The Effects of Expressive Interactive Journaling on Word Fluency in Seventh-Grade English Language Arts Students

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Abstract

Background: Trauma and its effects on affected individuals' overall health and outcomes have been widely examined and documented by clinicians for decades. From increased incidences of anxiety and depression to chronic health disorders, trauma impacts every aspect of an individual's functional, social, and emotional capacities. Findings of the most extensive study of childhood trauma resulting from abuse, neglect, and household labeled these instances, along with a host of others, as adverse childhood experiences (ACEs). Prolonged exposure to ACEs through adolescence challenges the child's sense of safety, stability, bonding, and attachment. Further, severe numerable instances of traumatic experiences in childhood are associated with poorer cognitive performance and lower reading levels due, in part, to low word fluency. As the cornerstone for reading, students with low word fluency struggle to understand grade-level texts, routinely demonstrate poor performance on state Reading assessments and navigate social and emotional situations. As a result, these students are among the highest number of discipline referrals in schools. Schools must develop interventions to mitigate the effects of ACEs on academic performance and student behavior management, especially at the middle school level. **Purpose**: This study aimed to examine the impact of a researcher-created technique called Expressive Interactive Journaling on improving word fluency in seventh-grade English Language Arts students. The central question examined how engagement in Expressive Interactive Journaling paired with Reading Intervention improved the word fluency of a small group of seventh-grade English Language Arts as measured by the Texas Middle School Fluency Assessment (TMSFA). **Participants**: Inclusion criteria for this study included a sample of seventh-grade English Language Arts and

Reading students who were administered the beginning of year (BOY) iteration of the TMSFA. The sampling of student participants comprised seventh-grade students who were administered and did not demonstrate proficiency on the BOY iteration of the TMSFA and were receiving campus-based Reading Intervention. Additionally, the student participants were of low socioeconomic status (SES), reported several ACEs, and had more than three office referrals in the preceding semester. **Methods**: Data from the student participant's performance on the BOY iteration of the TMSFA served as the pretest. The premise and process of EIJ were outlined and modeled for student participants by the researcher and Reading Interventionist before intervention implementation. The word lists from the TMSFA were introduced in stages throughout the study, and participants engaged in EIJ sessions along with whole-word fluency instruction provided by the researcher and a middle school Reading Interventionist in structured 45-minute sessions. Data from student performance during and after the study intervention were outlined using descriptive statistics. **Results**: Findings indicated a positive correlation between the EIJ study intervention and student participant performance on the EOY iteration of the TMSFA. Moreover, data revealed that the use of EIJ served as a tool for participants to employ to mitigate negative outward responses in social and emotional situations and also mitigated office referrals for behavior for all study participants. Limitations and suggestions for future research are outlined within.

Keywords

1. Introduction

Word fluency is the ability to recognize, decode, and read words with automaticity. It is the cornerstone for reading, comprehension, and writing. Seventh-grade students in the researcher's middle school struggle with word fluency, resulting in poor reading and comprehension. Reading Intervention is a small group-focused program designed to address deficits in reading ability by providing activities focused on improving reading levels. Ultimately, the goal is to guide students to improve their performance in Reading, English Language Arts, and across subjects. Intervention for Reading at the researcher's school is assigned to any student who demonstrates difficulty with grade-level reading and students who do not meet grade-level or master district-level assessments and the state-mandated Reading STAAR, Writing STAAR, or both. Students on the researcher's campus scored lowest in word fluency and reading comprehension for the previous three school years on the Reading and Writing STAAR tests, the third-lowest scoring of the 54 charter schools within the school system the researcher works for.

Expressive Writing, also referred to as Expressive Journaling, is a therapeutic writing technique founded by Dr. James Pennebaker. Dr. Pennebaker's original study entitled *Confronting a traumatic event: Toward an understanding of inhibition and disease* (1986) examined whether writing about traumatic events would influence long-term measures of health as well as reports of negative moods. Findings of the study indicated that when participants spent 15 minutes a day for four consecutive days writing about personally traumatic life events or trivial topics, they visited the health center at half the rate of those in the control group within the six months following the study and showed signs of improved physical and immune health over the next two years (Pennebaker & Beall, 1986). This indicates that writing about traumatic and stressful events can improve overall physical and mental health for those who consistently do so; however, there is little research on applying this technique to adolescents in an educational setting and those without diagnosed medical or psychological issues.

Interactive Journaling is a tool commonly used in educational settings that can be tailored to suit various purposes. Journaling has shown to be an effective means of engaging students and teachers in shared teaching and learning experiences. Student journaling is the "cornerstone of the 'communications triangle'; a method whereby the teacher could stimulate the natural interaction of language uses in students to further linguistic development" (Cobine, 1995). Interactive journals typically include handouts and foldable designed to help reinforce specific concepts or topics related to the content area. Teachers give written feedback and communicate with students via the journal and students. Students can reflect on the feedback received and use it to employ comparisons, analogies, descriptions, and arguments. Eventually, students will write more candidly and formally (Cobine, 1995). I would add that students come to read more fluidly given the vocabulary modeled in their written and verbal interactions with their teacher and peers due to journaling.

While a focus in the early elementary years, word fluency instruction wanes significantly as students progress through to middle school, especially for seventh-grade students at the researcher's campus, the technique of Expressive Writing and Interactive Journaling have been explored in isolation with no connection to one to the other in research studies, literature, or an educational setting. To address word fluency and academic challenges experienced by middle school students on the researcher's campus and add to the body of literature regarding Expressive Writing and Interactive Journaling, the researcher seeks to determine the effects of Expressive Interactive Journaling on Word Fluency in seventh-grade grade English Language Arts students.

Seventh-grade students at the researcher's middle school consistently struggle with word fluency. Specifically, they have difficulty recognizing, decoding, and reading words in and out of context with automaticity. Ultimately, they cannot read and comprehend grade-level texts enough to demonstrate mastery on state and district level assessments. Students are expected to successfully demonstrate

ability on district and state-mandated reading assessments each school year. In seventh-grade grade, students in Texas are administered the Texas Middle School Fluency Assessment or TMSFA (2018). The assessment comprises a word fluency section and a reading comprehension section. Students are expected to score within an acceptable score range in both areas to pass the assessment. Due to the lack of adequate word fluency and low reading ability, as a result, the majority (two-thirds) of seventh-grade students on the researcher's campus have been unable to successfully demonstrate mastery of the TMSFA based on beginning-of-year (BOY) scores. Such performance has negatively impacted the morale of students and teachers as both have expressed feelings of despair and discouragement, which negatively impact the learning environment as well. Despite afterschool tutoring, Reading Intervention, and Saturday School, students are still not progressing at the rate they should be. The number of seventh-grade students in need of remediation is greater than the number in an average classroom on the researcher's campus (i.e., >29 students). This makes providing adequate small group intervention challenging and infringes upon the teacher's ability to address the current curriculum. We must go beyond the superficial focuses of traditional Reading Intervention and focus on intensive instruction on word fluency to address the deficits and challenges exhibited by seventh-grade students on the researcher's campus.

Reading Intervention is chiefly focused on increasing reading levels. While Reading Intervention includes word fluency as a component, it does not offer effective instruction beyond phonemic awareness (i.e., the ability to hear, identify and manipulate individual sounds or phonemes in spoken words) and phonological awareness (i.e., the ability to recognize the many ways sounds function in words). Students are taught techniques to aid in decoding words, such as sounding it out and using context clues to determine what the word is; however, this does little to help students genuinely become fluent with words, develop automaticity, establish whole-word meaning, and understand the usage of words in and out of context. Unfortunately, while students may demonstrate slight increases in reading levels through Reading Intervention, their ability to recognize, decode, and read words with automaticity (i.e., word fluency) wanes. The results are ever-increasing reading fluency and comprehension gaps as they progress through elementary and middle school. These gaps in word fluency are even more prevalent in English Language Learners (ELLs) students. As grade-level texts become longer and more challenging, students with a lack of adequate word fluency partly due to a lack of automaticity struggle to read and interpret texts as intended and demonstrate difficulty mastering any assessment involving reading. Roembke et al. (2018) noted that "automaticity particularly in a task stressing meaning, predicted reading fluency over and above knowledge of the relevant grapheme-phoneme mappings" in their research study involving 58 middle school students with average to below-average reading comprehension. Further, the findings suggest a "link between automatic

written word recognition and fluency has important implications for how automaticity may be targeted to improve reading outcomes". Scammacca et al. (2007) noted that older students with reading difficulties benefit from interventions focused at both the word and the text level. Moreover, older students with reading difficulties benefit from improved knowledge of word meanings and concepts; word-study interventions are appropriate for older students struggling at the word level.

Ninety-three percent (93%) of the student body on the researcher's campus are economically disadvantaged. Seventy-five percent of the campus population do not speak English as their first language. Of the seventh graders on the researcher's campus, more than 60% of the students are considered English Language Learners or ELLs, some of whom are newcomers who have been in the United States for less than three years. This is significant because most ELLs have difficulty grasping the intricacies of the English language in general, let alone the ability to demonstrate word fluency. These students have little to no exposure to reading at home in any language and do not have more than one person at home who understands English and can assist them with reading. These students, in turn, do not have exposure to the vocabulary or meanings of the words they see in school and do not have a schema or background knowledge to draw from.

1.1. Central Question and Focus

This study's central question is: What is the effect of Expressive Interactive Journaling paired with Reading Intervention on the word fluency of seventh-grade grade English Language Arts students as measured by the Texas Middle School Fluency Assessment or TMSFA? This question is significant as it seeks to determine the effects of the study interventions on word fluency based on student performance on a commonly used standardized assessment. The TMSFA and its applications will be explained in greater detail in the following section.

Schonfeld et al. (2015) examined the results of a social and emotional learning (SEL) program on academic achievement among students attending a large, urban, high-risk school district. The demographics of students in the Schonfeld et al. study are similar to the demographics of students at the researcher's campus. Findings of the study indicated that students enrolled in the intervention or SEL-program schools demonstrated higher levels of basic proficiency in reading, writing, and math at some grade levels. This suggests that social development instruction may be a promising approach to promote the acquisition of academic proficiency, especially among youth attending high-risk school settings like those of the Schonfeld et al. study and the researcher's campus. Utilizing SEL techniques to improve educational outcomes and assessment performance is a task that has not been previously explored on the researcher's campus. Based on the noted benefits of Expressive Writing, the effectiveness of using Interactive Journaling, the components of the TMSFA, and the need for intensive and effec-

tive word fluency instruction, the solution is to explore the effects of combining Expressive Writing with Interactive Journaling to create one SEL technique and pairing it with Reading Intervention focused on word fluency in seventh-grade grade English Language Arts students.

1.2. Overview of the Literature

The purpose of this study is to examine the effects of expressive interactive journaling along with reading intervention on word fluency and reading comprehension of seventh-grade students. Information about education statistics for students of low socioeconomic status, expressive journaling and its effects on physical and mental health, interactive journaling, reading comprehension and intervention, second language acquisition, writing instruction, and intervention form the foundation of this study. In retrieving the information reviewed for this study, the researcher used Google Scholar, Research Gate, the National Center for Biotechnical Information, Cardinal Strich University's Strich Shares, Ohio-LINK, JSTOR-Scholarly Journal Archive, Pro Quest, and ERIC-Education Resources Information Center.

This literature review explores educational statistics of students of low socioeconomic status, how said status affects academics, and how educators approach and students receive reading and writing instruction and interventions. The concentration of literature is divided into three critical perspectives. The first perspective of the literature review focuses on recent statistics of students of low socioeconomic status and how said status affects the lives of students academically and potential career projection. The second perspective focuses on educators' approach to reading and writing instruction concerning second language acquisition, instructional delivery, vocabulary and fluency development, learning styles, reading comprehension, and education of students with special needs. The third perspective focuses on expressive interactive writing—precisely the psychological health benefits for individuals who have experienced physical and emotional traumas similar to those of the student participants.

1.2.1. Recent Statistics of Students of Low Socioeconomic Status

According to the American Psychological Association Socioeconomic Status Office (American Psychological Association, 2018), "SES affects overall human functioning, including physical and mental health. Low SES and its correlates, such as lower educational achievement, poverty, and poor health, ultimately affect our society. Inequities in health distribution, resource distribution, and quality of life are increasing globally. Society benefits from an increased focus on the foundations of socioeconomic inequities and efforts to reduce the deep gaps in socioeconomic status in the United States and abroad". Child Trends (2017) notes that "Hispanic and black children are much more likely to live in impoverished families than their non-Hispanic white and Asian counterparts. In 2016, 11 percent of non-Hispanic white and Asian children were impoverished, compared with 27 percent of Hispanic children and 31 percent of black children. In the same

year, Hispanic and black children were more likely than non-Hispanic white and Asian children to live in low-income families (56 and 58 percent, verses 27 and 24 percent, respectively)". Based on just this information and the statistics, it is fair to state that Hispanic/Latino and black children experience the stressors of poverty at much higher rates than their non-Hispanic and Asian peers and, as a result, tend to have lower educational achievement.

1.2.2. How Educators Approach Assessment and Reading and Writing Instruction

Providing reading and writing instruction is challenging and includes key elements of language that ultimately influence a student's ability to perform in other core subjects. Providing adequate and intensive instruction in reading and writing becomes even more challenging for educators when instructing students with limited exposure to reading and writing at home, as is the case with students of low socioeconomic status. Across the United States, scores of teachers are required to obtain a certification in English as a Second Language or ESL. A teacher cannot be considered highly qualified in Texas without holding both a content certification and an ESL certification. Teachers who do not hold an ESL certification must have a certified ESL teacher provide either push-in or pull-out services to LEP students. In addition to ESL students, a sub-culture of students has limited English proficiency, not due to country of origin but exposure to "proper" or the widely used English language. Chenowith (2017) and WMS-Link (2017) each explored the practices of teaching students with limited English proficiency from very different perspectives. Chenowith (2017) designed a multi-case study to examine how English as a Second Language (ESL) teacher teach writing to English Language Learners (ELLs) in grades 5 - 8. The purpose of the study was to understand how the teachers in the study used mediating tools toward the goal of teaching second language writing. The following questions were the central focus of the study: 1) how do ESL teachers teach writing to ELLs in grades 5 - 8? 2) How do ESL teachers explain their pedagogical decisions for the second language (L2) writing instruction? Chenowith's findings revealed that these two ESL teachers only spent 11% - 12.5% of their instructional time in ESL on writing. In addition to receiving very little time, writing tasks were limited in length and scope. The implications of Chenowith's research indicate a need to include writing pedagogy in ESL endorsement programs, for districts to implement defined goals and writing curricula for English learners, and the need to expand writing instruction beyond basic skills.

WMS-Link (2017) investigated perceptions of educators toward African American Vernacular English (AAVE) and sought to promote understanding of the language learning needs that lead to the acquisition of academic English, reading, and writing for the classroom at the secondary level (grades 7 - 12) for African American students who speak AAVE. The study researched the perceptions of two groups of teachers who had participated in a district literacy intervention or continued to participate in a district literacy intervention throughout the study.

The research included English Language Arts (ELA) and content-area teachers from a Mid-Western school district. It examined data gathered from interviews of teachers, language attitude surveys, and the researcher's reflective journal. ELA teachers were interviewed to determine their perceptions of AAVE. The study revealed that while attitudes toward AAVE remain negative, the teachers in this research study wanted to help AAVE-speaking students acquire academic language proficiency but lacked the training and resources to do so. Results suggested the need for collaboration between school districts and teacher training programs to accommodate the needs of AAVE-speaking students.

Continuing on the topic of how educators approach instruction of Reading and Writing, Feldman's quantitative study (Feldman, 2009) investigated three main variables concerning standardized reading scores for 307 middle and high school students attending school in two different school districts in an unnamed Midwestern City: 1) the extent to which differences occurred in the time spent on writing instruction by genre, instructional methodology, and the phase of writing between middle and high school teachers, 2) the number of time teachers provide writing instruction, the instructional methodology, the genre addressed in the instruction, the process of writing discussed, and students' gender predicts change in standardized reading test scores, and 3) the number of time students spend writing, the genre of writing, the part of the writing process used, and students' gender predict change in standardized reading test scores. Feldman noted significance in the variables of ethnicity, grade level, instruction in the writing phase, formal instruction on academic writing, and journals were significant predictors of reading scores.

The methods employed by teachers of Reading and Writing and students' language proficiency are critical factors in determining how well the instruction addresses the student's needs. As educators, it is imperative to check our proverbial biases at the door and focus on providing the best, most effective instruction possible for our students. Elser (2008) drew on her own experience as a classroom teacher when conducting an action research study that outlined the challenges both teachers and students face in today's classrooms regarding writing instruction. She explored the importance of writing, types of diversity in the classroom, and the writing challenges faced by culturally diverse students, who live in poverty, have limited English proficiency or suffer from learning disabilities. Elser was primarily focused on examining the effects of different types of writing on learning and suggested areas for more research and recommendations for teachers to implement in classrooms that will benefit all students.

While the primary learning styles are visual, auditory, and kinesthetic, most students are visual learners. Miller (2011) investigated the effects of using three different visual approaches to vocabulary instruction on students' engagement and perceptions. Participants were twelve 11th-grade students enrolled in an academic English course. Their teacher used student-created graphics, com-

mercially-made vocabulary cartoons, and vocabulary DVDs as part of the vocabulary instruction. Findings of the study indicated that each visual approach increased student engagement and perceptions of their learning, and students preferred the student-created visuals. Furthermore, the study concluded that middle and high school educators could support literacy and vocabulary development by providing literacy experiences that stimulate students' interests and incorporate various strategies that will help students build on prior knowledge.

Egmon's (2008) mixed-methods study sought to describe the relationship between the reading fluency and reading comprehension of first-grade students. The multivariate correlational research design examined first-grade students in a rural school district in the southwestern United States. The Texas Primary Reading Inventory (TPRI) was the instrumentation used, a commonly used assessment in Texas for primary grade levels. Research findings indicated a strong positive correlation between fluency and comprehension in first-grade students, and regression coefficients suggest that at-risk and fluency are the most significant contributing factors to the changes in reading comprehension. Egmon notes that the findings further indicated that fluency instruction must be an integral part of the first-grade curriculum to enhance comprehension. I would extend that statement to include fluency instruction at every grade level must be an essential part of the curriculum, considering it is usually in the upper elementary to middle-school grades that students begin to demonstrate deficits in Reading and Writing and life stressors start to become more prevalent as students ascend through the developmental stages. At these stages, learning disabilities and emotional disturbances start to impact students and their learning. Singh (2012) designed a qualitative case study to examine the effects of comprehension, writing, fluency, and vocabulary interventions on a student with a diagnosed Speech-Language Impairment (SPLI) and comorbid Cognitive Disorder (CD) transitioning from eighth grade to ninth grade in a large urban city in the Midwest. Singh reported that the student struggled in reading. The study began with a review of the educational performance and application to special education law and Common Core Standards. Various interventions were examined and implemented. The student was given one-on-one instruction in Reading per the student's Individual Education Plan (IEP) and based on student needs. Results of the intervention indicated that one-on-one instruction was best for this student and suggested that students like her would benefit from a similar intervention.

1.2.3. Expressive Interactive Writing

Expressive writing is a technique created and heavily researched by Dr. James Pennebaker, a renowned health psychologist and professor. In 1986, Pennebaker and his colleague Sandra Beall published the research study *Confronting a Traumatic Event: Toward an Understanding of Inhibition and Disease*. Pennebaker and Beall sought to determine if writing about traumatic events would in-

fluence long-term health measures, physiological arousal indicators, and reports of negative moods using undergraduate students. Their findings indicated that writing about a traumatic event's emotions and facts was associated with relatively higher blood pressure (physiological arousal) and negative moods following the essays and fewer health center visits in the six months following the experiment. Pennebaker's expressive writing techniques have since been used to develop further research studies and collaborate with others in psychology and beyond. Medical and psychiatric patients with varying illnesses and disorders have used expressive writing techniques. It is an effective means of coping with and overcoming significant stressors. Niles et al. (2014) assessed the main effects and moderators of the impact of expressive writing in a different sample; healthy adults. A total of 116 participants were randomly assigned to the experimental or control group. The experimental group was tasked to write for 20 minutes on four occasions about their deepest thoughts and feelings regarding their most stressful or traumatic event in the past five years. Within the expressive writing group, Niles et al. stated that participants high in expressiveness evidenced a significant reduction in anxiety at three-month follow-up, and participants low in expressiveness showed a significant increase in anxiety. The more willing and open a person is when writing about stressful or traumatic events, the more likely they will feel better immediately after writing and beyond. It is important to note that some people are not open to recalling or sharing stressful or traumatic events in their life for personal or cultural reasons.

Many studies reviewed examine expressive writing do so with adults, those with physical and mental illnesses, and those who have experienced significant life stressors. Could the same techniques work with much younger participants? Travagin et al. (2015) evaluated the use of Expressive Writing in their meta-analysis. Researchers collected twenty-one independent studies that assessed the effectiveness of Expressive Writing on adolescents ages 10 - 18 years of age. According to their findings, Travagin et al. noted that expressive writing produces small yet significant improvements in adolescents' well-being. The results further highlight the importance of modifying the traditional Expressive Writing protocol to enhance efficacy and reduce potential detrimental effects. Finally, they found that evidence of Expressive Writing as a viable intervention for adolescents is promising but not decisive.

Barbian's (2011) qualitative case study was created to assist a Special Education student in the researcher's fifth-grade class and her general education students. The study examined the effects of dialogue and journaling on reading comprehension. The primary focus participant named Lilly received services from the Learning Specialist per her IEP for a learning disability that significantly affects her reading comprehension; however, the remainder of her class was included in the study. Three main questions drove Barbian's study: how does dialogue impact comprehension? Can journaling be a form of "inner dialogue" used to help facilitate comprehension? What is the relationship between

certain types of journal statements and comprehension scores? Barbian elected to approach dialogue in written rather than oral form and explored how to increase reading comprehension through group discourse and independent written dialogue. Evidence of independent thought process was gathered by collecting students' journals, including Lilly's. Barbian's findings suggest that the combination of interventions increased reading comprehension for Lilly and all her students.

Regan et al. (2005) designed a mixed methods research study to investigate expressive writing via dialogue journals of five elementary students with EBD emotional and behavioral disturbances. This study most closely matches the focus of my proposed study in that many of the potential student participants have EBDs. Dialogue journals between teacher and student participants were implemented and used for the study duration and focused on each student's social and behavioral issues. Visual analysis used by the researchers indicated increased time on task for students, improved quality of writing, and randomized tests applied to the data revealed significant results for writing measures.

According to an analysis of campus-wide student performance on state and district level assessments from the previous school year, students on the researcher's campus scored only 60% proficiency in Reading and 30% in Writing. Fifty percent of fourth-grade students fell well below the state and district standards for Reading and Writing, and just over half of the incoming seventh-grade graders did not pass the state Reading STAAR, Writing STAAR, or both. Students scored lowest in word fluency and reading comprehension, the third-lowest scoring of the 54 campuses held by the charter school system in Texas. Considering the daily academic stressors, students face on the researcher's campus and the impact said stressors have on behavior and academic performance, it is of the utmost importance to determine a course of action that addresses these areas of concern together rather than in isolation. The goal was to examine the effects of expressive interactive journaling and reading intervention on word fluency and reading comprehension in seventh-grade students at my campus.

1.3. Summary of Literature

The importance and significance of the study are two-fold. First, there is little to no literature regarding the application of Expressive Interactive Journaling in an educational setting. This study will establish a body of literature on the topic. Secondly, based on the outcomes of the study, the researcher's district may adopt curriculum modifications to incorporate Expressive Interactive Journaling and other social-emotional activities as part of our general education reading and writing instruction as well as to enhance our Reading Intervention programs to make them more focused, intensive, and student-centered.

This research study adheres to the action research model. It examines and addresses the current challenges with word fluency and reading comprehension

experienced by seventh-grade students on the researcher's campus. Rather than simply increasing the number of intervention times or sessions, this study suggests enhancing Reading Intervention by focusing on the student's need for whole-word fluency and ultimately improving reading comprehension using a technique previously used in an exclusively clinical setting.

This study's driving question was: what is the effect of Expressive Interactive Journaling paired with Reading Intervention on word fluency of seventh-grade English Language Arts students as measured by the Texas Middle School Fluency Assessment or TMSFA? This question was significant. The researcher sought to determine the effects the study interventions had on word fluency based on student performance on a commonly used standardized assessment.

2. Participants

Participants in this study were ten students in seventh-grade grade on the researcher's campus who received Reading Invention based on their performance on the 2018 Reading STAAR test and beginning-of-year (BOY) iteration of the Texas Middle School Fluency Assessment or TMSFA. Participant groups will be made up of males and females between 12 and 14. Participants will most likely be of Hispanic or Latino descent, as these groups make up most of the campus demographic.

2.1. Data Collection Instruments and Methods

The TMSFA is a diagnostic assessment administered to students in grade 7 who did not demonstrate reading proficiency on the grade 6 state reading assessment. The TMSFA contains three reading passages and three 150-word lists. Teachers and Interventionists use student performance data to determine what level of intervention is needed to assist the student in achieving grade-level mastery. The TMSFA is usually administered in 5 iterations throughout the school year; however, for this study, administration of the TMSFA was done following the currently scheduled middle (MOY) iteration in February to act as a pre-assessment. Study interventions were applied, and student participants were assessed using parts of the middle/end-of-year (MOY/EOY) iteration of the TMSFA. Students will be re-evaluated using the complete, scheduled middle/end-of-year iteration on the (MOY/EOY) in April to determine if the interventions applied were effective outside of the study. Based on the study outcome, data collected from the study will be used to design and drive intervention focuses and classroom practices across the researcher's campus in the future.

Student scores on the TMSFA are analyzed using the metric featured below. The first metric outlines how student performance is scored based on their MOY/pre-assessment of the TMSFA. The second matrix outlines the expected performance of students at the middle/end-of-year (MOY/EOY) or post-assessment. Descriptive statistics analyzing mean, median, mode, and range will also be applied to the results of the TMSFA.

MIDDLE OF YEAR			
Average Equated Score RANGE	**DECODING**	**FLUENCY**	**COMPREHENSION**
Needs Identified	Decoding, Fluency, and Comprehension	Fluency and Comprehension	Comprehension
Grade 7			
TMSFA Word Lists	<63	64 - 84	>85
TMSFA Passage Fluency	≤106	107 - 129	>130
END OF YEAR			
Average Equated Score RANGE	DECODING	FLUENCY	COMPREHENSION
Needs Identified	Decoding, Fluency, and Comprehension	Fluency and Comprehension	Comprehension
Grade 6			
TMSFA Word Lists	≤63	64 - 83	>84
TMSFA Passage Fluency	≤100	101 - 130	>131
Grade 7			
TMSFA Word Lists	≤66	67 - 90	>91
TMSFA Passage Fluency	≤110	111 - 140	>141
Grade 8			
TMSFA Word Lists	≤70	71 - 95	>96
TMSFA Passage Fluency	≤130	131 - 155	>156

Descriptive statistics analyzing mean, median, mode, and range are also applied to the results of the TMSFA.

2.2. Data Security and Confidentiality

To ensure the security and confidentiality of all participants, the names of participants are not featured in this report. All participant's pre-and post-tests were assigned a random number and letter combination (ex. A123G456). All intervention materials were stored in a locked cabinet in the researcher's office that was only accessible by the researcher.

2.3. Summary

The implementation of the study is as follows. Please note that all sessions are 45 minutes in length and conducted over 13 consecutive days:

• Day 1—Students are introduced to Expressive Interactive Journaling and given their first 15-minute journaling session. Students then engage in 25 minutes of whole word fluency instruction using 14 words taken from the TMSFA word list with the guidance of the Reading Interventionist, followed by 5 minutes of optional journal entry sharing and application of the words used in word fluency instruction to their journal entry. Words from the fluency lesson

are written and posted in the intervention area for students to refer to in future sessions and added to during each session. Total intervention time = 45 minutes.

• Day 2—Students begin the intervention session with 15 minutes of Expressive Interactive Journaling. Students then review the 14 words introduced in the previous session, including word meaning and applicability. The Reading Interventionist guides students through whole word fluency instruction on the next 14 words taken from the TMSFA, followed by an exercise to link the review words to the current words. Words used during the lesson and any relevant notes to help students remember the words from the fluency lessons will be added to the word list posted in the intervention area for students to refer to in future sessions. Students use the last 5 minutes for optional journal entry sharing and reflection on their use of words from the fluency instruction in the previous and current session. Total intervention time = 45 minutes.

• Day 3—Students begin the intervention session with 15 minutes of Expressive Interactive Journaling followed by 25 minutes of whole word fluency instruction on the next 14 words on the TMSFA word list, just as in the previous sessions. Words reviewed and learned during the session and any relevant notes to help remember the words are added to the word list posted in the intervention area for students to refer to in future sessions. Students use the last 5 minutes for optional journal entry sharing. They are encouraged to incorporate the words they have learned into their conversations with one another during and outside of the sessions and in their writing. Students reflect on their use of words from the fluency instruction in the previous and current session in a group conversation. Total intervention time = 45 minutes.

• Day 4—Students begin the intervention session with 15 minutes of Expressive Interactive Journaling followed by 25 minutes of whole word fluency instruction on the next 14 words on the TMSFA word list, just as in the previous sessions. Words reviewed and learned during the session and any relevant notes to help remember the words are added to the word list posted in the intervention area for students to refer to in future sessions. Students use the last 5 minutes for optional journal entry sharing and continue to be encouraged to incorporate the words they have learned into their conversations with one another during and outside of the sessions and in their writing. Total intervention time = 45 minutes.

• Day 5—Students begin the intervention session with 15 minutes of Expressive Interactive Journaling followed by 25 minutes of whole word fluency instruction on the next 14 words on the TMSFA word list, just as in the previous sessions. Words reviewed and learned during the session and any relevant notes to help remember the words are added to the word list posted in the intervention area for students to refer to in future sessions. Students use the last 5 minutes for optional journal entry sharing. They are encouraged to incorporate the words they have learned into their conversations with one another during and outside of the sessions and in their writing. Total intervention time = 45 minutes.

• Day 6—Students begin the intervention session with 15 minutes of Expres-

sive Interactive Journaling followed by 25 minutes of whole word fluency instruction on the next 14 words on the TMSFA word list, just as in the previous sessions. Words reviewed and learned during the session, and any relevant notes to help remember the words, are added to the word list posted in the intervention area for students to refer to in future sessions. During this portion of the session, students are also introduced to a reading passage similar to the one featured on the TMSFA and guided through annotating the text while searching for the words they have learned during the whole word fluency sessions. Students use the last 5 minutes for optional journal entry sharing and reflection on the reading passage they read and the usage of the words from the word list found in the passage. Total intervention time = 45 minutes.

• Day 7—Students begin the intervention session with 15 minutes of Expressive Interactive Journaling followed by a 10-minute review of the 84 words they have learned/reviewed. Students are then given 1 of the official reading passages from the TMSFA and given time to annotate and answer comprehension questions individually and separately from the group. Provided time allows, students use the last 5 minutes for optional journal entry sharing and reflection on the reading passage they read and the usage of the words from the word list found in the passage. Total intervention time = 45 minutes.

• Day 8—Students begin the intervention session with 15 minutes of Expressive Interactive Journaling followed by a 5-minute review of how they performed on the passage from the previous sessions. The Interventionist and students then address any areas of concern and proceed with the whole word fluency instruction for the next 14 words on the TMSFA word list and add them to the posted list of words for 20 minutes. At this point, students have reviewed 84 of the 150 words on the list. Students then use the last 5 minutes for optional journal sharing and reflection on the current and past words used in their instruction and journaling. Total intervention = 45 minutes.

• Day 9—Students begin the intervention session with 15 minutes of Expressive Interactive Journaling followed by 25 minutes of whole word fluency instruction on the next 14 words on the TMSFA word list. Words reviewed and learned during the session and any relevant notes to help remember the words are added to the word list posted in the intervention area for students to refer to in future sessions. During this portion of the session, students are introduced to a second reading passage similar to one featured on the TMSFA and guided through annotating the text while searching for the words they have learned during the whole word fluency sessions. Students use the last 5 minutes for optional journal entry sharing and reflection on the reading passage they read and the usage of the words from the word list found in the passage. Total intervention time = 45 minutes.

• Day 10—Students begin the intervention session with 15 minutes of Expressive Interactive Journaling followed by a 10-minute review of the 98 words they have learned/reviewed. Students are then given another reading passage from

the TMSFA and given time to annotate and answer comprehension questions individually and separately from the group. Provided time allows, students use the last 5 minutes for optional journal entry sharing and reflection on the reading passage they read and the usage of the words from the word list found in the passage. Total intervention time = 45 minutes.

• Day 11—Students begin the intervention session with 15 minutes of Expressive Interactive Journaling followed by a 5-minute review of how they performed on the passage from the previous sessions. The Interventionist and students then address any areas of concern and proceed with the whole word fluency instruction for the following 14 words on the TMSFA word list and add them to the posted list of words for 20 minutes.

At this point, students have learned/reviewed 114 of the 150 words on the list and read a total of 4 passages featuring the words. Students also have 11 journal entries and reflect on their usage of the words in their entries and conversations for the last 5 minutes of the session. Total intervention = 45 minutes.

• Day 12—Students begin the intervention session with 15 minutes of Expressive Interactive Journaling followed by 25 minutes of whole word fluency instruction on the last 36 words on the TMSFA word list and the final reading passage similar to the passage on the TMSFA. Words reviewed and learned during the session and any relevant notes to help remember the words will be added to the word list posted. Students use the last 5 minutes for optional journal entry sharing and reflection on the reading passage they read and the usage of the words from the word list found in the passage. Total intervention time = 45 minutes.

• Day 13—Students begin the intervention session with their final 15-minute Expressive Interactive Journal entry. Students then have a 5-minute review session of all 150 words learned/reviewed throughout the study. Students are then given the final reading passage and time to annotate and answer comprehension questions individually and separately from the group. Provided time allows, students use the last 5 minutes for optional journal entry sharing and reflection on the reading passage they read and the usage of the words from the word list found in the passage. Total intervention time = 45 minutes.

The key methodological elements of the study are the small-group Reading Intervention, the structured 45-minute sessions including an introduction and review of the words featured on the TMSFA Word List, guidance through Expressive Interactive Journaling, and the optional share sessions. Incorporating each of the elements is a key to establishing an effective intervention and ultimately determining the effectiveness of the intervention application as it pertains to student performance on the final iteration of the TMSFA.

3. Results

The outcome of the MOY/EOY iteration of the TMSFA, also used as the posttest for this study, indicated that the application of the study intervention resulted in

a change in student participant scores. Specifically, 6 of the 10 (60%) student participants showed marked improvement in word fluency and word comprehension. Results for the remaining four students (40%) indicated an even split between no change in score for two student participants and slight to moderate regression in 2 student participants. Of the six student participants who demonstrated improved word fluency, three student participants showed a significantly marked improvement in their Average Equated Score from pretest to posttest. This suggests a positive correlation between the study intervention and student participant performance on the assessment.

Data Analysis

The TMSFA Word Reading Fluency portion of the assessment comprises three separate Word Lists, each with an identifying number assigned for each iteration of the assessment. Easy List numbers 2 and 5, Moderate List numbers 9 and 12, and Challenging List numbers 16 and 19, each with 150 words, were used for the MOY and MOY/EOY iterations, respectively. Each student is given the assigned list and asked to read as many words as they can in 60 seconds. The Reading Interventionist follows along and marks the missed or mispronounced words as errors on a separate corresponding Word List. Should a student participant initially mispronounces a word and then corrects themselves, the word is counted as correct. Once the student participant has reached their last word within the time frame, the Reading Interventionist records the total number of words read, including errors. The total number of errors and the number of words read correctly are also recorded, multiplied by 60, and then divided by the time in seconds to give the Words Correct Per Minute (WCPM) total. Equated Scores are reached using a metric based on the WCPMs, added across Word Lists, and then divided by 3 (the number of word lists) to determine the Average Equated Score for the Word Reading Fluency portion assessment. Pre- and post-test Words Correct Per Minute by Word List and Growth in Words Correct Per Minute, Pre- and Posttest Equated Scores by Word List, and Average Equated Scores by the participant are featured in the tables below.

Based on data featured in Table 1, it is notable that six of the ten student participants demonstrated growth in the number of words read correctly per minute on the Easy Word List. Participants A, B, C, D, and E increased their WCPM (Words Correct Per Minute), with Participants A, C, D, and E demonstrating growth at a significant, double-digit rate. Participants A, E, H, and J made the same or fewer word errors.

Data featured in Table 2 shows that four of the ten student participants, Participants A, B, C, and D, demonstrated growth in the number of words read correctly. These four participants are also among the six who showed growth on the Easy Word List, as indicated in the data in Table 1. Participants A, C, F, and H made fewer word errors on the Moderate Word List from pre- to post-test, while Participants B, D, E, and I made more errors on the Moderate Word List from pre- to post-test.

Table 1. TMSFA word reading fluency easy word list results.

Student Participant	Pre-test (MOY TMSFA Words Correct Per Minute)	Posttest (MOY/EOY TMSFA Words Correct Per Minute)	# of Errors (Pre)	# of Errors (Post)	Growth (in Number of Words Correct Per Minute)
A	52	62	9	7	+10
B	91	94	5	5	+3
C	87	100	0	2	+13
D	87	120	1	6	+33
E	74	86	5	4	+12
F	105	109	2	3	+4
G	81	73	0	0	−8
H	78	54	11	5	−24
I	105	101	1	2	−4
J	78	60	3	2	−18

Table 2. TMSFA word reading fluency moderate word list results.

Student Participant	Pre-test (MOY TMSFA Words Read Correctly Per Minute)	Posttest (MOY/EOY TMSFA Words Read Correctly Per Minute)	# of Errors (Pre)	# of Errors (Post)	Growth (in number of Words Read Correctly Per Minute)
A	35	42	8	3	+7
B	48	60	9	10	+12
C	77	85	3	1	+8
D	67	94	4	9	+38
E	58	51	1	4	−7
F	104	93	6	1	−11
G	81	73	0	0	−8
H	78	54	9	7	−24
I	105	101	2	6	−4
J	78	60	0	2	−18

Analysis of the data featured in Table 3 shows that four of the ten student participants, Participants C, D, H, and I, demonstrated growth in the number of words read correctly on the Challenging Word List. It is, again, notable that Participants C and D are among the six participants who demonstrated growth based on the Easy Word List data in Table 1 and among the four who showed growth based on the Moderate Word List data in Table 2.

Table 3. TMSFA word reading fluency challenging word list results.

Student Participant	Pre-test (MOY TMSFA Words Read Correctly Per Minute)	Posttest (MOY/EOY TMSFA Words Read Correctly Per Minute)	# of Errors (Pre)	# of Errors (Post)	Growth (in Number of Words Read Correctly Per Minute)
A	34	32	14	10	−2
B	28	25	11	20	−3
C	43	58	4	3	+15
D	33	63	12	15	+33
E	27	24	8	11	−3
F	61	56	3	6	−4
G	44	41	2	2	−3
H	21	26	16	12	+5
I	60	63	10	8	+3
J	29	29	6	7	0

Table 4 compares the Equated Scores across Word Lists from the pre-test and post-test. Participants A, B, C, D, and F demonstrated improved Equated Scores on the Easy Word List, while Participant E remained the same. Participants G, H, I, and J each showed regression in their performance from pre- to post-test. Participants A, C, and D demonstrated an improved Equated Score across all Word Lists. Participant B achieved an improved Equated Score on the Easy and Moderate Word Lists. Participant E improved the Easy and Challenging Word Lists, but not the Moderate Word List. Participant F showed improvements in Equated Score on the Easy Word List only. Participant G showed regression in Equated Score across all word lists from pre- to post-test. Participant H showed improvement on only the Moderate and Challenging Word Lists, while Participant H only showed nominal improvement with the Moderate Word List. Participant I demonstrated regression on the Easy and Challenging Word Lists and stagnation on the Moderate Word List. Participant J demonstrated regression on the Easy and Moderate Word Lists; however, the participant did demonstrate slight improvement on the Challenging Word List.

This study's central question examined to what degree Expressive Interactive Journaling (EIJ) paired with Reading Intervention improved word fluency of seventh-grade grade English Language Arts students as measured by the Texas Middle School Fluency Assessment TMSFA. The answer to that question is clear; EIJ paired with Reading Intervention focused on whole word fluency instruction resulted in a significant, positive effect on the word fluency of the study participants as evidenced by EOYTMSFA performance.

Table 4. Pretest (MOY) vs. posttest (MOY/EOY) equated scores by word list.

Student Participant	Easy Word List Average Equated Score		Moderate Word List Average Equated Score		Challenging Word List Average Equated Score	
A	29	36	32	36	33	39
B	70	72	45	56	45	43
C	66	78	74	85	66	83
D	66	101	64	95	52	89
E	52	63	55	46	24	42
F	83	85	101	94	92	80
G	60	48	69	59	67	62
H	45	21	40	41	35	44
I	84	77	102	102	90	89
J	53	31	55	55	46	48

4. Discussion and Conclusion

Overview

Participant performance on the MOY/EOY iteration of the TMSFA indicates that implementing Expressive Interactive Journaling paired with Reading Intervention focused on whole-word instruction leads to improved overall word fluency and fewer word reading errors in 6 out of 10 participating seventh-grade-grade students. These findings suggest that the use of Expressive Interactive Journaling paired with a focus on whole-word fluency leads to improved word fluency and, ultimately, improved reading comprehension for students over traditional Reading Intervention methods. Students responded positively to the study intervention, which also builds a case for implementing Expressive Interactive Journaling in the classroom to address social-emotional issues before they begin to impact student performance. Moreover, it suggests the need for adjustments in the scope and focus of current Reading Intervention methods at the middle school level to adequately and effectively address student needs.

4.1. Solutions

The problem for seventh-grade students at the researcher's middle school is that they consistently struggle with word fluency. Specifically, they have difficulty recognizing, decoding, and reading words in and out of context with automaticity. Ultimately, they cannot read and comprehend grade-level texts enough to demonstrate mastery on state and district levels. Based on the results of the study, implementing Expressive Interactive Journaling would allow students an outlet to express some of the challenges they are experiencing as they relate to their personal lives and how said challenges impact their academic performance. Use of the words featured on the TMSFA word lists in their journaling and during review and share-out provided an additional method of encoding. This contributed to their ability to recall and correctly articulate the words when assessed. Results fur-

ther indicate that whole-word fluency instruction that targets not just the word it-self but its meaning(s) and application(s), both in and across contexts, is a necessary component of instruction in the English Language Arts classroom and should also be standard practice for Reading Interventionists at the middle school level.

Strengths and Weaknesses

Strengths of the research study were the methodology, availability of student participants, and the data collection instruments. One weakness of the study lies in the number of student participants. Had there been more student participants, the results would be more easily generalizable across all seventh-grade-grade students on the researchers' campus and beyond. A second weakness lies in the amount of time for the study. Due to student holidays, a full week of spring break in the researcher's school district, and upcoming state testing, there was limited time available to conduct the study. Moreover, student skepticism and reluctance to write, let alone share, was a weakness. It is also notable that some students did not feel comfortable expressing their thoughts and emotions in any form, let alone in front of others.

Influential Factors

Potentially confounding factors for the study include personal issues that participants were experiencing at the time and the exposure to the word lists during Reading Intervention. Two of the ten participants were initially hesitant to participate in the Expressive Interactive Journaling portion of the study due to some significant life changes occurring at home but eventually did so of their own volition. Exposure to the word lists as part of the whole-word fluency instruction throughout the study could also have contributed to the student participant's increased ability to recall the words when assessed.

4.2. Further Investigation

Further Investigation Suggestions for further investigation include extension and implementation of the Expressive Interactive Journaling technique as part of the first and ongoing instruction in English Language Arts and Reading courses at the middle school level along with small-group, targets whole-word fluency instruction. School administrators and curriculum directors should consider modification of the English Language Arts and Reading curriculum to address the needs of students with reading difficulties stemming from word recognition. Additionally, further investigation into the long-term effects of EIJ on student behaviors and reading outcomes at the middle school level is suggested.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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