these questions, I began to focus in on one specific level of our ESL program. Low-intermediate ESL learners are the largest segment of the student population in our Adult Education program, with about 400 of our approximately 1200

ESL students enrolled in this level (G. Holladay-Baxter, personal communication). Anecdotally, this is also the level that students and teachers experience a great deal of frustration with. Anderson (2008) refers to this as the "intermediate level slump" (p. 67), and both teachers and students in our program often express frustration when learners fail to progress to higher levels at the completion of the low-intermediate ESL course. Classes in our program run on a quarterly schedule, with each course running for eight weeks. In order to move up to the high-intermediate ESL level, students must earn a scale score of at least 212 on the Comprehensive Adult Student Assessment Systems (CASAS) Life and Work Reading exam (National Reporting System, 2018). According to the National Reporting System level descriptors, students in low-intermediate ESL should be able to "process, understand, interpret, and/or engage with" level-appropriate text, including identifying the main idea of a text and answering questions about key details, in order to exit the level (National Reporting System, 2017, p. B-23). With classes lasting only eight weeks, many students are not able to make the level gain necessary to move up and end up repeating the level, sometimes multiple times. Both students and teachers are understandably frustrated with this system of advancement through the program; unfortunately, there are several policies in place at the state level that prevent changes at the program level. Since we cannot change the system, instructors are constantly looking for ways to work within it, and this often focuses on desperate attempts to improve learners' reading skills in a short amount of time.

When my manager suggested looking at reading for my capstone research, it clicked. In ABE, instructors use a method called repeated reading to improve learners' reading fluency, and reading fluency has been shown to increase comprehension (Curtis

& Kruidenier, 2005; Kruidenier, 2002). Repeated reading, first developed by Samuels (1979) for English-speaking primary school learners, has emerged as a successful technique in adult education for native English speakers and advanced ELLs and is a core instructional technique in STAR classes. With repeated reading, students read a text multiple times in order to increase their fluency with the text and comprehension of its words and ideas. If this technique works for native speakers who are beginning readers, as well as second language learners at an advanced proficiency level (Kruidenier, MacArthur, & Wrigley, 2010), might it also work with second language learners at the low-intermediate proficiency level? I began to research the method of repeated reading for English learners and discovered that there is very little research available, and almost no research that deals specifically with low-intermediate learners in an adult education context (Kruidenier, MacArthur, & Wrigley, 2010). If I wanted to know whether repeated reading could be effectively used to increase fluency and comprehension for English learners at a low-intermediate level, I would have to undertake the research myself.

Unfortunately, instruction time in adult education programs is often limited; teachers and students may tend to focus on maximizing the time spent on the skills they need to survive everyday life. Reading fluency, or the ability to read text efficiently and with comprehension, is an often neglected skill in many classrooms (Rasinski, 2012). However, fluency instruction does not have to use much instructional time, and its potential benefits to adult English learners may far outweigh the investment of time (Anderson, 1999; Gorsuch & Taguchi, 2008). This is particularly true of adult English learners at the low-intermediate proficiency level. As states adopt the College and Career Readiness Standards (CCRS) and other standards-based guidelines for adult education

which emphasize an increase in academic rigor and focus on career pathways (Pimentel, 2013; Shore, Lentini, Molloy, Steinberg, & Holzman, 2015), the role of reading becomes an even more crucial part of classroom instruction.

It is critical, then, that researchers find evidence-based methods that instructors can implement in their classrooms in order to improve reading skills efficiently. Repeated reading has emerged as a promising practice in fluency instruction, and the technique has been adapted for wider and more varied populations beyond native-speaking children and adults. Assisted repeated reading, in which learners have opportunities to hear a text modeled by a fluent reader while reading along is one such adaptation that Gorsuch and Taguchi (2008) made for their university-level English learners. Adding the support of a model fluent reading may help English learners in an adult education context improve their own reading fluency and comprehension skills, as prior research has established these skills to be very closely linked (Kruidenier, MacArthur, & Wrigley, 2010; McShane, 2005). However, very little research in this area has been conducted with low-intermediate adult English language learners. My research, then, will focus on the use of assisted repeated reading with low-intermediate adult learners in order to answer the following research questions:

1. To what degree does assisted repeated reading increase oral reading fluency of adult intermediate English language learners?
2. What, if any, effects does the practice of oral repeated reading have on learners' comprehension?
3. What, if any, effect does the practice of assisted oral repeated reading have on learners' attitudes toward reading in English?

Summary

In the following chapters, I describe research that has been conducted on reading and reading fluency in both first and second languages. Reading fluency has been shown to have a strong correlation with reading comprehension in native-speaking adults who are struggling to read; second language reading research also hints at a similarly strong correlation, although there may be aspects of learning that differ among students with different language and literacy backgrounds. The method of repeated reading is explored with regards to adult learners, and preliminary investigation shows that the method has great potential to be significantly effective with adult English learners as it is with native-speaking struggling readers. If my research shows that gains may, in fact, transfer to new texts, then repeated reading might be one method that instructors in my program can use to work on reading skills with our low-intermediate students.

In Chapter Two, previous research on reading fluency and the adult education population will be discussed. An overview of reading instruction in adult education provides the context for this research along with a more in-depth look at the reading fluency of adult learners in their first language (L1). A discussion of research in adult reading and fluency in a second language (L2) follows, and the chapter ends with a look at how the method of repeated reading has been used to provide instruction in oral reading fluency for different student populations. Chapter Three focuses on the methodology of this research, including an overview of the setting, participants, and data collection methods for the study, along with details of how data will be quantified and analyzed. In Chapter Four, the results of data collection and an analysis of the implications will be provided. Finally, Chapter Five will reflect on this research and

evaluate how it interacts with the work that has been conducted by others. Chapter 5 will also discuss the implications and limitations of this work as well as possibilities for future research.

CHAPTER TWO

Review of Literature

While Chapter One discussed the researcher's journey to the exploration of repeated reading with low-intermediate adult ELLs, this chapter will look at the background of reading and fluency in adult education. First, the need for reading instruction in the adult education context is explored. Next, differences and challenges in reading specific to L2 learners is examined. A discussion of reading fluency and fluency development in L1 readers comes next, followed by fluency differences specific to L2 readers and how the L1 may affect L2 reading fluency. Fluency instruction in the adult education context is reviewed, and finally, repeated reading is presented as a technique that may aid both L1 and L2 adult learners in overcoming reading challenges.

Reading is a significant component of the adult education landscape in the U.S.; however, many adults in the U.S. struggle with literacy (National Research Council, 2012). While much of the current research on reading has been conducted in a K-12 context, there is a growing body of research that informs reading instruction for adult education (Kruidenier, MacArthur, & Wrigley, 2010). Fluency has been identified in ABE as a critical component of adult reading instruction, along with alphabetics, vocabulary, and comprehension (Bell & Dolainski, 2012; Kratos Learning, n.d.; Kruidenier, MacArthur, & Wrigley, 2010). Although good comprehension is the main

goal of reading instruction, the literature from L1 reading research has shown that fluency is crucial to achieve comprehension.

Reading ability is perhaps even more important in a second language context because text can be a valuable source for language input (Anderson, 1999; Lems, 2012). However, although there are similarities between how L1 and L2 learners can improve reading abilities, the literature about L2 reading highlights several contrasts. Reading fluency in the L2 is a particular struggle because unfamiliar language and vocabulary leads to slower reading (Anderson, 1999), which leads to less motivation to read and, therefore, less language input (Nation, 2009). Because "we learn to read by reading a lot" (Grabe, 2002, p. 280), researchers have been exploring methods to incorporate fluency into both L1 and L2 classrooms.

Repeated reading is one method that researchers have explored to incorporate "reading a lot" and fluency instruction into adult education classrooms. Originally created for use with children who were struggling to read at grade-level norms (Samuels, 1979), the method of repeated reading has been shown to be effective with adult L1 beginning and intermediate readers as well as advanced English as a Second Language (ESL) learners (McShane, 2005). However, little research to date has focused on using repeated reading to increase the reading fluency and comprehension of adult ELLs at an intermediate level of language proficiency. Therefore, this research is focused on the following questions:

1. To what degree does assisted repeated reading increase oral reading fluency of adult intermediate English language learners?

2. What, if any, effects does the practice of oral repeated reading have on learners' comprehension?
3. What, if any, effect does the practice of assisted oral repeated reading have on learners' attitudes toward reading in English?

Adult Education and Reading

Adult education programming is a broad category services for a heterogeneous group of learners. Federal guidelines for adult education state that it exists for low-literate adults, aged 16 or older, who are no longer served by high school or other secondary education programs (Kruidenier, 2002). This population can include adults who did not complete high school, those with learning disabilities, incarcerated individuals, speakers of nonstandard English dialects, and English language learners (ELLs). Although these learners come from widely varied demographics, many have a need for instruction in basic skills in order to reach such goals as earning a high-school equivalency, improving their job skills or socioeconomic status, or becoming proficient in the English language.

Literacy instruction for adult learners. Adult education is a critical component of the U.S. educational landscape. Adults have different educational needs from children; they often come to class with a definite goal or purpose but with limited time to dedicate to their schooling. They have more varied responsibilities in their lives (Curtis & Kruidenier, 2005), which can include work, caring for family, maintaining a household, and other commitments. Many adults have developed skills that allow them to function and survive their daily lives, yet a lack of basic educational skills, such as reading proficiently, can prevent them from fully participating in their communities and making the best use of their resources (McShane, 2005). A lack of reading proficiency can also

limit job opportunities, income, and access to information about healthcare (Kruidenier, MacArthur, & Wrigley, 2010).

Low literacy skills affect a significant portion of adults in the U.S. The National Assessment of Adult Literacy, a survey of 18,000 U.S. adults conducted in 2003, found that as many as 43 percent of adults aged 16 and older have literacy skills at the basic or below basic level (National Research Council, 2012). At the basic level, adults can accomplish simple, everyday reading tasks in simple documents and short, everyday prose; adults at the below basic level are only able to complete the most simple and straightforward tasks (National Center for Education Statistics [NCES], n.d.). Adults in this group may struggle with word and letter recognition and may not understand even simple passages (NCES, n.d.; National Research Council, 2012). Similarly, data from the 2012 Program for the International Assessment of Adult Competencies (PIAAC) shows that almost half of U.S. adults lack some literacy skills "needed to function in modern society" (Batalova & Fix, 2015, p. 9). With such a large percentage of adults who are struggling to read well, literacy instruction is a critical need in the U.S.

The STAR initiative for adult reading instruction. While there is a great need for adult reading instruction in the U.S. in order to help adult learners realize the same opportunities as their more proficient peers, research in this area has been somewhat lacking. The Adult Literacy Research Working Group, a collaborative effort by the National Institute for Literacy and the National Center for the Study of Adult Learning and Literacy, found only about 70 studies exploring reading in adult learners for their 2002 report (Kruidenier, MacArthur, & Wrigley, 2010). Research focusing specifically on ELLs' reading in an adult education context is even more limited. Much of what is

known about adult reading in both first language (L1) and second language (L2) contexts has its basis in kindergarten through 12th-grade (K-12) research (Curtis & Kruidenier, 2005; Kruidenier, MacArthur, & Wrigley, 2010). However, adult learners differ from children not only in their varied responsibilities and limited time but also in cognitive development (Lightbown & Spada, 2013; Taylor & Marienau, 2016) as well as other obstacles that may interfere with their education.

Since it is critical that adult learners' limited time in class be used most efficiently, the Office of Career, Technical, and Adult Education of the U.S. Department of Education (OCTAE) created the STudent Achievement in Reading (STAR) initiative to develop best practices for adult reading instruction from the research that is available (Kratos Learning, n.d.). STAR makes use of evidence-based reading instruction (EBRI), or techniques that have been shown to be effective by empirical studies, to improve adults' reading proficiency. STAR divides reading into four components: alphabetics, or how readers decode words; vocabulary, or the words a reader is familiar with; comprehension, or the ability to make meaning from text; and fluency, or a reader's ability to read text efficiently (McShane, 2005; Kratos Learning, n.d.). Each component can affect the others. For example, a reader who struggles to decode words will not improve his or her vocabulary, and a reader who reads slowly will fail to make meaning from text. Comprehension, of course, is the ultimate goal in reading (Curtis & Kruidenier, 2005), but a struggling reader may have difficulty in one or all of the components (Abadiano & Turner, 2005; McShane, 2005). The STAR initiative focuses on providing intensive instruction of each component based on students' needs by providing explicit instruction, modeling, guided practice, and independent practice.

Practice is key for improving adult learners' reading skills because, again, "we learn to read by reading a lot" (Grabe, 2002, p. 280). The benefits of exposure to print include increased motivation, greater vocabulary, knowledge of language use and grammar, increased academic ability, and metalinguistic awareness (Curtis & Kruidenier, 2005; Kruidenier, MacArthur, & Wrigley, 2010; Sparks, Patton, Ganschow, & Humbach, 2012). In fact, Sparks, Patton, Ganschow, and Humbach (2012) assert that opportunities for print exposure have been found to have a stronger impact than cognitive ability on literacy skills in L1 research. The very act of reading can help those with lower cognitive ability level the playing field by exposing learners to more vocabulary and access to general knowledge.

The need for additional research. While the act of reading and providing evidence-based instruction can help remove limits on learners with low reading skills, the STAR initiative is somewhat limited in scope. It has been developed for readers at an intermediate reading level, defined by the National Reporting System as those earning scores between 4.0 and 8.9 grade level equivalencies (GLE) on the Test of Adult Basic Education (TABE) forms 9 and 10 (National Reporting System for Adult Education, 2018). STAR covers L1 readers at an intermediate level as well as advanced ESL learners; however, since limited research is available on reading instruction for beginning and intermediate adult ELLs, less is known about whether EBRI techniques can be effective for these adults as well. Further research is needed to determine if EBRI techniques in the low-intermediate adult ESL classroom can effectively improve learners' oral reading fluency as well as their reading comprehension skills.

Reading in the L2

Although little research has been conducted on adult reading in an L1 context, even less exists for adult reading in an L2 context. Similar to L1 adult reading, much of what is known or hypothesized about L2 reading has its basis in a K-12 context, although some research has focused on university L2 learning contexts. Adult L2 readers face a unique set of challenges in learning to read, and learners' L1s can influence this process. However, the importance of reading as a source of language input cannot be overlooked, and reading practice can help learners overcome some of the challenges they face in their new language.

Reading challenges for adult L2 learners. Learning to read in a second language presents challenges at any level, but adult ELLs face the added challenge of learning both oral and written language simultaneously. While L1 learners bring a wealth of spoken vocabulary as well as linguistic and cultural knowledge to their acquisition of literacy, L2 learners at beginning and intermediate levels are starting from scratch (Kruidenier, MacArthur, & Wrigley, 2010). Depending on their L1 and educational background, some L2 readers may need to learn basic literacy skills in addition to learning the second language. L2 readers will also encounter a great deal more unfamiliar language than L1 beginning readers, and decoding skills alone are not enough to be able to comprehend what they read. L2 readers will require controlled texts with schema-activating activities in order to make meaning from text (Nation, 2009; Pey, Min, & Wah, 2014), and they will need opportunities to work with text to practice reading skills.

Opportunities for reading in an adult education classroom may present another challenge; since reading needs to be taught along with other language skills, teachers may

not be able to dedicate significant time to reading practice. This is unfortunate, as Gorsuch & Taguchi (2008) note that poor readers, particularly L2 readers, need sufficient reading practice in order to develop their reading skills; only "actual reading experience" can help L2 readers improve (p. 255).

Reading challenges versus language challenges. In addition to insufficient reading practice, other factors can also influence the L2 reading skills of adolescent and adult learners. Similar to much of the research that has been done for L1 reading, L2 reading research has also focused on the individual components of alphabetics, vocabulary, fluency, and comprehension to determine best practices for instructional techniques and interventions. Jeon and Yamashita (2014) undertook a meta-analysis of L2 reading correlates to try to determine whether issues in L2 reading are rooted in reading challenges, such as metacognition and working memory, or language challenges, such as vocabulary and grammatical knowledge. They found that L2 comprehension is primarily a language challenge, but reading challenges are significant as well. Specifically, they found that decoding ability, vocabulary, grammatical knowledge, and L1 reading proficiency have the strongest correlations to L2 reading comprehension. However, one significant issue with Jeon and Yamashita's conclusions when applying them to an adult education context is that most of the adult-oriented research they analyzed dealt with language learners in university-level classes; many of these learners would be likely to have very strong L1 literacy skills that may transfer to their L2 reading as well as larger L2 vocabularies from earlier L2 schooling. ELLs in an adult education classroom may come from varied and perhaps limited educational backgrounds, and weak literacy skills in an L1 may not transfer to an L2 (Bigelow & Vinogradov, 2011;

Sparks, Patton, Ganschow, & Humbach, 2012). While vocabulary and grammatical knowledge are likely to significantly affect L2 reading in an adult education context, L1 literacy skills may have an even more significant effect on this population than Jeon and Yamashita's meta-analysis concluded.

L1 literacy effects on L2 reading. Print exposure and literacy skills in the L1 may have a profound effect on literacy in the L2. Sparks, Patton, Ganschow, and Humbach (2012) explored how L1 reading achievement correlated with L2 proficiency among U.S. high school students. They found that L1 reading ability was a strong predictor of not only L2 reading, but of L2 proficiency in general, and that literacy levels in the L1 may play a role in L2 outcomes. They also found that L1 print exposure had particularly significant effects on L2 reading comprehension and word decoding skills. L1 reading and print exposure also facilitates the development of other skills, such as vocabulary acquisition, grammatical knowledge, phonological awareness and a stronger memory for words and their meanings. Students who have higher oral and written language ability in their L1s are likely to exhibit a stronger aptitude for learning a second language, and this aptitude may extend into learning a second language even later in life. Similarly, strong decoding and comprehension strategies in the L1 can transfer to L2 reading, although Sparks et al. (2012) note that some L2 vocabulary knowledge is necessary in order to facilitate comprehension. Jeon and Yamashita (2014) add that some higher-order cognitive processes, such as making inferences, can also transfer to L2 reading in learners with strong L1 literacy. Decoding may also be facilitated by strong L1 literacy skills; however, this may be dependent on features of the learner's L1.

Decoding, of course, is necessary for reading comprehension in any alphabetic language; similar to L1 beginning readers, research has shown that decoding is correlated to reading ability in young learners in L2 contexts (Jeon & Yamashita, 2014). Among adult learners, however, the correlation is harder to determine. Adults who are reading in an L2 may be influenced not only by L1 literacy, but also by L1 interference and the distance between the orthography of their L1 and L2. Learners who come from an L1 that uses an alphabetic script may have more efficient decoding abilities in English than those whose L1 uses a non-alphabetic script (Jeon, 2012). Similar grammatical structures or many cognates between the L1 and L2 may also facilitate L2 reading proficiency (Jeon & Yamashita, 2014). Likewise, many differences between the L1 and L2 may hinder reading proficiency, at least in beginning and intermediate levels of ESL. As learners' L2 proficiency increases, readers can make more use of L2 orthographic knowledge in order to make meaning from text. Thus, while beginning and intermediate adult ELLs may be helped or hindered in their reading efforts by features of their L1, as learners increase their language proficiency, their L2 literacy will similarly improve.

Language input and language proficiency. Adults have shown capacity to improve reading skills at any age and in any language (Bigelow & Vinogradov, 2011), and "continued growth in reading after elementary school may play an important role in second language learning" even later in life (Sparks et al., 2012, p, 494). Although Sparks et al. focused on the variance of L1 literacy skills in L2 proficiency, the overall message is clear: more language input from reading leads to more language proficiency. If adult L2 readers at the intermediate level are given more opportunities to practice reading in the L2, they will also gain more language input through reading. Children's L1

vocabulary and grammatical knowledge is primarily a result of language exposure rather than language teaching, and reading practice is a significant contributor to children's knowledge of words. A wider variety of words and grammatical structures are used in text than in spoken language (Sparks, et al., 2012), and Pey, Min, and Wah (2014) found that, unsurprisingly, low-frequency words were more likely to be incorrectly decoded by L2 readers due to their lack of familiarity in students' oral vocabulary. Seok and DaCosta (2014) also note that vocabulary instruction is particularly important to improve the fluency and comprehension abilities of ELLs, and instruction of low-frequency vocabulary may be best facilitated with text. Therefore, it is vital that L2 learners, especially adult ELLs, receive significant and varied practice with print. Even reading aloud to adult ELLs can improve their reading proficiency. As Rasinski (2005) states, many teachers in elementary settings probably read aloud to students regularly, but this technique has been shown to be valuable even for struggling readers who are older and are reading in an L2. Moreover, Sparks et al. (2012) note that L2 reading proficiency may also facilitate the development of oral language proficiency, even for L2 learners who do not learn a second language until later in life.

Just as with adult L1 learners who are struggling to read, reading practice may have many benefits for adult L2 learners. Language exposure through reading can lead to language proficiency, even in older learners who are learning a second language. However, there are also many differences between L1 and L2 reading, and much of what is known comes from research with children or with well-educated adults in university and EFL settings. A focus on reading fluency with adult ELLs may provide more input into L2 reading in an adult education context, and this focus will further inform the

research on a link between fluency and comprehension in adult L2 readers at the low-intermediate level.

Reading attitudes and reading ability. Although reading has many benefits for both L1 and L2 adult learners, those who are struggling to read in either their L1 or L2 may face both emotional and developmental barriers. Grabe (2002) is not wrong in his assertion that reading is learned by the act of reading, but adult beginning readers, especially readers who struggle with literacy in their native language, are likely to have a negative relationship with reading. Curtis and Kruidenier (2005) note that "emotional factors such as motivation, engagement, and fear of failure play a major role in reading success" (p. 1), and these feelings may be particularly potent in adult learners who have struggled with reading for many years or have expended energy hiding this struggle from others. When these readers encounter a text that they do not understand, they tend to slow down in an attempt to improve comprehension; consequently, reading becomes a laborious and time-consuming process (Anderson, 1999). As a result, these learners spend less time reading and thus do not improve their reading skills. Stanovich (1986) describes this as the "Matthew effect" (p. 381) after the biblical Gospel of Matthew in which the rich get richer and the poor get poorer. With reading, learners who read well are motivated to read more, resulting in more vocabulary and general knowledge and, eventually, higher educational attainment, more job opportunities, and greater access to resources that will improve their socioeconomic status. In contrast, poor readers are less motivated to read and do not make the same gains in learning (Jeon & Yamashita, 2014; Stanovich, 1986). Struggling readers may continue to avoid reading into adulthood, further contributing to low levels of adult literacy in the U.S.

Adult ELLs may have similar negative attitudes toward reading in English. According to Nation (2009), negative preconceptions of and attitudes toward reading in the L1 may transfer to the L2. A negative attitude toward reading can lead to achievement gaps in reading in a second language just as it can in a first language. Even learners who are avid readers in their L1 may not be motivated to read in the L2 due to a lack of linguistic knowledge and reading confidence (Garvey, 2018). Additionally, adult ELLs may view reading as a utility, a task to be engaged in when necessary for survival. Many may not wish to make the effort to engage with text outside of school or necessity, and many more may not have the time to dedicate to reading practice independently.

Reading Fluency

Although comprehension is the objective of both L1 and L2 reading alike, it has been well established that the four components of reading – alphabetics, vocabulary, fluency, and comprehension – have symbiotic relationships, and good instruction will be most effective when all four components are taught (Kruidenier, MacArthur, & Wrigley, 2010). A weakness in one or more other components can hinder a learner's comprehension. The link between fluency and comprehension has been well-established in L1 research (Jeon, 2012), and comprehension is not possible without some level of fluency (McShane, 2005). Reading fluency is a crucial component of learning to read efficiently and effectively, and "fluency with comprehension is and should be a primary goal in our literacy instruction" of L1 learners (Abadiano & Turner, 2005, p. 55).

Definitions of fluency. How, then, is reading fluency defined? Many researchers define fluency in terms of rate, accuracy, and prosody (Abadiano & Turner, 2005; Crawley & Merritt, 2009; Curtis & Kruidenier, 2005; Pey, Min, & Wah, 2014). Rate is

the reader's speed, often measured by the number of words read in a given amount of time, while accuracy is the number or percentage of words read correctly (Curtis & Kruidenier, 2005). Prosody, or reading with expression, "includes the set of vocal patterns and inflections that people use when speaking or reading aloud" (Lems, 2012, p. 249). Curtis & Kruidenier (2005) further define fluent reading as the ability to read efficiently and decode text easily and accurately, and Crawley & Merritt (2009) add phrasing to their definition of prosody. Poor fluency may be indicated by a slow pace, choppy reading, repetitions and regressions, false starts, and improper phrasing or intonation, while readers with good fluency exhibit a natural, conversational pace and make use of punctuation and phrasing in text. (Abadiano & Turner, 2005; Jiang, 2016).

Rate and accuracy. Reading rate is probably the most salient measure of reading fluency. It would be difficult to deem a reader as fluent if their reading rate is below a certain threshold. Hasbrouck and Tindal's (2005) seminal study on oral reading fluency of K-8 students has provided elementary and intermediate teachers with a set of grade-leveled norms for words-per-minute (WPM) read aloud. Bader and Pearce (2009) note that adult oral reading fluency may differ due to differences in how print is processed by adult learners; they recommend a range of word-per-minute reading rates appropriate for adults at beginning (80-102 WPM), low intermediate (115-133 WPM), and intermediate (120-140 WPM) adult L1 learners (p. 34).

Accuracy is another salient subskill of oral reading fluency. Too many deviations from a written text may mean that a learner cannot process its meaning. In fact, Bader and Pearce (2009) include only words read correctly in their guidelines for analyzing reading rate. Accurate decoding of words is a necessity of fluent reading; further

examination of the relationship between rate and accuracy is explored in the discussion of Automaticity Theory later in this chapter.

Prosody. Prosody is perhaps the subskill of the above definitions of fluency that has the greatest impact on comprehension, and prosody is most easily observed in students' oral reading (Bader & Pearce, 2009). Appropriate pauses and phrasing in oral reading indicate the learner's ability to read the text in meaningful segments or chunks (Curtis & Kruidenier, 2005; Jiang, 2016). Doing so indicates that the learner is able to "convey and construct meaning with his or her voice" (Rasinski, 2005, p. 9), and demonstrates comprehension of text. Expression, or emphasizing key words in reading by varying pitch and volume, is another key component of prosody (Bader & Pearce, 2009). When readers interpret phrasing and expression as an author intended, they reach a higher level of comprehension due to inferred meaning than a reader who only interprets the text literally (Rasinski, 2012).

Comprehension. Another aspect of fluency is comprehension, but there are varying views on the role of comprehension in a definition of fluency. Pey, Min and Wah (2014) claim that it is unknown "whether fluency is the cause or the effect of comprehension" (p. 29), and Samuels (1979) defines fluency only in terms of speed and accuracy but notes that comprehension is likely to increase as a result of fluency practice. However, other researchers have found a symbiotic relationship between these components of reading. Abadiano & Turner (2005) insist that a complete definition of fluency "acknowledges a critical link to comprehension" (p. 51) because it is possible that a reader may read with good fluency without understanding the text. Without comprehension, fluency is simply a measure of reading speed and a performance of text

(Abadiano & Turner, 2005; Rasinski, 2012). Even Samuels (1979) agrees that if the content and vocabulary in a text are familiar, students should be able to comprehend what they have read aloud. Seok and DaCosta (2014) assert that past research has suggested a complementary correlation; fluency may improve comprehension while comprehension also improves fluency. Rasinski (2012) further argues that fluency instruction must be positioned as a means to achieve comprehension, and a true measure of fluency will include the components of rate, accuracy, and prosody in addition to comprehension.

L1 fluency and automaticity. Recognizing that fluency is a means to comprehension and that comprehension is the ultimate goal of reading is just one part of the fluency puzzle for adult learners. Learners must also have strong decoding abilities to deal with unknown words as well as a sizable inventory of sight words (Abadiano & Turner, 2005). This sight vocabulary is developed by practicing reading to the point that decoding and word recognition become automatic; that is, the print components of reading can be done quickly and without attention. When reading becomes automatic, more attention can be given to making meaning from what is read. Automaticity Theory, proposed by LaBerge and Samuels (1974, as cited in Samuels, 1979), describes how the demands of reading can compete for a learner's limited cognitive effort: when too much attention is given to decoding text, fewer cognitive resources are available for making meaning. Automaticity occurs when a reader can recognize words without effort, and when word recognition is automatic, comprehension improves as the reader attends to the meaning components of text (Curtis & Kruidenier, 2005; Rasinski, 2012; Rawson & Touron, 2015). Automaticity is accomplished through practice and instruction in fluency.

The adult learner's task, then, is to improve their word recognition skills to the point of automaticity, which is signaled by fluent reading. Improved fluency will free up cognitive resources for making meaning (Gorsuch & Taguchi, 2008; Pey, Min, & Wah, 2014), and fluent readers are able to simultaneously perform both decoding and comprehension tasks. In contrast, readers with poor fluency spend more energy on decoding, leaving fewer cognitive resources available to make meaning from the text. When reading is interrupted in order to decode words, fluency suffers, and if readers progress through a text too slowly, their working memory will be less efficient at making meaning (Abadiano & Turner, 2005; Crawley & Merritt, 2009; Curtis & Kruidenier, 2005; Jiang, 2016). If poor readers are able to improve their fluency, they will be more able to attain higher levels of comprehension.

Measuring and developing fluency in the L1. Improving fluency and automaticity for L1 learners is a process. Samuels (1979) discusses three levels of automatic word recognition. In the "nonaccurate stage," students struggle to recognize words in a reasonable amount of time. The "accurate stage" is characterized by word recognition but the student is still using most of his or her cognitive energy on decoding; in oral reading, the learner exhibits choppy, word-by-word reading. Finally, students reach the "automatic stage," in which they can recognize words effortlessly, and oral reading exhibits a natural speaking pace with good prosody (p. 406). Good prosody and a natural pace can signify that a reader is using his or her working memory to read words and phrases while making meaning from the text, but Pey, Min, & Wah (2014) contend that the subskill of accuracy is most strongly aligned with automaticity theory. They claim that meaning can be "distorted and misinterpreted" when decoding is not accurate

(p. 21), which may lead to a breakdown in comprehension. However, Samuels (1979) states that the best indication of automatic reading is likely the learner's rate. Without automatic word recognition, reading rate cannot improve. Therefore, automaticity, along with rate, accuracy, prosody, and comprehension, must be considered an integral part of the fluency component of reading.

Fluency instruction, then, must incorporate both automaticity and prosody in order for adult learners to improve their comprehension. Rasinski (2012) asserts that fluency can benefit a wide variety of learners and should be integrated into classrooms at all levels of education, and the National Reading Panel (2000, cited in Crawley & Merritt, 2009) found that fluency instruction is appropriate for all ages of learners as well as for both good and poor readers. While much research from psychology has shown that older adults struggle to move to memory-based cognitive processing, such as sight word retrieval, from algorithmic processing, such as decoding, Rawson & Touron (2015) found an exception in adult reading processes. They discovered that repeated practice with a meaning-based reading task encouraged a quicker shift to memory-based retrieval in both older and younger adults. While the older adults were slower to make this shift than their younger counterparts, the researchers suggest that the "rich context of a narrative passage" may support older learners in moving toward memory-based retrieval, or automaticity in word recognition (p. 821). While it is possible that some adults did not switch to memory-based processing but instead made use of more efficient decoding, the cognitive process is more efficient. Either method of more automatic processing allows the reader to divert more attention to prosodic elements and making meaning from text.

Fluency in the L2

Similar to research on adult L1 reading fluency, little research exists for L2 reading fluency, especially for adult ELLs in an adult education context. Reading fluency may be overlooked by L2 teachers for many of the same reasons that reading instruction in L2 classrooms may be limited; its importance to both reading and language development may be misunderstood (Gorsuch & Taguchi, 2008). Additionally, fluency has been assumed to be the natural result of increased reading proficiency (Gorsuch & Taguchi, 2008; Jiang, 2016); however, there is little evidence to support this perception. Kruidenier, MacArthur, and Wrigley (2010) note that each component of reading may develop at a different rate, and this remains true for adult L2 readers. Furthermore, instructors may simply be unaware of the importance of fluency or how to provide instruction. Anderson (2008) found that few, if any, L2 reading textbooks include activities specifically for building reading fluency. This is particularly unfortunate because Nation (2009) notes that equal instructional time should be given to what he calls the four strands of a language course: "meaning-focused input, meaning-focused output, language-focused learning, and fluency development" (p. 1). Although Nation is referring to fluency in both speaking and reading, it is obvious that reading fluency should still be a crucial part of the language course. He concludes that fluency work may be neglected in L2 courses partly because fluency development in an L2 is best done by using what learners already know. When instructional time is limited, as it is in many adult education courses, both instructors and learners may prefer to focus on learning new material. Since adult ELLs are working toward the simultaneous goals of learning written and spoken

language, fluency instruction for this group of learners has been overlooked by both instructors and researchers.

Differences between L1 and L2 reading fluency. Although reading fluency has not been used effectively or often in many L2 classrooms, it may be just as effective in L2 reading instruction as it is in L1 reading instruction (Nation, 2009). However, there are some important differences between L1 reading fluency and L2 reading fluency. One key difference between L1 and L2 reading fluency is a slower reading rate in the L2 (Lems, 2012). Proficient bilinguals read about 30% slower in their L2 than in their L1, and even highly skilled bilingual learners may read more slowly in their L2. ELLs have much poorer reading ability than their native-speaking counterparts, and even advanced ELLs may be reading at a rate below 100 words per minute (Anderson, 1999). English learners often have a weaker ability to recognize and identify words, leading to slower reading rates with less accuracy, which, in turn, weakens comprehension (Seok & DaCosta, 2014). Below a certain threshold, learners cannot read quickly enough to make meaning from text because too much cognitive energy is being put toward decoding. According to Anderson (2008), research has shown that adolescent and adult ELLs need to achieve a rate of 180-200 words per minute in silent reading in order to divert more attention toward comprehension. Similar to L1 reading fluency, print exposure and practice with reading in the L2 should increase learners' speed and automaticity. As L2 learners gain fluency skills, they move from decoding letters, to words, to phrases (Nation, 2009). When longer strings of text can be held in working memory, comprehension increases (Lems, 2012). Sufficient practice with reading in the L2 can

help learners, even adult ELLs, increase their reading fluency to achieve better comprehension.

L1 influence on L2 fluency. However, fluency is subject to the same challenges as other components of L2 reading. Although a relationship exists between oral reading fluency and reading comprehension, this has not been studied much in L2 populations; learners from different L2 backgrounds may face unique challenges in reading fluency. Jiang (2016) found that the more closely related a learner's L1 and L2 are, the stronger the link was between oral fluency and comprehension. The distance between the writing systems of each language can affect how much difficulty L2 learners encounter in reading English text aloud. Learners whose L1 orthography is similar to English may have some advantage in decoding English words (Lems, 2012), especially at beginning levels of ESL. Similarly, L1 decoding patterns may interfere with accuracy in oral reading (Pey, Min, & Wah, 2014). However, some research has concluded that L2 beginning readers are likely to have stronger decoding skills than their native-speaking counterparts (McShane, 2005), although there may always be some L1 interference in pronunciation.

L2 decoding versus vocabulary knowledge. These stronger decoding skills do not necessarily lead to better comprehension, though. When L1 readers decode a word in oral reading, they are typically able to draw on their oral vocabulary to find its meaning. With L2 readers, however, this is not guaranteed. They may be able to decode the word, but may not know its meaning because their oral vocabulary is not as developed as that of a native speaker. Alternatively, L2 readers may understand a word's meaning in text but be unable to decode it orally (Pey, Min, & Wah, 2014). Similarly, Jeon (2012) states that L2

readers may perform oral passage reading accurately, but not efficiently; therefore, L2 fluency cannot be considered a substitute for comprehension. Oral and silent vocabulary knowledge, then, is a crucial component of L2 fluency. Indeed, this was one of the strongest correlates, along with grammatical knowledge, that Jeon & Yamashita (2014) found aligned with reading comprehension. They advise that "text comprehension is impossible if readers have no knowledge of the individual words that constitute the text" (p. 165). For L2 learners, then, some vocabulary knowledge is needed in order to begin reading connected text.

Controlled texts for L2 fluency practice. Limited vocabulary knowledge, however, does not preclude beginning and intermediate ELLs from practicing reading fluency, but progress may be affected by vocabulary knowledge and other factors. New vocabulary that L2 readers encounter in text will be harder to learn because of the competing demands on working memory when trying to both decode and make meaning in an L2 (Sparks, et al., 2012). Similarly, unfamiliar grammatical structures can compete for the reader's attention when reading in an L2 (Jeon & Yamashita, 2014). Thus, texts used for fluency practice in the L2 should be controlled for vocabulary and grammar. According to Nation (2009), reading material for fluency instruction should be at or below the learner's proficiency level. This may be in contrast with how reading material for fluency instruction is selected for adult L1 beginning readers, but L1 readers already have a well-developed oral vocabulary and an understanding of the grammar of the language. L2 readers' limited vocabulary may also affect how fluency and comprehension skills transfer to new readings. With L1 readers, some fluency and comprehension gains from deep practice of one reading will transfer to a new text

(Rasinski, 2012). Research has been inconclusive about whether the same phenomenon occurs in L2 reading; it is possible if fluency is practiced regularly over the long term, but transfer is often limited because of differences in vocabulary and grammar between passages (Gorsuch & Taguchi, 2008). The possibility of transfer may increase when texts used for L2 fluency practice are controlled for vocabulary and grammatical complexity.

Controlling text complexity for L2 fluency instruction can also help L2 learners' oral fluency by limiting unfamiliar language. Lems (2012) cautions that unfamiliar language may inhibit fluency because, when asked to read aloud, ELLs' performance may be hindered by an affective filter. Learners may be self-conscious about their oral reading due to unfamiliarity with vocabulary and pronunciation as well as background and cultural knowledge. Particularly with very beginning ELLs, oral reading may not be appropriate because learners may not yet have enough language proficiency to perform the task. If oral fluency is practiced with lower level adult ELLs, it is crucial that the text is well within their proficiency level (Lems, 2012; Nation, 2009).

Automaticity in L2 reading fluency. Text complexity may be one major difference between fluency instruction for adult L1 intermediate readers and adult intermediate learners of English, but other factors of how fluency is learned and how it relates to comprehension may be similar. Working memory is significant in L2 reading just as in L1 reading. While Jeon and Yamashita (2014) found working memory to be a weaker correlate to comprehension when compared with vocabulary and grammar, it is still significant for achievement in reading comprehension. Without working memory, readers cannot access their long-term memory knowledge to make meaning from text. Just as with L1 fluency instruction and practice, L2 fluency practice makes reading an

automatic process so that cognitive energy is available to create meaning from text. Gorsuch and Taguchi (2008) found that automaticity was a significant factor in the ability of university EFL students to make meaning from text, corroborating Automaticity Theory in L2 reading. Pey, Min, and Wah (2014) also found that correlation between fluency and comprehension as found in L1 research can be duplicated in an L2 context with their study of secondary ESL students in Malaysia, further showing the relevance of Automaticity Theory in L2 reading fluency. However, they caution that while a link between fluency and comprehension exists for L2 learners, the relationship between these components may not act in quite the same way between L1 and L2 contexts. Jiang (2016) affirms that more research is needed to explore the link between fluency, especially oral reading fluency, and comprehension, particularly among adult L2 learners from different L1 backgrounds.

Oral reading fluency of adult L2 learners. Oral reading fluency may be an especially significant indicator of comprehension in L2 reading. As in L1 reading, reading fluency is a critical component of overall reading ability, and fluency may demonstrate ability in reading performance (Jiang, 2016; Seok & DaCosta, 2014). Although Lems (2012) cautions that claims supporting oral reading as a measure of fluency for ELLs are variable, research does show that oral reading competence increases along with silent reading comprehension. Seok & DaCosta (2014) found that oral reading fluency and silent reading fluency were significantly related to each other in their study of secondary and postsecondary learners, and that for ELLs, comprehension was strongly related to fluency ability. Similarly, Jiang (2016) found that oral reading fluency can

contribute to improved reading comprehension among adult learners from varying L1 backgrounds.

Correlations between L2 fluency and L2 comprehension. Just as with L1 research, there are differing aspects of fluency that have been looked at in L2 research. While Jiang (2016) found that oral reading fluency contributed to L2 comprehension with adult ELLs, she also discovered that different aspects of fluency were significant for learners of different L1 backgrounds. She looked at four components of fluency: rate, accuracy, prosody, and efficiency, or "words read correctly per minute" (p. 229). Jiang notes that efficiency is a significant component of fluency for L2 readers because they may read very quickly, but have several errors in their reading. Her study found that efficiency was the most significant indicator of increased comprehension for Arabic speakers, but for learners from Chinese and Japanese L1s, prosody was the only significant component of fluency that correlated to increased comprehension. Accuracy and rate were most significant for Spanish speakers, most likely because Spanish is orthographically related to English. However, this study looked at learners of varying English proficiency levels; studying learners with similar proficiency levels may yield somewhat different results.

Other studies with adolescent L2 learners have yielded similar findings for the correlation between oral reading fluency and reading comprehension. Jeon (2012) studied three variables of oral reading fluency – passage reading, pseudoword reading, and word reading – in high school English learners in Korea and found a strong correlation between oral passage reading fluency and comprehension in silent reading. Learners' fluency was judged on their ability to read quickly and with accuracy. However, in contrast with

Jiang's (2016) study of adult learners, Jeon (2012) did not examine prosody as a variable for comprehension. This is also in contrast with Pey, Min, and Wah's (2014) finding that prosody was most strongly linked to comprehension in their study of secondary school students of English in Malaysia. While rate and accuracy were also linked to comprehension, they found that reading rate has a stronger link to prosody than with accuracy, and prosody has the strongest link to comprehension. They also note that most participants in their study read aloud in a "monotonous and non-expressive tone" (p. 28); therefore, teachers of adolescent and adult ELLs may need to focus on prosody more than other elements in fluency instruction.

Fluency Instruction in the Adult Education Classroom

What both L1 and L2 adult learners need, then, is practice. Practice is required to attain automatic processing of text with comprehension of the author's intended meaning (Rasinski, 2005). Automatic processes in reading are developed just like automatic processes in other areas of life, such as driving a car, playing an instrument, or playing a sport. Rasinski refers to methods of "wide and deep practice" (p. 521). Wide practice refers to the reading of many varied texts, which is important for language input and vocabulary acquisition. Deep practice, then, is the method of reading one text several times in order to achieve a desired level of fluency. For adult learners, deep practice can be a motivating factor for reading in order to overcome the "Matthew effect" described above. When learners practice deep reading, their speed improves and they read more, which then continues to improve their fluency (Abadiano & Turner, 2005; Anderson, 1999; Crawley & Merritt, 2009; Gorsuch & Taguchi, 2008). For adult learners, then, fluency practice makes perfect.

Many adult education classrooms lack fluency instruction. Although most readers, especially struggling adult readers, need practice and instruction in fluency, many classrooms fail to provide it (Anderson, 1999; Rasinski, 2005). Fluency instruction may be ignored or overlooked for a variety of reasons. One is that teachers may hold contradictory views of fluency's role in reading; some believe that good oral reading fluency is a result of skilled reading, while others see fluency as a gateway to comprehension (Abadiano & Turner, 2005). Some instructors may fail to understand that fluency and comprehension have a symbiotic relationship – good fluency aids good comprehension, and good comprehension leads to improved fluency. Another reason is that many teachers and some researchers consider fluency to be a skill that should be mastered in lower elementary grades and is not worth spending limited classroom time on in upper grades or higher learning. Yet another reason is that many adult education instructors may not have professional training in reading instruction. In actuality, research has shown that students at all levels of schooling may struggle with reading proficiency, and weak fluency skills are a contributing factor (Rasinski, 2012). For struggling readers in upper grades, this can cause frustration with school and reading when assignments may take "double and triple the time" than what skilled readers need (p. 521). Pitts (1986, as cited in Krashen, 1993) found that even university students who struggled with reading experienced benefits from fluency practice. Similarly, fluency can be an issue for readers at all levels of adult education (Curtis & Kruidenier, 2005); therefore, practice in fluency is likely to benefit adult learners as well.

Instructional practices for fluency. Although fluency practice may be neglected in many classrooms, it can be easily integrated into instruction by having students

practice reading repeatedly in order to perform a reading for others (Rasinski, 2012). However, Anderson (1999) cautions that fluency instruction must not overemphasize accuracy. Too much attention to accuracy can slow down the reading and hinder comprehension. When students focus on avoiding word recognition errors, they slow down their reading and their reading rate suffers (Samuels, 1979). Anderson laments that much of the fluency instruction that does exist indeed puts too much emphasis on accuracy; Abadiano & Turner (2005) add that while fluency does require strong word recognition ability, word recognition does not necessarily lead to fluency. Best practices for fluency instruction must include all components of fluency – not only rate and accuracy, but prosody and comprehension as well.

For adult readers, fluency will be best developed by using a combination of fluency practices that incorporate all components of fluency over a significant period of time (Jiang, 2016). Anderson (1999) asserts that fluency instruction can be easily implemented by most classroom teachers using existing materials, and regular practice needs only a small portion of class time. However, Rasinski (2005) fears that even in classrooms where fluency instruction is part of reading work, the teacher may not take a key role in the process, even though the teacher is often the most fluent reader. Students may make bigger gains when the teacher participates in fluency work, partly because they are an active model of fluent reading and also because doing so demonstrates the importance of fluency practice. Krashen (1993) adds that when a fluent reader models reading aloud for struggling readers, their literacy development is impacted from hearing an appropriate pace, strong prosody, and new vocabulary in context. Explicit instruction is also a key component of fluency development for struggling readers, as learners

improve more when they know what they are expected to learn (Anderson, 1999; Rasinski, 2005). Teachers who take on a coaching role and provide feedback during fluency practice help students see areas of weakness (Rasinski, 2005). Adults who receive this type of instruction will more rapidly develop their fluency and, therefore, their reading comprehension.

Because reading fluency has such a strong correlation with comprehension, Rasinski (2005) argues that regular fluency assessment can give insight into students' reading progress. However, Pey, Min, & Wah (2014) caution that assessing a single component of reading does not give an accurate picture of a learner's reading ability; it may be best to assess each component of reading to get a true snapshot of progress (McShane, 2005). Oral reading is appropriate for assessing student progress in fluency, and can give important insight into a learner's reading comprehension; according to Rasinski (2012), most adults hear themselves in silent reading, and poor prosodic skills in oral reading are likely to contribute to poor comprehension in silent reading.

Strong prosody, good accuracy, and appropriate reading rate all contribute to good fluency, and good fluency in turn contributes to good comprehension. This link has been well established in L1 reading for learners at all educational levels. The link between fluency and comprehension among L2 beginning readers, particularly adult L2 readers, has not been as well researched. While there are some known similarities between L1 and L2 reading, there are also several differences that must be explored further. Additional research may provide some insight into how fluency and comprehension may be linked in adult L2 readers at the low-intermediate proficiency level.

Potential benefits of fluency instruction with adult L2 learners. Just as with L1 reading, fluency instruction may play a key role in L2 reading comprehension. While Seok and DaCosta (2014) recommend that fluency instruction for ELLs focuses on reading aloud at the word level, Nation (2009) notes that as learners' fluency improves, the units of text they read become larger, moving from individual letters to whole words to phrases. They also become more efficient at recognizing larger units of text, making the reading automatic and, therefore, fluent.

Fluent reading may also benefit L2 learners beyond assisting in reading comprehension. As with L1 reading, improved fluency allows learners to take in more text, thereby increasing language input and proficiency (Anderson, 1999). Practicing fluency with adult ELLs can not only improve their reading rate but may also boost confidence, help them learn English prosody and phrasing, and strengthen their phonological awareness. Additionally, fluency practice can indirectly lead to implicit learning of language structure, cultural information, and other content available in text (Lems, 2012). But learners must be given sufficient opportunities to practice oral reading fluency in order to reap such benefits (Jiang, 2016; Rasinski, 2005). Furthermore, L2 learners should be "pushed to develop fluency in reading" by their instructors (Nation, 2009, p. 8), because readers with poor fluency are not likely to effectively practice deep reading on their own. Anderson (2008) agrees, stating that "if we can get intermediate level readers to read at 200 words per minute with 70% comprehension, they will be prepared to move out of the intermediate level slump and on to being proficient readers of English" (p. 67). Instructors must provide guidance and interventions to promote fluency in L2 readers. Many researchers have suggested supported reading, repeated

reading, and performance reading with explicit instruction as effective methods for increasing L2 fluency (Jiang, 2016; Rasinski, 2005; Seok & DaCosta, 2014).

Although some of these methods have been preliminarily researched in L2 contexts to further explore the link between L2 fluency and reading comprehension, more research is needed. Most of the existing research on L2 fluency has been studied in an EFL or university setting or has taken place among adolescent learners. Little research has focused specifically on the link between fluency and comprehension with adult ELLs at the intermediate level, and less has focused on which methods of fluency practice may be most effective at improving the fluency of learners in this context. Repeated reading with a fluent model may be one way to link fluency and comprehension with adult L2 learners.

Repeated Reading

One method for improving fluency that has been shown to be effective for both L1 and L2 readers is repeated reading. Samuels (1979) is often credited for developing the modern method of repeated reading for use with struggling readers. The method entails reading a short text, between 50-200 words, "several times until a satisfactory level of fluency is reached" (Samuels, 1979, p. 404). The method is then repeated with a new text, and over time, the student's speed and reading accuracy increase as skills transfer to new texts. Additionally, the number of repetitions needed to reach the desired level of fluency decreases as practice continues.

Automaticity. Although repeated reading is attributed to Samuels (1979), the method is not necessarily a new concept. Historically, educational settings in the U.S. and Europe used repetitions of familiar prayers and Biblical verses to teach reading to

schoolchildren (Samuels, 1979). Because the learners were using familiar text, they could read the words repeatedly until reading fluency was achieved. Familiar – or manageable – text is key to using repeated reading in modern teaching contexts. For L1 beginning or struggling readers, this should be text that is at a learner's independent reading level or just beyond it (Abadiano & Turner, 2005; Nation, 2009). Some models of repeated reading suggest that the learner first perform a cold reading aloud of the text, followed by repetitions of the text with a fluent model reader, which could be the instructor reading aloud for the student, or the student listening to a recording of the reading. Instructors may provide feedback or instruction on rate, accuracy, or prosody, and the learner reads again until a desired level of fluency is achieved (Crawley & Merritt, 2009; Curtis & Kruidenier, 2005; Nation, 2009). Repeated reading is effective because it "provides the practice needed to become automatic" (Samuels, 1979, p. 406). The method allows struggling readers to improve their fluency skills in the same way that an athlete or musician hones their craft, by practicing the basic components over and over again until they become automatic.

Repeated reading with adult learners. Samuels (1979) originally developed repeated reading to complement the reading instruction of learners with reading disabilities or other reading problems. In recent years, it has also been shown to be a successful method for working with struggling adult L1 readers. Curtis and Kruidenier (2005) have deemed repeated reading as "the most effective instructional technique for increasing reading fluency in adults" (p. 6). Fluency is increased during repeated reading because repeating a reading naturally puts some pressure on the learner to read faster, in competition with his or her previous performance (Nation, 2009). Assisted repeated

reading, in which the teacher provides a fluent model while students follow along in the text, is a particularly effective method for adult L1 readers as the responsibility for reading is gradually released to the learner as repetitions continue (Rasinski, 2005). Modeling fluent reading for L1 learners is a critical technique for fluency instruction, and when the learners have opportunities to re-read texts with modeled guidance, significant gains can be made in both fluency and comprehension (Abadiano & Turner, 2005). Providing a model of fluency can also help learners improve their oral reading prosody. Like speed and accuracy, prosody can be improved through the deep practice provided by repeated reading, and with sufficient practice, gains in prosody may also be transferred to the reading of new texts (Rasinski, 2012). These increases in fluency are a main reason that repeated reading is an integral part of EBRI instruction for adults.

Effects on comprehension. With increased fluency comes increased comprehension, and comprehension is the main goal of reading and EBRI classes for adults. When learners re-read text, the now-familiar material is processed more efficiently, allowing learners to focus more cognitive resources on creating meaning from the text (Anderson, 1999). In fact, Gonzalez and Elijah (1975, as cited in Samuels, 1979) found that a second reading of a passage at learners' frustration level resulted in 3.3% fewer errors, thus bringing the text down to the same difficulty as the learners' instructional level. However, learners need to understand that the repetition of readings has a purpose, whether it is to perform for an instructor, peer, or other audience; to improve one's comprehension of a text, or to improve some aspect of fluency (Nation, 2009; Samuels, 1979). While some instructors may think that repeated reading will bore students, Samuels actually found the opposite to be true: the use of short texts helped to

maintain interest and build confidence by allowing learners to experience frequent success in fluency. However, Taguchi, Melhem, and Kawaguchi (2016) discuss a case study in which a reader did express boredom due to too many repetitions of a reading, although it is important to note that in that case, the learner had set her own goal of six repetitions for each text. Both instructors and learners must keep in mind that the goal of repeated reading is to increase fluency and, therefore, comprehension. Rasinski (2012) cautions that repeated reading has not been shown to enhance fluency and comprehension when the only goal appears to be increased speed, as increased speed alone has not been shown to increase comprehension. Samuels adds that repeated reading is not intended to teach all reading skills; instead, it should complement struggling readers' instruction. However, Abadiano and Turner (2005) state that, when implemented effectively, both strong and struggling readers can obtain benefits from repeated reading.

Repeated reading with L2 learners. Repeated reading has been shown to benefit both child and adult struggling L1 readers, but L2 research has been less robust. Gorsuch and Taguchi (2008) looked at repeated reading with university EFL students in Vietnam and found that it may improve reading fluency in much the same way for L2 learners as L1 learners; repeated reading increases the automatic reading and recognition of words, which allows for more cognitive focus on meaning. However, L2 learners in this study were less able to transfer fluency and comprehension skills from one text to new readings over the 11-week treatment period, although the researchers believe that a more longitudinal study would reflect higher levels of transfer. They conclude that repeated reading as a method for increasing fluency is feasible in the ESL classroom; learners are still improving their fluency and comprehension after multiple readings of a text, and the

method does not take much class time. This is in line with Anderson's (1999) claim that learners "understand more when reading something twice at a faster reading rate than when reading it slowly only one time" (p. 3). Repeated reading with adult ELLs may improve more than just reading rate as well. Lems (2012) claims that word recognition is improved by repeatedly reading a text, which can also help ELLs' confidence in reading. Additionally, repeated reading helps adult learners gain experience in English phrasing and prosody. However, Lems warns that an adult ELL's comprehension cannot be accurately gleaned from a cold oral reading of a text. When lower-level ELLs read aloud, it is likely that most of their cognitive energy is being put toward decoding and performing in the L2, leaving little energy left for making meaning. Reading proficiency is improved when students have the opportunity to practice the reading more than once. Seok and DaCosta (2014) found that strategies for fluency instruction, such as repeated reading, may significantly benefit adolescent and adult ELLs, and by using explicit instruction and providing opportunities for learners to practice, repeated reading can help older L1 and L2 struggling readers improve their automaticity.

Repeated reading and reading attitudes. As discussed earlier with regards to both L1 and L2 reading fluency, motivation to read can play a significant role in how learners' fluency and other reading skills develop. However, attitudes toward reading have been improved in L1 learners through the use of repeated reading. Samuels, Ediger, and Fautsch-Patridge (2005) note that motivation to read is a key part of building fluency, and repeated reading requires that learners engage with a text several times. When given the support that repeated reading and assisted repeated reading provide, beginning readers may recognize that their skills are improving are eager to continue practice (Samuels,

1979). The practice is also likely to work with adult L2 readers. Anderson (1999) states that "by reading faster the reader is encouraged to read more" (p. 2), further improving their reading skills. Repeated reading may be able to help adult ELLs overcome possible hesitance to reading in English, and assisted repeated reading may also help lower the affective filter associated with reading aloud.

Potential benefits of repeated reading. Repeated reading, then, has great potential to help adult ELLs improve their fluency skills. Research has shown that repeated reading with L1 adult readers can benefit the three main fluency components of rate, accuracy, and prosody, and that the automaticity built by reading texts repeatedly can also aid comprehension. Improved comprehension can also lead learners to read more, further improving their reading skills. While less research has been conducted with ELLs, repeated reading has shown some promising results in the same areas. However, little research to date has focused specifically on ELLs in an adult education context who are at the low-intermediate proficiency level. Additional research using repeated reading in this context may provide more insight into a link between fluency and comprehension in adult L2 reading. Therefore, the research questions that this paper will explore are:

1. To what degree does assisted repeated reading increase oral reading fluency of adult intermediate English language learners?
2. What, if any, effects does the practice of oral repeated reading have on learners' comprehension?
3. What, if any, effect does the practice of assisted oral repeated reading have on learners' attitudes toward reading in English?

Summary

Repeated reading has been shown to be an effective method for increasing the fluency, comprehension and reading motivation of young readers as well as adult readers in L1 learning contexts. Research among K-12 populations has shown that L1 reading fluency can be a strong indicator of other reading skills, including comprehension, and research with adult beginning and intermediate L1 readers has also shown fluency to be a critical component of reading ability. Second language reading, especially among adult learners, has not been significantly explored, and improving the reading fluency of these learners has been explored even less so. More research is needed to establish a link between fluency and comprehension of L2 reading in an adult education context. The next chapter will provide an overview of the research methodology used to implement repeated reading with a group of low-intermediate adult English learners in an adult education context.

CHAPTER THREE

Methods

Chapter Two described previous research on reading and fluency in adult education and adult ESL, but further research is needed to determine the effectiveness of repeated reading with low-intermediate adult ELLs. In order to examine how repeated reading may influence the reading fluency and comprehension skills of these learners, a mixed-methods approach using repeated reading with a voluntary group of adult learners was devised. Participants took part in repeated reading activities for 8 interventions over a four-week period, and assessments of fluency and comprehension was collected at the second, fifth, and eighth interventions to evaluate gains in these skills. The research design, participants, setting, and data collection methods were selected to isolate the variables of fluency and comprehension, and a pilot study was carried out to evaluate the effectiveness of the research.

Research Design

Because there is a lack of research focusing on adult ELLs at the low-intermediate level with regards to reading fluency and how it may affect comprehension, this mixed-methods study was designed to address these gaps. Voluntary participants came from an adult education program in the Midwestern U.S. and were a heterogeneous group of learners with regards to language background and age. The participant sample size was small in order to manage the amount and variety of data to be collected.

In spite of a small sample size, data collection methods have been designed to provide as much quantitative information about participants' fluency and comprehension as possible. This convergent mixed-methods approach (Creswell, 2014) combines quantitative data about participants' fluency and comprehension with qualitative information about their backgrounds and attitudes about reading in English in order to develop a clearer picture of how repeated reading may affect adult ELLs' reading fluency. By using this approach, it may be possible to generalize the results to inform ESL instruction in the adult education program where the research takes place, and it may possibly be useful for informing fluency instruction of adult ELLs for a wider audience.

In order to inform instruction and contribute to the small but growing body of research on the use of repeated reading with adult ELLs, this research is focused on the following questions:

1. To what degree does assisted repeated reading increase oral reading fluency of adult intermediate English language learners?
2. What, if any, effects does the practice of oral repeated reading have on learners' comprehension?
3. What, if any, effect does the practice of assisted oral repeated reading have on learners' attitudes toward reading in English?

Participants

Participants in the study were adult English language learners (n=9) enrolled in an adult education program at a community college in the Midwestern U.S. (Table 1). Like the adult education population in many areas of the U.S., they comprised a heterogeneous group consisting of a variety of ages, L1 backgrounds, and life experiences. L1

backgrounds included Spanish, Chinese, Persian, and Arabic, with an age range of 22-48 years. Six participants were female and three were male. Participants reported formal education ranging from three years or less through high school completion, and formal English instruction as one year or less (with several reporting that they were in their first English class ever). Time living in the U.S. ranged from just three months to around ten years.

Table 1

Participants

Participant	Sex	Age	L1	Education	Time in U.S.	English Study
P1	F	40	Spanish	10-12 years	5 years	1 year
P2	F	48	Chinese	10-12 years	3 years	1 year
P3	F	41	Spanish	0-3 years	3 months	< 3 months
P4	M	38	Spanish	10-12 years	2 years	< 3 months
P5	F	48	Spanish	10-12 years	8 years	< 3 months
P6	F	22	Spanish	0-3 years	2 years	4-6 months
P7	F	34	Persian	0-3 years	2 years	< 3 months
P8*	M	43	Spanish	4-6 years	10 years	< 3 months
P9	M	29	Arabic	4-6 years	2 years	< 3 months

*P8 did not complete the minimum eight treatment sessions and is not included in data analysis except for the reading attitude survey.

Participation in the study was voluntary; participants were actively enrolled in low-intermediate ESL classes, but treatment sessions took place outside of class time. All participants had a scale score between 201-210 points on the Comprehensive Adult Student Assessment Systems (CASAS) Life and Work Reading exam, the standardized assessment that is used for placement and measuring learning gains in the adult education program. This score identifies learners as being in the low-intermediate Educational Functioning Level for ESL as defined by the National Reporting System (CASAS, 2018). Participants were recruited from three sections of low-intermediate ESL classes that met

during the mornings in the Spring 2019 semester. The researcher explained that the purpose of the study was to determine whether repeated reading could help adult ESL students improve their reading skills. Participants who completed the eight necessary treatment sessions were given a gift card to the community college's bookstore as compensation for their time.

Informed Consent and Participant Confidentiality

Because the participants for this study are English learners, consent forms were given in English as well as students' native languages. To protect participants' identities, all data containing identifying details was assigned a code, with the identifier key accessible only by the researcher. Electronic documents and audio recordings were maintained on a password-protected, private computer with a backup stored on a password-protected, private cloud service. Audio recordings were accessed, under supervision by the researcher, by one other instructor at the program for interrater reliability. Hard copies of documents were maintained in a dedicated, private file box that remained in the researcher's possession during treatment sessions and data compilation. Outside of treatment sessions, the file box was locked and kept in the researcher's home. Hard copies of documents and any electronic files containing personally identifiable information of participants were destroyed upon completion of the project.

Setting

The study took place in an adult education program in the Midwestern United States. It is a non-credit program within the local community college that offers ESL, ABE, and Adult Secondary Education (ASE) classes to adults age 16 and older who are not enrolled in secondary education. The program is open to any adult who does not hold

a U.S. high school diploma or high-school equivalency certificate. The program served approximately 2100 adult learners during the academic year beginning July 1, 2017, with about 1200 learners enrolled in ESL, almost 600 learners in ABE, and over 300 learners in ASE (G. Holladay-Baxter, personal communication). Each course meets twice a week for eight weeks, for a total of 60 hours of instruction. Students advance through the program based on their standardized test scores on the CASAS for ESL or the TABE for ABE/ASE.

The campus where adult education classes are held is in the downtown area of a medium-sized city outside of a major metropolitan area. The adult education department is housed on one entire floor of the building, with most classes, the program's main office, and all administrative offices on the same floor. There are a few ESL classes that take place at other campuses or community locations, but the majority of classes take place on campus. The current building opened in 2011, and all classrooms contain a uniform number of student tables and chairs as well as a teacher's workstation with a dedicated computer, document camera, and projector. Treatment sessions took place in one of these classrooms after morning ESL classes had been dismissed.

Data Collection

Data collection took place over the course of about four weeks, with two interventions per week. One additional intervention took place at the beginning of the fifth week in order to allow for participant absences during the data collection period. This timeline was designed to avoid as much participant attrition as possible; it coincided with the program's class schedule without interfering with the first or last week of classes, and did not span any breaks between class sessions. Additionally, Gorsuch and

Taguchi's (2008) study suggests that short and frequent repeated reading interventions are more likely to encourage fluency development and potential transfer of skills to new passages than less frequent interventions. Although a more longitudinal timeline would be ideal, the reality of the adult education context is that student attrition is frequent and unpredictable; changes in adult learners' lives can affect their ability and commitment to attend classes.

Data collection materials. Materials for data collection included a short reading passage for each session, two sets of comprehension questions for each passage, and handheld audio recorders. Additionally, the first treatment session included a survey to collect participants' demographic data as well as to assess motivation and confidence to read in English. The final treatment session included a survey with the same format to assess any changes in attitudes toward English reading.

Student survey. To learn about participants' demographics and attitudes toward reading, a survey was devised for the first and final treatment sessions. Demographic information included age, L1, years of formal education in native country, years spent living in the U.S., total years of formal English instruction, and years of English instruction in the U.S. Participants were also asked about their reading frequency in both their L1 and in English.

To assess attitudes toward reading in English, participants were asked to rate a series of statements about reading on a five-point scale (strongly agree, agree, neutral, disagree, strongly disagree). Statements included such things as whether participants like reading in English and self-assessments of comprehension and confidence (Garvey,

2018). Statements about reading fluency were also included. See Appendix A for the complete survey.

Texts. One text was prepared for each treatment session, for a total of nine texts. Texts were selected from *Read 100* (Bennett, 2006), a collection of reading passages that are approximately 100 words each and controlled for vocabulary and grammar. Texts in this book are designed for readers at a beginning ABE level, which is also appropriate for ESL students at the low-intermediate level (Anderson, Foster, & Steele, 2017). The passages are intended for adolescent and adult readers, so the content was high-interest and relevant to students' lives. The passages selected for repeated reading interventions were all informational texts for consistency across treatments, as different types of texts may affect readers' fluency (Bader & Pearce, 2009). Each 100-word passage was a complete text, which is important in order for readers to be able to effectively create meaning (Abadiano & Turner, 2005). Additionally, the 100-word length follows recommendations from research that passages for repeated reading be between 50-300 words (Crawley & Merritt, 2009; Pey, et al., 2014; Samuels, 1979). Texts were typed in a word processing document for formatting consistency, and each text included a photograph to help orient the learner to the topic and activate background knowledge (see Appendix B).

Comprehension question sets. Two sets of written comprehension questions were developed for each text. Because the texts are quite short at approximately 100 words apiece, question sets were limited to four questions each. The first set of questions was given to participants to answer immediately after an initial reading of the text, and the second set was given to participants after their final reading of the text. Each set consisted

of four statements with yes/no responses to be circled by the participant. The yes/no answer format was devised in order to maintain validity between question sets, and was modeled after the types of comprehension questions used in the adult education program's textbook series. While a retelling of the text may be a more accurate measure of comprehension than responses to questions (Abadiano & Turner, 2005), answering comprehension questions about a text is more easily quantified and is most similar to how participants are expected to perform on the CASAS and other classroom exams. A sample set of comprehension questions can be seen in Appendix C.

Treatment session tasks. All treatment sessions followed the same format, with the first and final sessions including a survey of participants' demographic information and reading attitudes. A timeline of treatment session tasks can be seen in Table 2.

Table 2

Timeline of Treatment Session Tasks

Activity	Description
1. Activate schema	Display title and photograph for each text; ask participants to share knowledge based on title and photograph
2. Initial reading and comprehension questions	Distribute text and comprehension question set A to participants; participants read silently and complete question set
3. Initial oral reading	Each participant audio-records self
4. Modeled reading 1	Researcher models fluent reading of passage and asks participants to note phrasing and expression; participants clarify pronunciation of specific words
5. Modeled reading 2	Researcher models fluent reading of passage a second time
6. Independent repeated reading	Participants practice reading passage multiple times, either silently or aloud
7. Final oral reading	When ready, each participant records self
8. Final comprehension questions	Participants receive and complete comprehension question set B

The treatment began with schema activating and a prepared oral reading, meaning that participants had an opportunity to read the text to themselves before reading aloud (Bader & Pearce, 2009). The researcher displayed the photograph for the text on the classroom projector and asked participants to describe the photograph in order to activate background knowledge. Then, following the treatment plan above, each participant performed a silent, independent reading of the text and completed a set of four comprehension questions.

Next, each participant recorded him or herself reading the text aloud. The participant's initial reading was followed by two modeled readings performed by the

researcher, with an opportunity for participants to ask questions to clarify pronunciation of specific words. The decision to include two modeled reading performances was based on Gorsuch and Taguchi's (2008) study, but also because it is assumed that students at the low-intermediate level of ESL may need more reading support than the L1 readers that repeated reading was originally designed for (Kruidenier, MacArthur, & Wrigley, 2010).

Following the modeled readings, participants read the text independently as many times as they felt necessary to prepare for the final oral reading. Some participants chose to do this silently, while other participants elected to read aloud quietly. No restrictions were given to participants about how they chose to undertake these repeated readings. When participants felt ready, they recorded their final oral reading. After recording, each participant completed the second set of comprehension questions about the text.

Data collection pilot study. In order to determine feasibility, the data collection method was piloted with two students enrolled in a low-intermediate ESL class in the adult education program. One text from *Read 100* (Bennett, 2006) was prepared along with two sets of comprehension questions. Pilot participants performed an unprepared oral reading (Bader & Pearce, 2009) of the text, followed by one set of comprehension questions that was answered without support from the text. Based on Lems' (2012) claim that asking low-level ELLs to answer comprehension questions about an unprepared oral reading may be inappropriate, the research method was redesigned to instead make use of a prepared oral reading with comprehension questions following the first silent reading. This method is similar to Pey, et al.'s (2014) research design for assessing preliminary comprehension.

After the first oral reading, the researcher read the text aloud twice while the two pilot participants listened and followed along. Between readings, the researcher and pilot participants discussed features of good oral reading. Responses included, “it’s fast, but not too fast” and “it’s like conversation.” The two pilot participants were then given an opportunity to read the text silently as many times as they wanted in order to prepare for reading aloud a second time. After the second oral reading, the researcher asked another set of comprehension questions. Pilot participants then discussed whether they noticed any improvement between their first and final readings, and both answered affirmatively. One participant commented that “it helps me because I need to read at my church,” and the other stated that “I feel more comfortable. I need this practice.” Quantitative data was not collected on these pilot participants, but both anecdotally improved their fluency and comprehension on this trial intervention.

In addition to the decision to use a prepared oral reading, the pilot study lent insight into other steps of the process. A script for the researcher to follow for each treatment session was developed, which ensured consistency for each session. It was also determined that participants would be able to look at the text when answering comprehension questions; Day and Park (2005) note that such questions are intended to evaluate a learner’s comprehension, not their memory. Correct and incorrect responses were not shared with students during the study since the treatment sessions were not intended as instructional time. Finally, a rubric was designed so that the researcher and one additional rater could consistently evaluate participants’ oral reading fluency.

Data Analysis: Measuring Fluency

Participants' improvements in reading fluency were carefully quantified in order to determine results of the study. To answer the research question, "To what degree does assisted repeated reading increase oral reading fluency of adult intermediate English language learners?", participants' reading rate, accuracy, and prosody was assessed on both pre- and post-treatment recordings of the second, fifth, and eighth treatment sessions. The first treatment session was not assessed in order to compensate for any issues due to learners' affective filter, which may mask their true reading ability (Lems, 2012). Assessing rate, accuracy, and prosody at the second, fifth, and eighth sessions allowed for a more complete sense of participants' progress throughout the treatment period.

In order to reliably assess the more subjective elements of accuracy and prosody, one instructor from the adult education program was recruited to rate recordings of participants' oral reading in addition to the researcher. The researcher provided training on how to assess accuracy and prosody using the research-based guidelines outlined below, and a rubric was provided for consistency in analysis (see Appendix D). Raters listened to the recordings together after the completion of the treatment sessions. Analysis was performed by each rater independently, then compared and discussed by both in order to resolve any questions or unanticipated issues about what was heard. Each rater also noted any additional observations about participants' oral reading fluency on the rubric.

Rate. Rate was determined by the time needed to complete each reading. Because the readings are consistent in their word counts, a faster reading time will indicate a faster

reading rate. Since oral reading rate is linked to silent reading comprehension, assessing participants' reading rate will give some insight into whether their fluency has improved. Nation (2009) states that fluent L1 readers typically read around 300 words per minute, but many L2 readers typically read much slower. He recommends a reading rate of 250 words per minute as an appropriate goal for L2 learners in silent reading, and an oral reading rate around 150 words per minute when text is within the learners' proficiency level. Anderson (1999, 2008) is less optimistic, stating that a silent reading rate of 200 words per minute should be attainable. However, Majorana, Scott, and Cook (2018) found in their action research that even 200 words per minute was difficult for their beginning and intermediate students to attain; they recommend a rate of about 109 words per minute in silent reading for low-intermediate adult learners. This more closely corresponds with the oral reading rates recommended by Bader and Pearce (2009), who state that adult readers in the group identified as beginners by the National Institute for Literacy, which includes non-native speakers of English who are reading below a fourth-grade level equivalency, should have an oral fluency rate between 80-102 words per minute (Literacy Information and Communication System [LINCS], n.d.). Too low of a reading rate will indicate that a participant is struggling with decoding (Nation, 2009). However, participants were neither instructed nor encouraged to focus solely on improving their reading rate; Rasinski (2012) cautions that a focus on reading rate alone can be detrimental to prosody and comprehension. It is assumed that reading rate will naturally increase with the overall fluency development fostered by repeated reading (Nation, 2009). Measuring reading rate will serve as one quantitative indication of participants' reading fluency.

Accuracy. Another indication of participants' fluency was their oral reading accuracy. As with reading rate, accuracy was not the main focus of the treatment sessions; too much focus on accuracy can be detrimental to reading rate (Anderson, 1999; Samuels, 1979). Accuracy was assessed because it is the strongest indicator of automatic word recognition (Pey, et al., 2014), but it was not the aspect of fluency that participants are asked to focus on. Instead, it is assumed that as word recognition improves, accuracy will also improve. However, one flaw with Pey, et al.'s study design was in the way that accuracy was measured; the authors did not distinguish between decoding errors and mispronunciations due to L1 interference. They also counted verb tense changes as miscues, which is in contrast with guidelines from Bader and Pearce (2009, discussed below). When assessing the accuracy of ELLs' oral reading performance, it is critical for raters or instructors to be able to distinguish between decoding errors and mispronunciations due to an accent. English contains many phonemes that are not present in other languages; a reader who encounters an unknown phoneme is likely to replace it with the most reasonable substitution from the L1 (Lems, 2012). For example, a pronunciation of the word "computer" as "com-POO-ter" would not count as a decoding error, as many participants' L1s may lack a distinction between "u" and "yu" phonemes. These types of miscues should not be counted as decoding errors, as most adult ELLs may never be able to adopt some English phonemes into their speech.

Bader and Pearce (2009) have operationalized the assessment of fluency errors for use with adult learners; their guidelines have been adopted by many programs participating in the STAR initiative. Included in their definition of miscues are "substitutions and mispronunciations that disrupt meaning…insertions…omissions and

partial omissions…words pronounced by the examiner…[and] repetitions of words or phrases" (pp. 32-33). Words that are repeatedly mispronounced or substituted with the same error are counted as only one miscue. Mispronunciations and other imperfect readings that are not counted as inaccuracies are "Substitutions, mispronunciations, and inversions that do not disrupt meaning…self-corrections…repetitions to make corrections…hesitations…substitutions and mispronunciations resulting from a dialect…ignored punctuation…[and] phrasing" (pp. 32-33). Using these guidelines allowed both raters to perform a quantitative analysis of learners' accuracy and provided a method of measuring improvement.

Prosody. While rate and accuracy provide quantitative measures of fluency, prosody is a more elusive component of fluency. The ability to read with good prosody has been shown to have a strong correlation with reading comprehension in both L1 and L2 research (Jiang, 2016; Pey, et al., 2014; Seok & DaCosta, 2014), and most fluent readers employ prosody even in silent reading (Rasinski, 2012). Therefore, prosody was the main focus of the treatment sessions, but its evaluation is necessarily more subjective. Several researchers have developed rubrics for assessing prosody (Biggam & Thompson, 2005; Jiang, 2016; Paige, Rasinski, & Magpuri-Lavell, 2012; Pey, et al., 2014); Bader and Pearce (2009) have developed a simple rubric specifically for quickly assessing the oral reading prosody of adult beginning readers. This rubric included simple descriptors of phrasing and expression, rating each of these components of prosody as low, medium, or high (p. 34). Both raters used the rubric in Figure 1 to quantify participants' prosody.

	Low	Medium	High
Phrasing	Word-by-word, choppy reading	Word-by-word, but with some phrasing	Conversational, appropriate pauses
Expression	Little or monotone	Some variation in pitch and volume	Appropriate variation of pitch/volume

Figure 1. Rubric for analyzing oral reading prosody. Adapted from Bader and Pearce (2009).

The rubric was used along with a checklist of miscues and tracking of reading rate to assess participants' fluency at the second, fifth, and eighth interventions (Progress Report, Appendix D). Recordings of oral readings were assessed by both the researcher and one additional instructor at the adult education program to ensure rater reliability. To quantify data, prosodic elements were assigned a numerical value where low = 1, medium = 2, and high = 3. With this progress report, all aspects of oral reading fluency were able to provide quantifiable data and a clear picture of participants' oral reading fluency through the progression of the study.

Data Analysis: Measuring Comprehension

Fluency, however, is not only a measure of rate, accuracy, and prosody; as discussed in Chapter 2, a good measure of fluency must also address comprehension. To answer the research question, "What, if any, effects does the practice of oral repeated reading have on learners' comprehension?", two sets of comprehension questions were developed for each text. Participants answered the first set of comprehension questions immediately after their initial reading of the text, and the second set was answered after their final reading and post-treatment audio recording.

Improvements in comprehension were measured by the percentage of comprehension questions answered correctly by participants at the second, fifth, and

eighth interventions. Scholars disagree on what level of comprehension is necessary to be considered a fluent reader. Bader and Pearce (2009) deem an understanding of 60-70% of the literal details in a text, as ascertained through either a retelling or responding to comprehension questions, as adequate for mastery of a leveled reading. Anderson (1999, 2008) takes a stricter stance on comprehension, stating that learners must attain at least 70% comprehension in order to be considered fluent. Majorana, Scott, and Cook (2018) adapted Anderson's goal to 75% correct responses on comprehension in order to align with assessment standards in their academic English program. Since each set of comprehension questions for this study consisted of four questions, a goal of 75% correct responses was also used for this research for practicality.

Data Analysis: Measuring Attitudes

While rate, accuracy, prosody, and comprehension are the technical components of fluency, attitudes toward reading can affect learners' confidence and willingness to read. To answer the research question, "What, if any, effect does the practice of assisted oral repeated reading have on learners' attitudes toward reading in English?", surveys were given to participants at the first and final treatment sessions to measure any changes in attitude (see Appendix A).. Participants were asked to rate their agreement with statements about reading on a five-point scale. Five of the statements centered on participants' self-assessment of their confidence in English reading (Garvey, 2018), and three of the statements focused on students' agreement with statements about reading for information and fluency. Survey responses from all participants were assigned point values ranging from five (strongly agree) to 1 (strongly disagree), and responses to the pre- and post-treatment surveys were compared to determine changes in attitude.

By assessing oral reading fluency, comprehension of participants' reading of 100-word passages, and changing attitudes toward L2 reading, this research contributes to the small but growing body of research on the use of repeated reading with adult L2 learners. The method of repeated reading has been studied in university and foreign English language learning settings, but little is known about its effects in an adult education context. Additionally, little research has been conducted on adult education learners at a low-intermediate proficiency level. This study aims to address these gaps in research by using the method of repeated reading with low-intermediate adult ELLs in an adult education program in the Midwestern U.S. Although the participant population was heterogeneous, as is the adult education population in general, results may be used to inform teaching practices within the program and may contribute to the body of research that can be generalized to inform adult ESL instruction for a wider audience.

Summary

Little is known about how fluency and comprehension may interact when repeated reading is used with low-intermediate adult English learners. By working with a heterogeneous group of adult learners from an adult education context, this study contributes to a small but growing body of research. Over the course of eight treatment sessions, learners practiced reading for fluency using the method of repeated reading. Potential gains in fluency and comprehension were assessed by periodically evaluating readers' rate, prosody, and accuracy in reading aloud as well as correct responses to comprehension questions. In the next chapter, the results of the data collection and a discussion of their implications will be discussed.

CHAPTER FOUR

Results

In Chapter Three, the methodology for a study to examine the use of repeated reading with low-intermediate adult ELLs was described and implemented. This chapter will examine the results of the data collected during the course of the repeated reading intervention. In order to determine whether the intervention was effective, quantitative data, from recordings of oral readings and written comprehension questions, and qualitative data, from pre- and post-treatment surveys, were collected and analyzed across the participant group. Oral reading fluency was assessed by timing participants' reading rate, counting miscues for accuracy, and analyzing prosody using a rubric. Results are discussed for the participants as a group as well as for individual aspects that appeared to affect fluency. The intervention's effect on comprehension is discussed next, followed by an assessment on how the practice of repeated reading affected participants' attitudes toward reading in English. Finally, key findings from the research are discussed, framed by the research questions:

1. To what degree does assisted repeated reading increase oral reading fluency of adult intermediate English language learners?
2. What, if any, effects does the practice of oral repeated reading have on learners' comprehension?

3. What, if any, effect does the practice of assisted oral repeated reading have on learners' attitudes toward reading in English?

Effects on Oral Reading Fluency

To determine the answer to the research question, "To what degree does assisted repeated reading increase oral reading fluency of adult intermediate English language learners?", oral reading fluency was assessed in terms of reading rate, oral reading accuracy, and the prosodic elements of phrasing and expression. Rate was measured by the amount of time participants needed to read each 100-word text aloud. Accuracy and prosody were measured using the tools outlined in the methodology, with both raters analyzing the recordings of participants' oral reading. For the subskill of accuracy, interrater agreement was 93.25%; due to the subjective nature of evaluating oral reading accuracy of English learners, ratings with a one-point difference in miscues were considered to be in agreement. For the subskill of prosody, interrater agreement was 87.5% for phrasing and 95.75% for expression, with an overall agreement of 91.63%.

Rate. Participants' reading rates improved over the course of treatment. Rate was not an explicit focus of the intervention, but it stands to reason that as participants had the opportunity to read the text multiple times, they would get faster at it (Rasinski 2012; Samuels 1979). Improved rate appears to have transferred to new readings as well, as shown by comparing the average reading rate of initial readings at the second, fifth, and eighth readings in Figure 2.

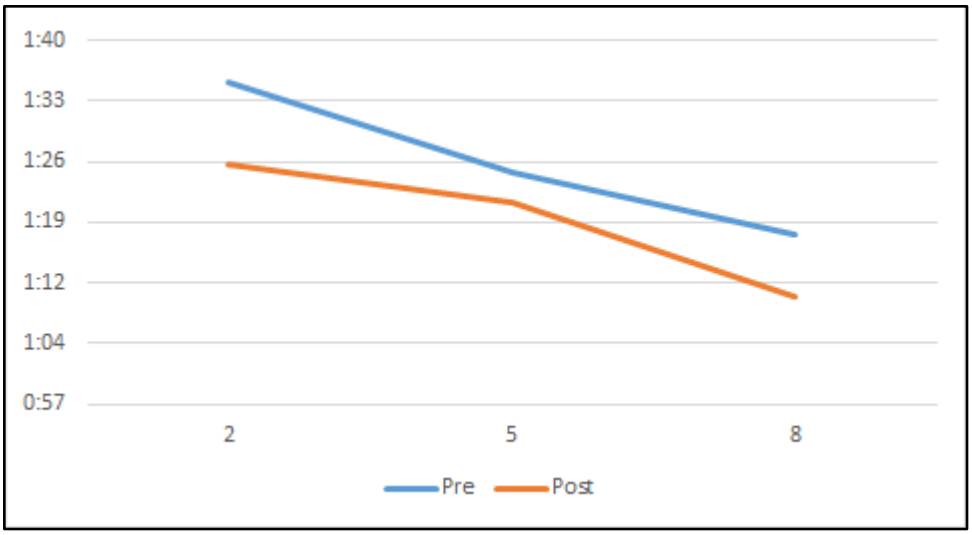

Figure 2. Average reading rate per 100 words. This figure shows average reading rate on pre- and post-treatment oral reading at the second, fifth, and eighth sessions.

The finding that reading rate may transfer to new readings confirms findings from L1 research that fluency skills can improve between texts (Rasinski, 2012, Samuels, 1979). Previous research focusing on fluency in L2 reading has been inconclusive that such skills could transfer (Gorsuch & Taguchi, 2008); however, using texts that were controlled for vocabulary and grammar may have made this possible by limiting unfamiliar language (Lems, 2012).

Individual differences in rate. All participants improved their reading rate over the course of the interventions, as evidenced by comparing pre-treatment reading rates from the second, fifth, and eighth treatment sessions. Most participants also consistently improved their reading rate between pre- and post-treatment readings within individual treatment sessions. In order to observe any demographic influences on reading rate, participants' results were further analyzed by level of formal education and L1 background.

Formal education. Because many aspects of reading and literacy are often acquired through education, reading rate was analyzed with regards to how much formal education participants had received in their native country. In Figure 3, participants' reading rates at the beginning and end of the second, fifth, and eighth treatment sessions are compared.

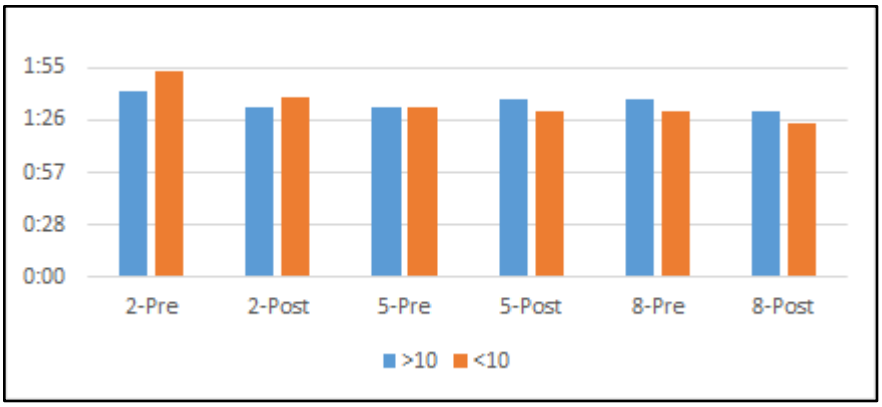

Figure 3. Pre- and post-treatment rate by years of school. This figure compares rate of participants with more than and less than ten years of school for each treatment session.

From the data, it appears that participants with 10 or more years of formal education (n=4) began the repeated reading treatment with a slight advantage over those with fewer than 10 years of formal education (n=4). This is consistent with findings from Sparks, et al. (2012) and Jeon and Yamashita (2014) that L1 literacy skills can influence L2 literacy. However, both groups improved rate during the course of treatment, with the group having less formal education making a slightly larger gain.

L1 orthography. As Lems (2012) noted, L2 readers whose L1 is orthographically related to English may decode written English more efficiently than L2 readers whose L1 is more distant. Since Spanish, like English, uses a Latin alphabet and the other L1s represented in the participant group (Persian, Arabic, and Chinese) do not, rate was analyzed by Latin-alphabet L1 speakers (n=5) against non-Latin-alphabet L1 speakers (n=3). Differences in rate between the groups are displayed in Figure 4.

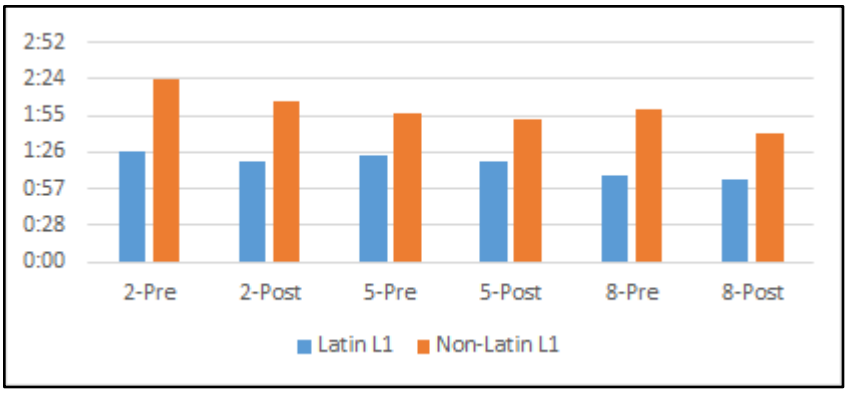

Figure 4. Pre- and post-treatment rate of Latin-alphabet L1 speakers vs. non-Latin-alphabet L1 speakers. Rates are shown for each treatment session.

It appears that the Latin-alphabet L1 speakers did have an advantage over non-Latin alphabet speakers in regards to reading rate. However, one member of the non-Latin-alphabet L1 group had a significantly slower rate than all other participants; to control for this, results were analyzed again without that participant's rate included in the data set (Figure 5).

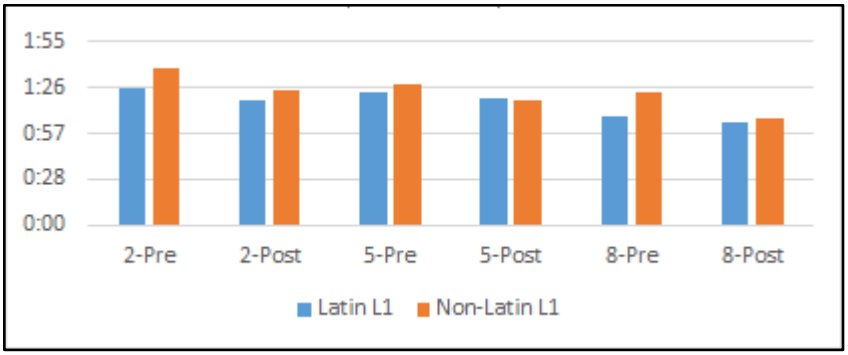

Figure 5. Pre- and post-treatment rate of Latin-alphabet L1 speakers vs. non-Latin alphabet L1 speakers, P7 removed. P7's data has been removed from this analysis.

Even with the re-analyzed data, Latin-alphabet L1 speakers still maintained a slight rate advantage over the non-Latin-alphabet L1 speakers. This is consistent with indications in previous research that similar orthography and language structure can help learners with more efficient - and therefore, faster - L2 decoding (Jeon, 2012; Jeon & Yamashita, 2014; Lems, 2012). However, both groups made gains in reading rate over the course of treatment.

Accuracy. Accuracy appears to have increased overall, as the number of miscues per 100 words fell during the course of treatment. Accuracy was somewhat focused on during the treatment, as participants had opportunities to clarify the pronunciation of unfamiliar words during the modeled fluent readings. For most participants, accuracy improved between the initial and final oral readings of each text (Figure 6), which can be expected due to repeated engagement (Samuels, 1979). As a group, participants' accuracy improved on initial readings between the second, fifth, and eighth treatment sessions, indicating that some decoding skills may have transferred to new readings. However, all participants were simultaneously enrolled in formal English classes during the course of treatment; without a control group, it is possible that some of the reading improvement is due to increased language input outside of treatment.

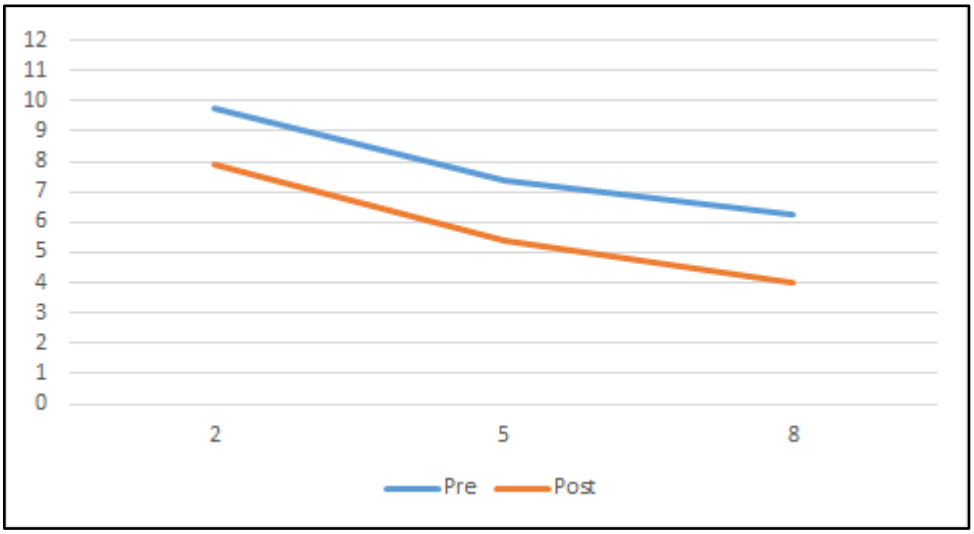

Figure 6. Average miscues per 100 words. Pre- and post-treatment analysis of participants' miscues during oral reading.

Improved accuracy across texts again confirms findings from L1 research that fluency practice improves fluency performance on new readings (Rasinski, 2012; Samuels, 1979). More surprising is that accuracy seems to have transferred across readings for this group of adult ELLs over the study's short course of treatment, which

contrasts somewhat with Gorsuch and Taguchi's (2008) finding that L2 readers were less able to transfer fluency skills to new texts during their 11-week treatment period. The controlled texts for grammar and vocabulary used in this research may have helped increase participants' ability to read new texts with more accuracy.

Individual differences in accuracy. Most participants became more accurate in their oral reading over the course of the treatment period. Like reading rate, the number of miscues per reading decreased on the initial readings from the beginning to end of the intervention period, and for most participants, the number of miscues between pre- and post-readings decreased within each of the second, fifth, and eighth treatment sessions.

L1 orthography. Like with rate, L2 readers whose L1 is more closely related to English may be more able to decode English words accurately (Lems, 2012). To determine this, miscues of participants from a Latin-alphabet L1 (n=5) were analyzed along with miscues of participants from a non-Latin-alphabet L1 (n=3). Figure 7 displays the results.

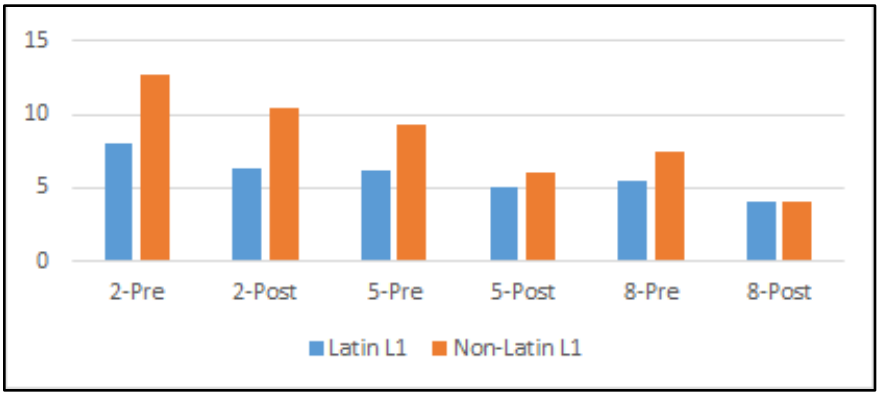

Figure 7. Miscues of Latin-alphabet L1 speakers vs. non-Latin-alphabet L1 speakers. Miscues are displayed for pre- and post-readings at the second, fifth, and eighth sessions.

Both groups made gains in accuracy as evidenced by a decreased number of miscues. On average, more miscues occurred among the non-Latin-alphabet L1 participants. This is consistent with findings from Jeon (2012), Jeon and Yamashita

(2014), and Lems (2012) that English learners whose L1 has similar orthography to English may be more able to decode English reading. However, by the end of the interventions, the average number of miscues for each group was equal at the final oral reading.

Length of time in the U.S. Two participants from a Spanish L1 background seemed to experience significantly more miscues in their oral reading than their peers from both Spanish and non-Spanish L1 backgrounds. These two participants shared the similarity of having spent more time living in the U.S. than others, so an analysis was performed on the miscues of participants with more than five years in the U.S. (n=2) and less than three years in the U.S. (n=6). Results are displayed in Figure 8.

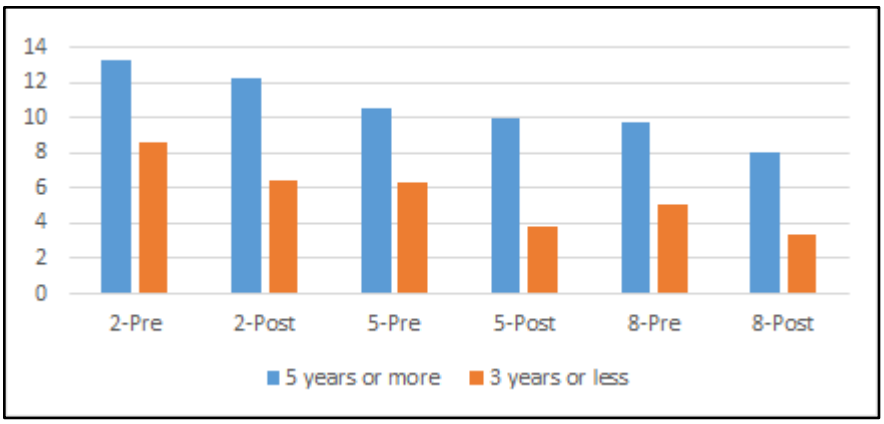

Figure 8. Pre- and post-treatment miscues by length of time in the U.S. Miscues for those who have lived here more than five years compared with less than three years.

The participants who had lived in the U.S. the longest were less accurate in their oral decoding than peers who had lived in the U.S. for a shorter time period. With the small sample size of the participant group, this result certainly could not be extrapolated to a larger population. It may be that these two participants experienced some anxiety over the pressure to read aloud, even after repeated practice (Lems, 2012). However, it is important to note that all participants reported one year or less of formal English study.

For these longer-term participants, it is possible that their oral vocabulary is more developed than their text-based vocabulary, and while they may know many words when encountered in spoken English, they may not be able to decode written English with as much success.

Formal education. To determine if formal education had any effect on participants' accuracy in English oral reading fluency, an analysis was performed on miscues of participants with more than ten years of school (n=4) and participants with less than ten years of school (n=4). Both groups made gains in accuracy, performing almost equally on initial oral readings of the second and eighth treatment session texts (Figure 9).

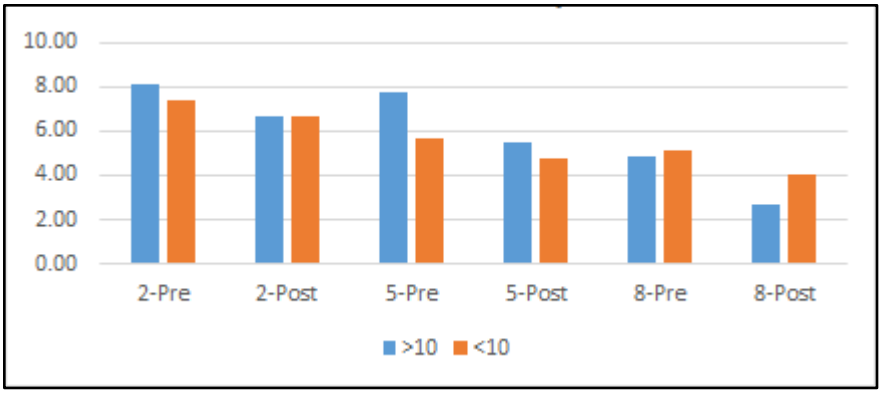

Figure 9. Pre- and post-treatment miscues by years of school. Participants with 10 or more years of school as compared to those with less than 10 years of school.

While most participants increased their accuracy in oral reading overall, one participant (P6) experienced an increase in miscues between the second and eighth interventions (Figure 10). This participant was a female Spanish L1 speaker in her twenties who indicated having three years or less of formal education in her native country.

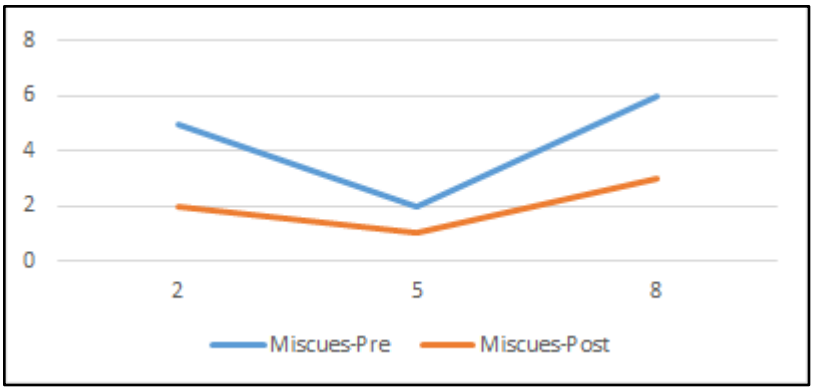

Figure 10. P6 miscues. Miscue analysis of Participant 6's oral reading miscues on initial and final readings at second, fifth, and eighth treatment sessions.

While it is possible that this participant's limited schooling may have had an effect on her oral reading accuracy, the improved accuracy displayed by the fifth treatment session indicates otherwise. It could be instead that the topic of the text for her eighth treatment session was less familiar to her, and perhaps contained more unknown vocabulary. Other factors, such as fatigue or distraction, may have also had an effect on her accuracy.

The overall increases in accuracy among most participants are consistent with findings from L1 research on repeated reading (Rasinski, 2012; Samuels, 1979). Therefore, repeated reading may be a useful method to help adult L2 readers continue to increase their oral reading accuracy.

Prosody. Prosody appears to have improved overall, with participants making performance gains in both phrasing and expression. Results can be observed in Figure 11. While prosody was the main focus of the oral reading treatment, it was not explicitly taught to participants beyond being asked to listen to and try to mimic the sound of the model reader's voice. As a group, participants seem to have improved both phrasing and expression on initial oral readings between the second and eighth treatment sessions,

indicating that some prosodic skills may have transferred to new texts prior to the assistance of that text's model reading.

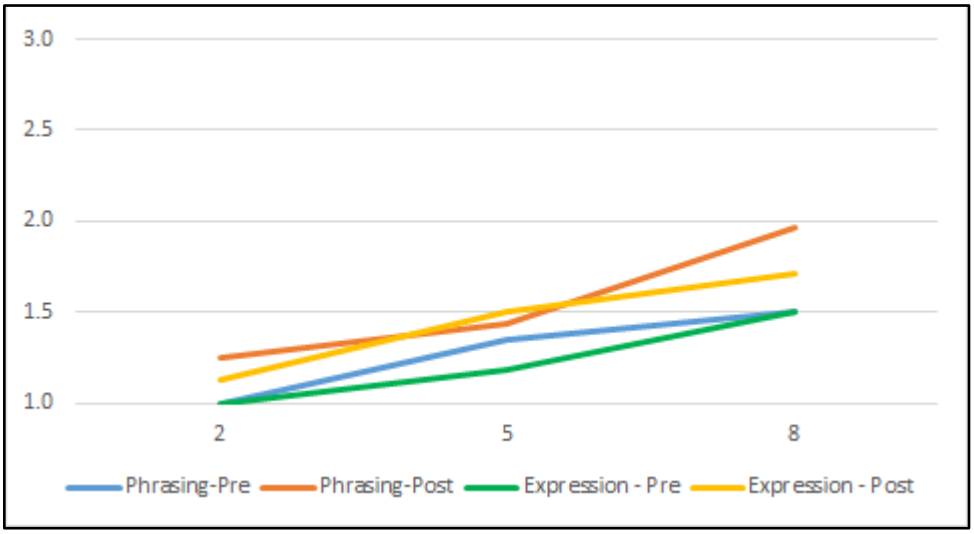

Figure 11. Average prosody (phrasing and expression). Pre- and post-treatment ratings of prosody for all participants at the second, fifth, and eighth interventions.

This possible transfer of prosodic elements of fluency is consistent with L1 fluency research (Rasinski, 2012). In contrast, Gorsuch & Taguchi (2008) did not find that prosody necessarily transferred to new readings with L2 learners; indeed, not all participants in this study improved in their phrasing and/or expression. It is also possible that some improved reading prosody is due to increased language input through participation in formal English classes. Language input may not have a considerable effect on prosody, however, as many instructors in the adult education landscape lack formal training in how to teach prosodic elements of spoken language (Murphy, 2014). Additionally, an overall increase in oral reading prosody can still indicate overall improvement in L2 reading (Jeon, 2012).

Individual differences in prosody. Factors such as formal education and amount of time spent in the U.S. did not appear to have much effect on participants' outcomes in the prosodic elements of phrasing and expression. Participants made similar gains on

phrasing and expression regardless of years of schooling; those who had spent more than five years in the U.S. made slightly larger gains in their expression and slightly smaller gains in phrasing when compared to those who had been in the U.S. less than five years. The only factor that appeared to display a noticeable difference was participants' native language.

L1 influence on prosody. In analyzing participants' gains in phrasing, L1 seemed to have almost no noticeable effect; both Spanish L1 speakers (n=5) and other L1 speakers (n=3) made modest gains in phrasing overall. However, Spanish L1 speakers seemed to have an advantage with regards to expression (Figure 12).

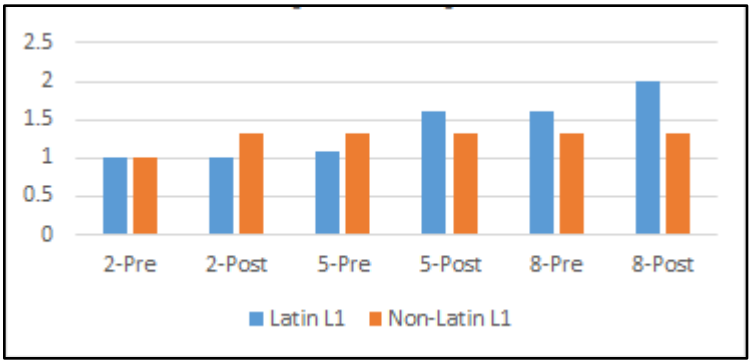

Figure 12. Expression of Spanish L1 speakers vs. non-Spanish L1 speakers. Comparison of expression ratings for each group on initial and final oral readings at each treatment.

While both groups made gains in expression, the Spanish L1 speakers made larger gains over the course of treatment. However, not all Spanish L1 speakers improved their expression, nor did all non-Spanish L1 speakers; the gains displayed above likely reflect a few individual participants' noticing of and attention to prosodic elements of spoken English.

One participant (P9), an Arabic L1 speaker in his late twenties, did make exceptional gains in his oral reading prosody over the course of treatment. He was the

only participant to receive a "high" rating on either phrasing or expression throughout the entire study. An analysis of P9's prosody is displayed in Figure 13.

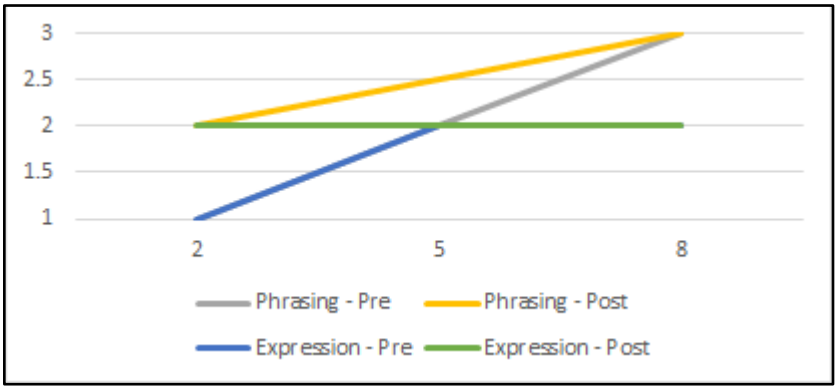

Figure 13. P9 prosody. Prosody ratings for expression and phrasing on pre- and post-treatment oral readings at the second, fifth, and eighth sessions.

On the initial oral reading of the second treatment text, he was rated "low" for both phrasing and expression. However, by the eighth treatment text, his initial oral reading was rated "high" for both of these prosodic elements. One explanation for this could be that both English and Arabic are stress-timed languages, meaning that stressed syllables are an important aspect of the spoken language and have a longer duration than unstressed syllables (Conlen, 2016). For this participant, the prosodic elements of phrasing and expression may have transferred from the L1 to the L2.

Additional gains in prosody. While most participants' gains in the prosodic elements of phrasing and expression were not as dramatic as the Arabic L1 speaker's, even participants who did not make quantifiable gains still seemed to show modest improvement. Both raters made comments on progress reports for several participants about their efforts, especially for the eighth treatment session. For example, one rater commented "still has a ways to go, but noticeably better than first intervention; starting to recognize punctuation [in oral reading]" on a progress report for P5. While this participant did not improve enough to earn a prosodic rating above 1 at any point during

the treatment, this qualitative evaluation shows that prosody is still improving. Other comments that were made across progress reports had recurring themes of participants sounding “more confident” and “much smoother” in their reading, even when the raters did not feel that the criteria was met for a quantifiable improvement. Although prosody is just one element of reading fluency, these improvements in prosody show that the method of repeated reading may be a promising practice for low-intermediate adult L2 learners.

Effects on Comprehension

Comprehension is another critical element of reading fluency. To determine the answer the research question, “What, if any, effects does the practice of oral repeated reading have on learners’ comprehension?”, each participant’s responses to initial and final comprehension question sets were compared.

After analyzing the results from participants’ responses to the initial and final comprehension question sets for the second, fifth, and eighth treatment sessions, it appears that the repeated reading treatment had little to no effect on participants’ comprehension of the texts (Figure 14). In fact, it appears that overall comprehension decreased slightly over the course of the intervention.

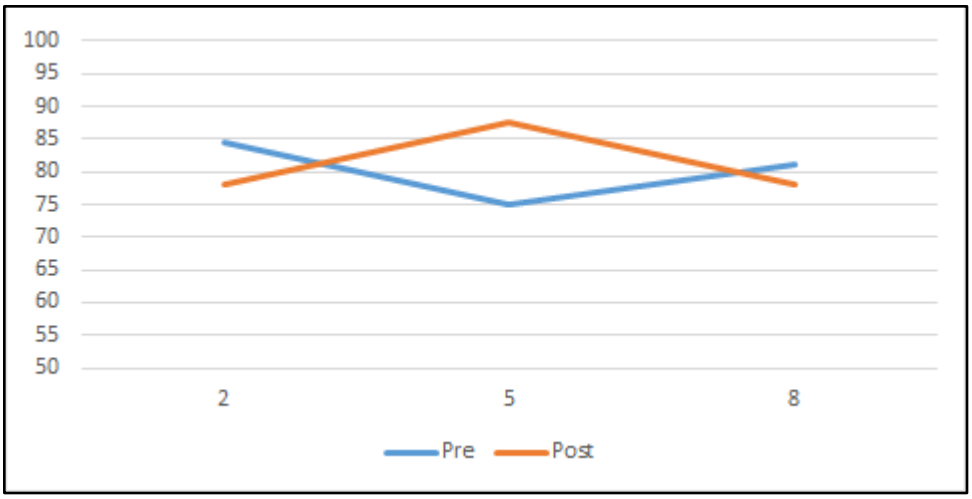

Figure 14. Average comprehension of participants. Correct responses (by percent) of all participants on pre- and post-question sets for the second, fifth, and eighth treatments.

Although obvious gains were not made in participants' comprehension of the texts, note that the average comprehension rate for both pre- and post-question sets is at 75% or above. This falls within the criteria set forth in Chapter Three for fluent reading, and could signify that the texts chosen for fluency practice were within the participants' proficiency range (Nation, 2009). Another possibility is that individual participants were more or less familiar with different topics and vocabulary, which could lead to the varying results displayed above. Additionally, even though numerical gains in comprehension are not obvious, improvements in prosody may indicate improved comprehension; one cannot read with expression without understanding the text. Jeon and Yamashita (2014) found that L2 phonological awareness was indeed correlated to L2 reading comprehension.

Only one participant (P7) truly struggled to achieve a comprehension rate to qualify as a fluent reader. With an average comprehension score of 37.5% across readings, it is clear that the texts were beyond her proficiency level. When compared with her reading rates between 2:51 and 3:54 across treatment sessions, she is likely spending

too much cognitive energy on decoding the text in order to make meaning from what she has read (Anderson, 2008; Lems, 2012; Samuels, 1979).

Effects on Attitudes toward English Reading

To determine the answer to the third research question, "What, if any, effect does the practice of assisted oral repeated reading have on learners' attitudes toward reading in English?", participants' responses to the pre- and post-survey attitudinal questions were analyzed. Each response option was quantified, with "strongly agree" given 5 points, "agree" as 4 points, "neutral" as 3 points, "disagree" as 2 points, and "strongly disagree" as 1 point. Any questions that received no response were removed from the data set. Responses to each question were averaged among all participants for the pre- and post-survey questions, and those averages were compared to determine attitude changes over the course of the intervention. Overall, participants' responses to most questions displayed an improved attitude toward reading in English (Figure 15).

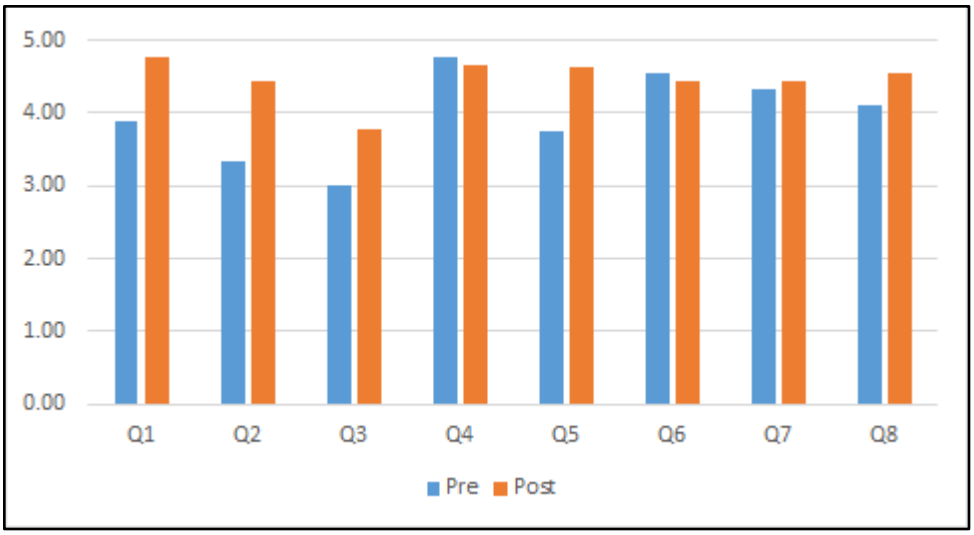

Figure 15. Pre- and post-treatment responses to survey questions. "Q1, Q2, etc." refer to Questions 1-8 as they appeared on the survey.

Survey questions:

Q1: I enjoy reading in English;

Q2: I am comfortable reading aloud in English;

Q3: I can understand what I read in English;

Q4: I want to read more in English;

Q5: I am confident in my English reading;

Q6: Reading in English will help me learn more about American culture;

Q7: Reading a text multiple times will help me read faster in English; and

Q8: Reading faster will help me understand more (adapted from Garvey, 2018).

The most notable increases appear with questions 1, 2, 3, and 5. These questions directly concern participants' attitude toward English reading and demonstrate that, as with L1 research, repeated reading can improve L2 learners' confidence in reading by allowing them to experience small successes (Samuels, 1979). Similarly, these results align with previous adult L2 research that the improved word recognition skills developed through repeated reading can increase learners' confidence (Lems, 2012).

Slight increases occurred with questions 7 and 8. Both of these questions deal with the relationship between fluency and comprehension. Since the main focus of the treatment sessions was not explicitly reading rate or comprehension, and participants were not made aware of their gains in rate over the course of treatment, it makes sense that participants may not have identified a connection between the reading practice and reading rate or comprehension. Still, most participants seemed to agree that repeated reading helped them read faster and understand more, which corresponds to previous research (Seok & DaCosta, 2014; Rasinski, 2012).

Question 4 and question 6 on the survey both appear to have decreased slightly over the course of treatment. Question 6 asks participants whether reading in English will help them learn more about American culture. Although reading can help learners improve their knowledge on many topics, including American culture, none of the informational texts selected for the study dealt with U.S.-specific topics. Therefore, participants should not be expected to connect the act of reading explicitly with learning more about life in the U.S. More surprising was the decreased response to question 4, "I want to read more in English." This response could be due to participants seeing English reading as a utility, something they have to do in order to survive daily life in the U.S., as opposed to an activity to be done for pleasure.

It is possible that question 4 may have been misunderstood by some participants, and the anecdotal evidence collected during the study lends some credence to this theory. In addition to the responses to written survey questions, several participants also made verbal comments to the researcher about their perceived effects of the study. At the end of the final treatment session, one participant stated, "wow, this helped me a lot." Several

participants expressed disappointment that the intervention was complete and asked if it could continue. Even weeks after the intervention ended, one participant stopped the researcher in the hallway of the adult education program and asked if the "reading class" would be starting again in the future!

Key Findings

From the results described above, it appears that repeated reading with low-intermediate adult L2 learners can be a promising practice in the adult ESL classroom. As a whole, participants made noticeable improvements in their oral reading rate, accuracy, and prosody. While quantifiable gains in comprehension were not observed, participants' gains in prosody may still indicate improved comprehension.

The method of repeated reading appears to have helped participants develop a faster oral reading rate. Rate improved for all participants, not only between initial and final readings of the same text, but also across treatment sessions. This finding is extremely promising because even though rate was not a main focus of the intervention, the data appears to demonstrate transfer to new texts.

Repeated reading also appears to be responsible for some improvement in oral reading fluency with regard to accuracy. As a group, participants' overall accuracy improved both within and across treatment sessions. Again, this finding is quite promising as it appears to demonstrate transfer to new texts for low-intermediate adult L2 learners.

Most exciting was participants' gains in the prosodic elements of phrasing and expression over the course of the repeated reading intervention. Improvements in prosody were not expected considering the limited duration of the study, yet the analysis seems to

display growth for participants as a whole. Once again, it appears that this growth occurs both within and across treatment sessions, demonstrating potential transfer between texts.

One aspect of the study where participants did not demonstrate improvement was in comprehension; reading comprehension scores were fairly stagnant both across and within treatment session. This finding is surprising as most research on repeated reading has shown gains as a result of using the method, particularly with rereadings of the same text. However, most participants were still within the range of comprehension necessary to qualify them as fluent readers; additionally, participants' improvements in prosody may also indicate improvements in comprehension. Because the question types mainly relied on recall and did not require higher-order thinking, it is difficult to know from the comprehension questions alone whether participants gained a deeper understanding of the treatment texts.

Finally, it appears that the method of repeated reading has helped to improve participants' attitudes toward reading in English. Even though results of the study were not shared with participants during the intervention, both quantitative and qualitative data point toward an awareness that repeated reading has helped students improve their understanding of English text and ability to read English text aloud. Participants appeared more confident in their reading ability, again showing that repeated reading can be a promising practice to use with low-intermediate adult ELLs.

The promising results of the repeated reading intervention show that the method of repeated reading has great potential to help low-intermediate adult ELLs improve many aspects of their reading fluency. This is consistent with previous research with both L1 and L2 adult readers. Fluency instruction and practice has the potential to help both

strong and struggling readers alike (Abadiano & Turner, 2005) and appears to be appropriate at all levels of education, including adult education and low-intermediate adult ESL (Curtis & Kruidenier, 2005; Rasinksi, 2012).

Summary

From the results of the study, it appears that repeated reading may indeed be a viable means to increase oral reading fluency, comprehension, and reading attitudes of low-intermediate adult English learners.The key findings from the repeated reading intervention show that participants' rate, accuracy, and prosody in oral reading seem to have increased over the course of treatment, and that participants were able to transfer these improvements to new texts. While comprehension scores did not increase, it is possible that participants' improved prosody still displays better comprehension skills. Finally, both qualitative and quantitative data show that learners' attitudes toward reading in English improved over the course of treatment, with participants displaying improved confidence in their English reading.

In Chapter Five, some final thoughts on the study will be discussed. Implications and limitations of the study will be explored, along with a discussion of how this research adds to the research presented in the literature review. Suggestions for future research will be presented. The chapter will also include a reflection on how the research can be used in the classroom and as a resource for other instructors.

CHAPTER FIVE

Conclusion

Chapter Four presented an overview of the results from participants' reading rate, accuracy, and prosody in oral reading fluency, as well as their comprehension of texts and attitudes toward reading in English. This chapter now explores connections to research presented in Chapter Two as well as a discussion of the implications of the repeated reading intervention. Limitations of the study will be explored, along with possibilities for future research to overcome some limitations and further explore the links between this research and previous studies. Finally, ideas for using and sharing the results will be presented, followed by a review of the researcher's personal journey with the project.

This study on the use of repeated reading with low-intermediate adult English language learners sought to address the following research questions:

1. To what degree does assisted repeated reading increase oral reading fluency of adult intermediate English language learners?
2. What, if any, effects does the practice of oral repeated reading have on learners' comprehension?
3. What, if any, effect does the practice of assisted oral repeated reading have on learners' attitudes toward reading in English?

Connections to Previous Research

Although much of what is known about reading has grown out of K-12 research, some methods, such as repeated reading, have been shown to be effective for adult learners as well. While this has been studied more extensively with adult L1 beginning and intermediate learners, the results of this study seem to confirm findings from prior research with adult L2 learners that repeated reading can effectively increase learners' fluency. When Samuels (1979) first developed the method of repeated reading, it was intended to be used with struggling readers in the elementary grades. Since then, however, repeated reading has been shown to help increase rate, accuracy, prosody, and comprehension in the reading of a variety of learners, as well as their motivation to continue reading practice.

Much of the rationale for this research was based on Rasinski's (2005, 2012) insights into the reading fluency of struggling L1 readers at varying levels of education. From his work, we know the importance of fluency instruction in L1 classrooms; this study shows attention to fluency in L2 classrooms can help adult ELLs improve their reading skills as well. Similarly, Kruidenier (2002), Curtis and Kruidenier (2005), and Kruidenier, MacArthur, & Wrigley (2010), along with McShane (2005), demonstrated the importance of literacy instruction and fluency instruction in the adult education classroom. While their focus was mainly on the adult English L1 population and advanced ELLs, the results of this study show that these findings may also hold true in low-intermediate adult ESL. This may bring a new layer of understanding to adult education fluency research, as the low-intermediate ESL participants in this study seem

to have experienced many of the same gains that have been observed in L1 and advanced ESL learners.

Inspiration for the logistics of the study came mainly from Gorsuch and Taguchi (2008), as well as Lems (2012). Gorsuch and Taguchi (2008) developed a similar assisted repeated reading study with university students in Vietnam, and the treatment sessions for this study were loosely modeled after their work. While Gorsuch and Taguchi found weak evidence of skill transfer to new texts, the participants in this study demonstrated that transfer may indeed occur with L2 readers. Lems (2012) provided valuable insight for adapting the repeated reading treatment for lower-level adult learners, such as collecting data at each treatment session, but beginning analysis with the second session to overcome learners' affective filter. Additionally, the work of Lems (2012), along with that of Sparks et al. (2012) and Jeon and Yamashita (2014), was valuable in analyzing results of the data collection with regard to individual differences in various aspects of fluency. This study also found that some individual variation in the different aspects of fluency may be affected by factors such as L1 or prior educational experience.

Garvey's (2018) research into adult ELLs reading attitudes was the basis for much of the qualitative data of this study; the pre- and post-intervention attitude survey was modeled after his work. As in Garvey's research, the results of the survey for this study indicate that attitudes toward and confidence in English reading increased over the short duration of the study. This also corroborates findings from Lems (2012) and Samuels (1979), as well as others, that repeated reading can give adult ELLs the same boosts in reading confidence that L1 readers experience with the method.

Implications

From the results of the study, it appears that repeated reading is a promising practice for improving low-intermediate adult ELLs' fluency in and attitudes toward reading in English. Both anecdotal and quantitative data show that an assisted repeated reading intervention can help build learner's confidence in reading, corroborating claims in both L1 and L2 research (Gorsuch & Taguchi, 2008; Samuels, 1979). The treatment also seemed to be effective for improved reading rate, accuracy, and prosody in oral reading fluency (Jeon, 2012; Pey et al., 2014). This adds to the existing research that repeated reading can be an effective method to help adult learners improve their reading fluency.

The implications of this research indicate that repeated reading may be an effective instructional technique to incorporate into the low-intermediate ESL classroom. Gorsuch and Taguchi (2008) state that assisted repeated reading can be implemented in the classroom without using a great deal of time or effort. Instructors are likely already using short texts that would be appropriate for assisted repeated reading in the classroom, and many may already be having students read such texts multiple times. Adding a component of a modeled reading and pointing out prosodic elements of spoken language, followed by time for students to practice individually and perform the reading for the instructor or a partner, would not be terribly challenging for most instructors. If instructors are able to incorporate assisted repeated reading on a regular basis, perhaps weekly or twice a week, their students may make similar gains in reading rate and prosody as the participants of this study.

The finding that all participants improved their reading rate over the course of treatment may be reason enough for repeated reading to be implemented in many adult education classrooms. Timed tests with a focus on reading, such as the CASAS Life and Work Reading exam, are often a necessary part of education. In adult education, such texts can be a major factor in accountability and funding. If English learners are able to improve their reading rate through the technique of repeated reading, their performance on timed reading tests may improve as well because they will be able to read more content in the same amount of time.

Additionally, the finding that most participants improved the prosodic elements of their oral reading may have implications beyond fluency instruction. The low-intermediate ELLs who participated in this study were able to increase their phrasing and expression in just four weeks of treatment and without much explicit instruction in English prosody. This supports the idea set forth by Derwing and Munro (2014) that fossilization of L2 pronunciation is a myth, and learners at any stage can improve their oral English skills.

Limitations

While the results of this research show that repeated reading is a promising practice, the study also had some limitations that prevent the results from being extrapolated to the larger adult education population. One such limitation is the small sample size, with only eight participants completing the full intervention. Although the participant group's diversity reflected the program's adult ESL population, that diversity was still limited by the small sample size. Many language groups that also attend English classes at the adult ESL program were not represented in the sample, let alone all of the

language groups represented by the ESL population nationwide. In addition to the small group of L1s represented by the sample size, it is important to remember that the adult ESL population is heterogeneous in other ways, too. Factors such as age, education, and individual differences in learning were all limited by the sample size. Certainly the results from one Chinese L1 speaker certainly cannot be applied to all Chinese L1 speakers learning English in the U.S., as each individual will have differences that may affect the learning process. A larger sample size would have reflected more of the diversity of the adult learner population, which would allow more and stronger generalizations to be made from the data.

The lack of a control group also prevents strong generalizations to be made. Without a control group, the results from the study cannot definitively be considered a direct result of the repeated reading intervention. Other factors may have influenced results beyond what was done during the treatment sessions. Factors such as increased language input from being enrolled in ESL classes or instruction of vocabulary or pronunciation could have affected participants' performance. A control group would have helped differentiate between what happened as a result of the repeated reading intervention as opposed to what may have occurred regardless of the study.

Time was also a limitation of the study. A more longitudinal study almost certainly would have provided stronger results, but the research had to be performed within the constraints of the adult education program. With considerations for breaks between class sessions, holidays, and weather emergencies, it was not feasible to have a duration of more than five weeks for the study. Additionally, the transience of the adult learner population itself had to be considered when creating the timeline for the study.

Adults have responsibilities outside of English class that include jobs and families, and attrition is always a very real possibility as those responsibilities change. Selecting a group of participants from this population who could absolutely commit to a long-term study would be a daunting task.

A final limitation of the study may have been the comprehension questions that were developed. Four questions for each text, while reasonable for the length of the text, may not encompass how well participants truly understood the text. Additionally, the yes/no answer format was confusing for some participants when they encountered negative statements that required a "no" response, and most questions were limited to literal comprehension. Questions requiring higher-order thinking, such as interpreting or prediction, may have provided a more accurate picture of how well participants truly understood each text (Day & Park, 2005). Open-ended questions may have also provided a better indication of comprehension, as the yes/no question format gave participants a 50% chance of guessing a correct answer. Another limitation to comprehension could have been the length of the texts; while 100-word texts were certainly appropriate for the design of this study, a 200- or 300-word text may have provided more of a challenge to participants' comprehension and, therefore, a more accurate picture of what they could understand from the text. Future research should consider more and varied types of comprehension questions, as well as longer texts, in order to glean more accurate results.

Future Research

Additional research is needed to determine the effectiveness of assisted repeated reading with adult English learners at the low-intermediate level. While this study has shown repeated reading to be a promising practice, the limitations of the research prevent

the results from being generalized to the wider adult education population. Future research should be undertaken with a larger sample size as well as a control group.

In order to explore further a possible link between repeated reading and comprehension in adult L2 learners, future research should incorporate higher-order comprehension questions. Including interpretive questions would indicate deeper understanding of a text than literal comprehension or simple recall questions. Having learners perform a retelling of text would be another way to signify comprehension (Abadiano & Turner, 2005; Bader & Pearce, 2009).

While accuracy seemed to improve for most participants, further research is needed to confirm that this is a result of the repeated reading treatments. Future research may also look at how adult learners' L1s may influence their accuracy when reading in English; additionally, research should explore how the development of oral and literacy skills of the L2 affects oral reading fluency. Two of the participants of this study performed their oral readings with notably more miscues than others, despite having lived in the U.S. for a longer period of time. Both participants, however, had not spend a great deal of time in formal English classes, and it would be interesting to see whether oral reading accuracy is weaker in other learners with a similar background.

The most interesting aspect of this research, however, was seeing how participants' oral reading prosody may have been affected by the repeated reading treatment. Further research is necessary to determine whether assisted repeated reading can help learners improve their prosody with consistently and over a more longitudinal intervention. It may also be interesting to explore whether repeated reading can help learners improve their pronunciation in spontaneous speech to add to the growing body of

research showing that, when provided with targeted, high-quality instruction in phonological features, learners do make changes in what may have been considered fossilized speech patterns (Derwing & Munro, 2014). Another angle to explore would be whether a focus on prosody in pronunciation instruction would also transfer to learners' oral reading.

Many possibilities for continued research exist. Future research may focus on more specific aspects of reading and fluency in order to explore how repeated reading affects each element of prosody, rate, and accuracy. A specific focus on whether repeated reading improves adult learners' attitudes toward reading over the longer term will also add to the small but growing body of research on L2 reading and, specifically, repeated reading in an adult L2 context.

Using and Sharing Results

In my own teaching context, I certainly plan to use what I have learned about assisted repeated reading with future ESL classes. Implementing repeated reading in class should be manageable, as we already read short texts for the purpose of comprehension; these texts are often read with a modeled fluent reading, and we typically read the texts more than once. By providing some basic instruction in prosody, and a few minutes to provide learners with an opportunity to practice reading on their own, classroom implementation of assisted repeated reading could be incorporated into my instructional routines without much additional effort or time. I also feel that with some training in or demonstration of the technique, more adult education instructors would be able to implement repeated reading into their own classrooms as well.

On a larger scale, I would like to share the results of this study with other instructors in my program. Because of the pressure put on our learners and instructors by our funding agent to perform well on the CASAS reading assessment, instructors are always looking for ways to help learners improve their reading. I believe that assisted repeated reading would be an easy technique for most instructors to implement without extensive training in reading instruction. More importantly, I believe that the technique of repeated reading could be a high-impact way to attain some of the standards outlined in the *College and Career Readiness Standards for Adult Education,* such as the Reading Foundation skills of phonological awareness, word recognition, and reading with accuracy and fluency (Pimentel, 2013).

In order to share this work with a wider audience, I plan to propose sessions on using repeated reading in adult ESL for regional and state conferences. Another possibility might be to present a poster session at a national conference, such as COABE or TESOL. At the very least, I would hope to be able to get the information out to a wider audience so that more instructors can implement repeated reading in their classrooms and more adult learners will improve their reading.

Personal and Professional Growth

Over the course of this project, I have come to learn a great deal more about adult reading fluency and second language reading than I ever anticipated. The scope of the project reached far beyond my expectations and possibly a little bit farther than what I should have taken on for a Master's thesis. Many times, I found myself wondering why I did not seek out a graduate program with a different type of culminating project, and as I spoke to colleagues who have completed MAs, several commented that they did not have

to do such an extensive project for their degrees. That said, I am glad to have come out on the other side. I feel that I have grown as an instructor. More importantly, I have a much better understanding of how research is conducted, how results are interpreted, and how those results can be translated into classroom instruction.

Indeed, I feel that my own fluency in reading research has increased along with the English reading fluency of my participants. I am more able to understand the research presented in academic journals, but I also feel that one of my strengths as an instructor is taking such research and giving it a practical application in my classroom. Not everyone has the ability or inclination to do this, and I hope that I am able to use this strength more as my career progresses. For several years, I have had opportunities to present at conferences and provide professional development trainings every so often for other instructors and volunteer tutors; with my academic growth along this journey, perhaps I will be able to do so on a more regular basis.

Finally, I feel that this project has given me a good foundation on which I may be able to build future research projects. The process is no longer a mystery, and I understand the necessity of each portion of a research paper. While I am sure that L2 reading with adult learners will continue to be a research interest, I am also interested in pronunciation and technology applications for the ESL classroom.

Summary

As with previous repeated reading research, this study also shows that repeated reading is a promising practice in the adult ESL classroom with low-intermediate English learners. The implications of the research are that repeated reading can, and likely should, be incorporated into the adult ESL classroom with regularity; additionally, the practice of

assisted repeated reading may help a wide variety of adult learners with reading rate, accuracy, comprehension, and prosody. Repeated reading may also be one way to encourage learners to read more and feel more confident in their reading.

While the repeated reading intervention presented here did have several limitations, many of those limitations can be overcome with carefully designed, longitudinal research efforts. Additionally, future research may be able to provide a link to pronunciation instruction.

As for this research, I am hoping to implement improved repeated reading practice in my own classroom. I also hope to help other instructors implement assisted repeated reading in their ESL instruction, both at my own program and among a wider audience. Taking on this research project has also provided me the opportunity to grow as an instructor and as a consumer of research. Finally, I hope that the experience will lead me to produce additional research to help advance the field of adult ESL, and to further explore best practices for ESL instruction in my own classroom and beyond.

REFERENCES

Abadiano, H. & Turner, J. (2005). Reading fluency: The road to developing efficient and effective readers. *The New England Reading Association Journal, 41*(1), 50-56.

Anderson, K.H., Foster, J.K., & Steele, J. (2017). *Illinois ESL content standards.* Springfield, IL: Illinois Community College Board.

Anderson, N.J. (1999). Improving reading speed: Activities for the classroom. *English Teaching Forum, 37*(2), 2-5.

Anderson, N.J. (2008). *Practical English language teaching: Reading.* New York, NY: McGraw-Hill ESL/ELT.

Bader, L. & Pearce, D. (2009). *BADER reading and language inventory* (6th ed.). Boston, MA: Pearson.

Batalova, J. & Fix, M. (2015). Through an immigrant lens: PIAAC assessment of the competencies of adults in the United States. Washington, DC: Migration Policy Institute.

Bell, K. & Dolainski, S. (2012). What is evidence-based reading instruction and how do you know it when you see it? Washington, DC: U.S. Department of Education.

Bennett, A. (2006). *Read 100: 100-word reading passages for fact, fiction, and fun, level 3.* Brattleboro, VT: Pro Lingua Associates.

Bigelow, M., & Vinogradov, P. (2011). Teaching adult second language learners who are emergent readers. *Annual Review of Applied Linguistics, 31,* 120-136.

Biggam, S.C., & Thompson, E. (2005). The "QT" quick text-level check-in: A practical tool for classroom-based reading assessment in the intermediate grades. *The New England Reading Association Journal, 41*(1), 35-39.

CASAS. (2018). Scale scores, NRS educational functioning levels (EFLs), and grade levels. Retrieved from https://www.casas.org/training-and-support/wioa-and-nrs-compliance/scale-scores-nrs-efls-and-grade-levels.

Conlen, M. (2016). A linguistic comparison: Stress-timed and syllable-timed languages and their impact on second language acquisition. Retrieved from Wayne State University Digital Commons: https://digitalcommons.wayne.edu/honorstheses/30.

Crawley, S., & Merritt, K. (2009). *Remediating reading difficulties* (5th ed.). New York, NY: McGraw-Hill Higher Education.

Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Los Angeles, CA: Sage.

Curtis, M., & Kruidenier, J. (2005). *Teaching adults to read.* Washington, DC: Partnership for Reading.

Day, R., & Park, J. (2005). Developing reading comprehension questions. *Reading in a Foreign Language, 17*(1). Retrieved from http://nflrc.hawaii.edu/rfl/April2005/day/day.html.

Derwing, T., & Munro, M. (2014). Once you have been speaking a second language for years, it's too late to change your pronunciation. In L. Grant (Ed.), *Pronunciation myths: Applying second language research to classroom teaching* (34-55). Ann Arbor, MI: University of Michigan Press.

Garvey, J. (2018). *The attitudinal and motivational effects of extensive reading on adult ELLs in a non-intensive ABE/ESL program.* Retrieved from Hamline University Digital Commons: https://digitalcommons.hamline.edu/hse_cp/143.

Gorsuch, G. & Taguchi, E. (2008). Repeated reading for developing reading fluency and reading comprehension: The case of EFL learners in Vietnam. *System, 36,* 253-278.

Grabe, W. (2002). Dilemmas for the development of second language reading abilities. In J. Richards & W. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice* (pp. 276-286). New York: Cambridge University Press.

Hasbrouck, J., & Tindal, G. (2005). Oral reading fluency: 90 years of measurement. Eugene, OR: Behavioral Research and Teaching. Retrieved from https://files.eric.ed.gov/fulltext/ED531458.pdf

Jeon, E.H. (2012). Oral reading fluency in second language reading. *Reading in a Foreign Language, 24*(2), 186-208.

Jeon, E.H., & Yamashita, J. (2014). L2 reading comprehension and its correlates: A meta-analysis. *Language Learning, 64*(1), 160-212.

Jiang, X. (2016). The role of oral reading fluency in ESL reading comprehension among learners of different first language backgrounds. *The Reading Matrix, 16*(2), 227-242.

Kratos Learning. (n.d.) STAR fact sheet. Retrieved from https://www.startoolkit.org/assets/files/STAR_factsheet.pdf.

Kruidenier, J. (2002). *Research-based principles for adult basic education reading instruction.* Washington, DC: Partnership for Reading.

Kruidenier, J.R., MacArthur, C.A., & Wrigley, H.S. (2010). *Adult education literacy instruction: A review of the research.* Washington, DC: National Institute for Literacy.

Lems, K. (2012). Reading fluency and comprehension in English language learners. In T. Rasinski, C. Blachowicz, & K. Lems (Eds.), *Fluency instruction: Research-based best practices* (2nd ed.), (pp.243-254). New York, NY: The Guilford Press.

Lightbown, P.M., & Spada, N. (2013). *How languages are learned* (4th ed.). Oxford, UK: Oxford University Press.

Literacy Information and Communication System. (n.d.) Assessment strategies & reading profiles: About the ASRP profiles. Retrieved from https://lincs.ed.gov/readingprofiles/About_ASRP_Profiles.htm.

Majorana, J., Scott, K., & Cook, A. (2018, March). *Getting up to speed: Implementing an IEP reading fluency program.* Talk presented at the International TESOL Convention, Chicago, IL.

McShane, S. (2005). *Applying research in reading instruction for adults: First steps for teachers.* Washington, DC: National Institute for Literacy.

Murphy, J. (2014). Teacher training programs provide adequate preparation in how to teach pronunciation. In L. Grant (Ed.), *Pronunciation myths: Applying second language research to classroom teaching* (188-224). Ann Arbor, MI: University of Michigan Press.

Nation, I.S.P. (2009). *Teaching ESL/EFL reading and writing.* New York, NY: Routledge.

National Center for Education Statistics. (n.d.) Performance levels. Retrieved from https://nces.ed.gov/naal/perf_levels.asp.

National Reporting System for Adult Education. (2017). *Technical assistance guide for performance accountability under the workforce innovation and opportunity act.* Washington, DC: U.S. Department of Education.

National Reporting System for Adult Education. (2018). *NRS test benchmarks for educational functioning levels.* Washington, DC: U.S. Department of Education. Retrieved from https://nrsweb.org/resources/nrs-test-benchmarks-educational-functioning-levels-efl-updated-feb-2018.

National Research Council. (2012). *Improving adult literacy instruction: Options for practice and research.* Lesgold, A. & Welch-Ross, M. (Eds.). Washington, DC: The National Academies Press.

Paige, D., Rasinski, T., & Magpuri-Lavell, T. (2012). Is fluent, expressive reading important for high school readers? Journal of Adolescent & Adult Literacy, 56(1), 67-76.

Pey, K.C., Min, L.H., & Wah, L.L. (2014). Relationship between oral reading fluency and reading comprehension among ESL students. *GEMA Online Journal of Language Studies, 14*(3), 19-32.

Pimentel, S. (2013). *College and Career Readiness Standards for Adult Education.* Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education.

Rasinski, T. (2005). The role of the teacher in effective fluency instruction. *The New England Reading Association Journal, 41*(1), 9-12.

Rasinski, T. (2012). Why reading fluency should be hot! *The Reading Teacher, 65*(8), 516-522.

Rawson, K., & Touron, D. (2015). Preservation of memory-based automaticity in reading for older adults. *Psychology and Aging, 30*(4), 809-823.

Renandya, W., & Jacobs, G. (2002). Extensive reading: Why aren't we all doing it? In J. Richards & W. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice* (pp. 295-302). New York: Cambridge University Press.

Samuels, S.J. (1979). The method of repeated readings. *The Reading Teacher, 32*(4), 403-408.

Seok, S., & DaCosta, B. (2014). Oral reading fluency as a predictor of silent reading fluency at secondary and postsecondary levels. *Journal of Adolescent & Adult Literacy, 58*(2), 157-166.

Shore, J., Lentini, J., Molloy, H., Steinberg, J., & Holtzman, S. (2015). Faculty perspectives and needs in supporting adult English learners: Linking measurement to practice. *The Journal of Continuing Higher Education, 63,* 165-179.

Sparks, R., Patton, J., Ganschow, L., & Humbach, N. (2012). Do L1 reading achievement and L1 print exposure contribute to the prediction of L2 proficiency? *Language Learning, 62*(2), 473-505.

Stanovich, K. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21*(4), 360-407.

Taguchi, E., Melhem, L., & Kawaguchi, T. (2016). Assisted reading: A flexible approach to L2 reading fluency building. *The Reading Matrix*, *16*(1), 106-118.

Taylor, K., & Marienau, C. (2016). *Facilitating learning with the adult brain in mind.* San Francisco, CA: Jossey-Bass.

APPENDIX A

Participant Survey to Assess Demographics and Reading Attitudes

Student ID: _____

Reading Survey

Gender (circle one)

a. Male
b. Female
c. Other

Age: _____

Years of education in native country (circle one):

a. 0-3 years
b. 4-6 years
c. 7-9 years
d. 10-12 years
e. More than 12 years

How long have you lived in the U.S.? _____

What is your native language? _____

How long have you studied English? _____

How long have you been going to ESL classes in the U.S.? _____

How often do you read outside of school in ANY language? (Circle one)

a. Every day
b. 2-5 times per week

c. Once a week
d. 1-2 times per month
e. Never or almost never

Please rate your agreement with each of the following statements.
Write a check (✓) in the column that best describes you:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I enjoy reading in English.					
I am comfortable reading aloud in English.					
I can understand what I read in English.					
I want to read more in English.					
I am confident in my English reading.					
Reading in English will help me learn more about American culture.					
Reading a text multiple times will help me read faster in English.					
Reading faster will help me understand more.					

Adapted from Garvey, J. (2018). The attitudinal and motivational effects of extensive reading on adult ells in a non-intensive abe/esl program (Unpublished master's thesis). Hamline University, St. Paul, MN.

APPENDIX B

Sample Data Collection Text

Online Computer Games

Above is a photograph for activating schema for a 100-word text about playing computer games on the internet. The full text is not provided due to copyright.

Text adapted from Bennett, A. (2006). *Read 100: 100-word reading passages for fact, fiction, and fun, level 3.* Brattleboro, VT: Pro Lingua Associates.
Image source: https://www.pexels.com/photo/boy-computer-fun-game-79637/

APPENDIX C

Sample Comprehension Questions

Comprehension Questions A: Online Computer Games
Read the statements and circle Yes or No.

1. Before the internet, people played computer games alone or with friends.
   Yes No
2. Computer gaming is changing because the internet is fast and expensive.
   Yes No
3. In a "role playing" game, people play characters online. Yes No
4. Online computer gaming is a business that is showing rapid growth. Yes No

Comprehension Questions B: Online Computer Games
Read the statements and circle Yes or No.

1. People played computer games by themselves or with friends before the internet.
   Yes No
2. Computer gaming is changing because the internet is fast and cheap. Yes No
3. Players become different characters in an online world in "role-playing" games.
   Yes No
4. Online computer gaming is a business that is not showing rapid growth.
   Yes No

Adapted from Bennett, A. (2006). *Read 100: 100-word reading passages for fact, fiction, and fun, level 3.* Brattleboro, VT: Pro Lingua Associates.

APPENDIX D

Progress Report for Second, Fifth, and Eighth Interventions

Participant ID: _____

Intervention (circle): 2 5 8 **Reading (circle):** pre post

Reading rate: _____ (~100 words)

Miscues (total):

- Substitutions/mispronunciations that disrupt meaning: _____
  (count repeated miscues of same word as one error)
- Insertions: _____
- Omissions/partial omissions: _____
- Repetitions (not for self-corrections): _____

TOTAL MISCUES PER 100 WORDS: _____

Prosody (circle):

	Low	Medium	High
Phrasing	Word-by-word, choppy reading	Word-by-word, but with some phrasing	Conversational, appropriate pauses
Expression	Little or monotone	Some variation in pitch and volume	Appropriate variation of pitch/volume

Notes:

_____

_____

_____

Adapted from Bader, L. & Pearce, D. (2009). *BADER reading and language inventory* (6th ed.). Boston, MA: Pearson.