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Comparisons of Oral Narrative and Expository Stories for Children with Language
Impairment and Typical Development

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By

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ABSTRACT

The National Assessment of Educational Progress has found deficits in reading ability among elementary school-age children. Oral language is foundational to reading ability, so assessing oral language abilities among elementary school-age children could provide insight into the below average reading scores. The purpose of this study is to assess oral narrative and expository story production abilities in third grade students with and without a language impairment. 37 children, either language impaired or typically developing, were recruited from elementary schools in Northern Nevada, and each child provided an oral narrative story and an oral expository story. The stories were analyzed at the word, sentence, and discourse level. The narrative story results were compared to the expository story results, and the language impaired results were compared to the typically developing results. The results of comparing narrative and expository stories indicated significant differences at the word and discourse level, with narrative story performance scoring higher than expository story performance. The results of comparing children with a language impairment to children with typical development indicated no significant differences between the two groups.

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INTRODUCTION

The United States' National Assessment of Educational Progress (NAEP) is a nationally representative assessment of children who attend public schools. Children are assessed in various subjects, including Reading, Mathematics, Writing, and Science (The Nation's Report Card, 2017). Reading assessments are given every two years to children in fourth and eighth grade and every four years to twelfth graders. The 2015 NAEP Reading assessment report indicated that 36 percent of fourth grade children are performing at or above proficiency in reading (The Nation's Report Card, 2017). This is a problem because fourth grade children need to have proficiency in reading to succeed in their academic career, and based on the NAEP results, this proficiency is not being achieved.

Although children's deficits in reading skills have been identified by fourth grade NAEP assessments, these issues can be identified earlier. Oral language is a foundation for reading ability (Kamhi & Catts, 2012; Kaderavek, 2011; Nelson, 2010). Thus, it is conceivable that addressing oral language proficiency could in turn improve later reading skills (Kamhi & Catts, 2012; Kaderavek, 2011; Nelson, 2010). In primary education, children are orally instructed in two genres: narrative and expository. A narrative refers to a character's goal oriented sequence of events that are tied together by temporal and thematic units (Paul & Norbury, 2012). From the beginning of primary education, a narrative format is used for instruction, even for scientific and historical subject matters (Paul & Norbury, 2012). Alternatively, expository discourse is a modality that does not tell a story, but is informational in nature (Paul & Norbury, 2012). Expository texts are first introduced as early as first grade and require a different knowledge level and

linguistic skill set for successful comprehension than narratives (Common Core State Standards, 2017). Thus, the expository genre is thought to be more difficult than the narrative genre (Paul & Norbury, 2012).

National Standards

The Common Core State Standards are a set of standards that children are expected to meet in the areas of Mathematics and Language Arts before graduating high school (Common Core State Standards, 2017). Language Arts standards increase in difficulty from lower grades to higher grades. In third grade, children are expected to write their opinion on certain topics while supporting their point of view, write texts with the purpose of explaining topics, and write an organized and descriptive narrative (Common Core State Standards, 2017).

There are many specific standards for third grade children that relate to narrative stories. For example, under Reading standards, children are expected to “describe characters in a story and explain how their actions contribute to the sequence of events” (CCSS.ELA-LITERACY.RL.3.3), “refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections” (CCSS.ELA-LITERACY.RL.3.5), and “compare and contrast the themes, settings, and plots of stories written about the same or similar characters” (CCSS.ELA-LITERACY.RL.3.9). Under Writing standards, children are expected to “establish a situation and introduce a narrator and/or characters, organize an event sequence that unfolds naturally” (CCSS.ELA-LITERACY.W.3.3.A), “use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situation” (CCSS.ELA-

LITERACY.W.3.3.B), “use temporal words and phrases to signal event order” (CCSS.ELA-LITERACY.W.3.3.C), and “provide a sense of closure” (CCSS-LITERACY.W.3.3.D; Common Core State Standards, 2017).

Additionally, third grade standards also relate to expository stories. For example, under Reading, children are expected to “determine the main idea of a text and recount the key details and explain how they support the main idea” (CCSS.ELA.LITERACY.RI.3.2) and “read and comprehend informational texts, including history, science, and technical texts” (CCSS.ELA-LITERACY.RI.3.10). Under Writing standards, children are expected to “introduce a topic and group related information together” (CCSS.ELA-LITERACY.W.3.2.A), “develop the topic with facts, definitions, and details” (CCSS.ELA-LITERACY.W.3.2.B), “use linking words and phrases to connect ideas within categories of information” (CCSS.ELA-LITERACY.W.3.3.C), and “provide a concluding statement or section” (CCSS.ELA-LITERACY.W.3.2.D; Common Core State Standards, 2017).

Thus, much of the English/Language Arts standards for third grade are related to narrative and expository elements and structure. These standards require a more developed inferential and analytical skill level. Thus, mastery of these skills will lead to proficiency in understanding and producing narrative and expository text (Common Core State Standards, 2017). Although children are nationally tested on these standards in fourth grade, Common Core State Standards regarding narrative and expository genres exist in third grade and even earlier (Common Core State Standards, 2017). Therefore, it is beneficial to examine oral language before high stakes testing in fourth grade to better understand development.

Third grade is a critical year for development of narrative and expository skills (Best, Floyd, & McNamara, 2008). During third grade, instruction begins to transition to an expository genre in science and social studies as these classes become more factual (Best, Floyd, & McNamara, 2008). After third grade, a plateau in language ability occurs that is referred to as the “fourth-grade slump.” (Best, Floyd, & McNamara, 2008). This term describes the point where oral and written language difficulties begin to emerge, and fourth grade children’s language abilities do not increase to the level demanded by fourth-grade curriculum (Best, Floyd, & McNamara, 2008). This plateau could correlate to the low reading proficiency scores in the NAEP results.

There is very little literature that examines narrative and expository story skills in the oral language modality among elementary school-age children. Most of the literature that compares narrative and expository genres looks at language in the modalities of reading and writing (Berman & Nir-sagiv, 2007; Best, Floyd, & McNamara, 2008; Goddard & Sendi, 2008; Koutsoftas & Gray, 2012; Kucer, 2011; Marron, 2017; Scott & Windsor, 2000). These studies measured the structure, vocabulary, and comprehension of written narrative and expository stories (Berman & Nir-sagiv, 2007; Best, Floyd, & McNamara, 2008; Goddard & Sendi, 2008; Koutsoftas & Gray, 2012; Kucer, 2011; Marron, 2017; Scott & Windsor, 2000). Overwhelmingly, results from these studies indicated the ability to produce and comprehend narratives develops before expository stories (Berman & Nir-sagiv, 2007; Best, Floyd, & McNamara, 2008; Goddard & Sendi, 2008; Koutsoftas & Gray, 2012; Kucer, 2011; Marron, 2017; Scott & Windsor, 2000). Most of the oral modality literature examines narrative and expository genres in elementary school-age children, and a majority of these studies included participants that

were in fourth and fifth grade (Berman & Nir-sagiv, 2007; Goddard & Sendi, 2008; Koutsoftas & Gray, 2012; Kucer, 2011; Marron, 2017; Nippold, Hesketh, Duthie, & Mansfield, 2005; Scott & Windsor, 2000).

There is also a body of literature that has examined the production of oral narrative and expository stories in children with a language impairment (LI). A language impairment is “impaired comprehension and/or use of spoken, written and/or other symbol systems” (Owens, 2014, p. 3). Children with an LI could have difficulty with phonology (sounds of language), morphology (word form), syntax (grammar and order), semantics (meaning), and pragmatics (use of language; Koutsoftas & Gray, 2012; Owens, 2014; Roth; 1986; Saenz & Fuchs, 2002; Scott & Windsor, 2000). In studies that compared oral narrative and expository stories in children with language impairment, children with an LI had greater difficulty with both narrative (Roth, 1986) and expository (Scott & Windsor, 2000) discourse than their typically developing (TD) peers. The studies examining children with an LI versus children with TD focused on overall structure and fluency of narrative and expository stories (Koutsoftas & Gray, 2012; Roth; 1986; Scott & Windsor, 2000). There is a dearth of information regarding the oral narrative and expository story production abilities of third grade children with and without an LI.

The purpose of this study is to compare third graders’ narrative and expository production in the oral language modality and to compare the performance between children with language impairment and children with typical development.

LITERATURE REVIEW

Oral Language is Foundational for Reading

There are four modalities, or forms of expression, of language communication: listening, speaking, reading, and writing (Nelson, 2010). There are also two methods of processing spoken and written language: top-down and bottom-up. Each of the four modalities of language fit into one of the two processing methods. Listening and reading fall into bottom-up processing, and speaking and writing fall into top-down processing (Nelson, 2010). The bottom-up method can be described as two steps: the decoding of meaning at the sound (listening) or word (reading) level, and formulating a message at the sentence/discourse level based on the received information (Nelson, 2010). Top-down can be described as the mental formulation of a message at the sentence/discourse level, encoding that message into words (speaking) or letters (writing), and transcribing that message (Nelson, 2010).

These two processes are integrally related through the reciprocal relationship of decoding and encoding. Without bottom-up processing abilities, children will not be able to execute a top-down communicative action (Nelson, 2010). For example, to orally speak an effective message, a child must be able to apply knowledge of proper sentence/discourse structure to encode their message into a cohesive structure (Nelson, 2010). Similarly, to comprehend a message through listening, a child must decode the meaning that was spoken and encode the message in sentence/discourse structure (Nelson, 2010). Since the processes are essentially related, the four modalities are related developmentally. Thus, oral language processing and expressing abilities (speaking and listening) must develop successfully through cognitive development and exposure to

become proficient in written language processing and expressing abilities (reading and writing; Nelson, 2010; Owens, 2014).

Based on this fact, it is justified that analysis of oral language ability may be related to the deficits in NAEP reading scores since oral language and written language are integrally connected (Nelson, 2010). If children are to become more proficient in reading on NAEP tests, it would benefit children to establish oral language proficiency at a younger age.

Narrative Skills Develop Prior to Expository Skills

There are consistent findings in the literature demonstrating that narrative skills develop before expository skills (Berman & Nir-sagiv, 2007; Koutsoftas & Gray, 2012; Kucer, 2011; Scott & Windsor, 2000). Narratives can be analyzed using a story grammar model that include the following elements: setting, initiating event, action, and consequence (Stein & Glenn, 1979). Most children have the ability to imagine and create a story involving a setting, characters, and a plot of some sort based on the notion that they experience events every day that can be recounted as narrative stories (Best, Floyd, & McNamara, 2008; Dickens & Meisinger, 2016).

On the other hand, expository stories have an entirely different linguistic structure that is more complex in terms of topic, processing, vocabulary, and background knowledge needed (Best, Floyd, & McNamara, 2008; Dickens & Meisinger, 2016; Saenz & Fuchs, 2002). These texts often have a low degree of cohesiveness, so they move from one idea to the next with little transition, which can cause difficulty in comprehension (Best, Floyd, & McNamara, 2008; Saenz & Fuchs, 2002). Expository texts are de-contextualized, which requires the reader to infer the context of the information by

drawing connections within the subject matter (Best, Floyd, & McNamara, 2008). The reader also typically needs a basic background knowledge of the subject in order to successfully understand the message in the text. While the purpose of expository text is to provide new information, background knowledge related to the topic is essential or the reader will have no foundation to connect the new knowledge (Best, Floyd, & McNamara, 2008; Saenz & Fuchs, 2002).

Children can comprehend narrative text more easily than expository text in early elementary school (Best, Floyd, & McNamara, 2008; Kucer, 2011; Scott & Windsor, 2000). The structure of narratives is simpler in nature than expository. The events in a narrative are logically sequential and typically chronological. This chronological sequence of events is a concept which most children in early elementary school who are TD will be able to master by middle childhood (Best, Floyd, & McNamara, 2008). In contrast, expository language develops later because it is introduced later in primary school. It is used more heavily in the middle to late grades of elementary school for instruction, which causes expository language abilities to not be completely developed until adolescence (Berman & Nir-sagiv, 2007; Best, Floyd, & McNamara, 2008).

Children between third and fifth grade are more heavily exposed to the expository genre in school during instruction. This increase in exposure to expository stories can be attributed to the increase in complexity of scientific and historical subjects (Best, Floyd, & McNamara, 2008). Therefore, this duration of time between third and fifth grade is a period that demands an examination of oral and written language ability to better understand the developmental sequence of narrative and expository story production ability and how it relates to each other.

Past Research on Oral and Written Narrative and Expository Stories

Most of the literature that has examined narrative and expository stories have studied oral narrative stories and written expository stories. The most frequent grades studied are fourth and fifth grade (Berman & Nir-sagiv, 2007; Koutsoftas & Gray, 2012; Kucer, 2011; Marron, 2017; Scott & Windsor, 2000). There was only one study that included third grade participants, as in the current study. Best, Floyd, & McNamara, 2008 examined third grade children's ability to comprehend oral narrative and expository stories. In addition, others examined oral and written narrative and expository stories of fourth and fifth grade children with an LI and children with TD (Koutsoftas & Gray, 2012; Scott & Windsor, 2000), while others examined only fourth grade children with an LI (Goddard & Sendi, 2008).

There were also a variety of elicitation methods used to prompt participants in these studies to produce oral narrative stories and written narrative and expository stories. For example, prompts utilized to elicit oral and written narrative and expository stories in previous studies included presentations of videos with a clear beginning, middle, and end for narrative stories, to providing informational texts about various scientific subject matters for expository stories. (Berman & Nir-sagiv, 2007; Kucer, 2011; Scott & Windsor, 2000). Children in these studies were directed to respond orally or write a narrative and expository story based on the provided text or visual prompt (Berman & Nir-sagiv, 2007; Koutsoftas & Gray, 2012; Kucer, 2011; Scott & Windsor, 2000).

In this body of literature, the narrative and expository stories, in both oral and written modality, were analyzed in terms of the total number of words, number of different words, clausal complexity, story grammar macrostructure, comprehension, and

fluency (Berman & Nir-sagiv, 2007; Best, Floyd, & McNamara, 2008; Koutsoftas & Gray, 2012; Kucer, 2011; Scott & Windsor, 2000).

Narrative and expository stories have been analyzed at the word level. The total number of words and the number of different words are outcome measures that analyze speech samples at the word level. The number of total words refers to the number of words spoken or written in a specific speech sample (Koutsoftas & Gray, 2012). This measure suggests a child's overall expressive language ability (Koutsoftas & Gray, 2012). The number of different words, or lexical diversity, is a measure of the number of different words in a language sample, which indicates the complexity and size of a child's lexicon, or the amount of words within their knowledge (Koutsoftas & Gray, 2012).

Narrative and expository stories have been analyzed at the sentence level. Clausal complexity is an outcome measure that analyzes speech samples at the sentence level. Clausal complexity can be defined as the diversity in number and type of clauses used within single utterances in a language sample (Koutsoftas & Gray, 2012). A greater number of clauses in an utterance indicates higher literacy skills (Koutsoftas & Gray, 2012).

Narrative and expository stories have been analyzed at the discourse level. Story grammar, comprehension, and fluency are all outcome measures that analyze speech samples/ability at the discourse level. Story grammar is a measure of the macrostructure elements of narrative text only (Koutsoftas & Gray, 2012). These elements include setting, initiating event, internal response, internal plan, attempt, consequence, resolution, and ending (Koutsoftas & Gray, 2012). If a child's narrative includes all of these

elements, the narrative will be complete (Koutsoftas & Gray, 2012). Reading comprehension involves integrating the ability to decode effectively with the mental capacity to understand the meaning in the text (Best, Floyd, & McNamara, 2008). Fluency, or cohesion, is a measure of the overall flow of the sample and how the writer best integrates the message within the story (Koutsoftas & Gray, 2012). Fluency also accounts for pauses, mistakes, and transitions (Koutsoftas & Gray, 2012). Measuring these outcome measures in a speech sample allowed past researchers to analyze if these measures were affected by the genre (narrative or expository).

Current Knowledge of Narrative vs. Expository Performance

Researchers have compared the narrative and expository story production abilities at the word, sentence, and discourse level.

Word Level. The measures analyzed at the word level in past studies comparing narrative and expository performance include total number of words and number of different words. For the total number of words in a speech sample, the results were consistent that the total is higher in both oral and written narrative stories than in expository stories (Berman & Nir-sagiv, 2007; Koutsoftas & Gray, 2012; Scott & Windsor, 2000). Another study that examined the number of total words in written stories included only children with an LI, and the results were also consistent in that this value is higher in narrative stories than in expository stories (Halls-Mills & Apel, 2012). This is consistent with the concept that the ability to form a narrative develops before the ability to form an expository text.

Sentence Level. The measures analyzed in past studies at the sentence level include clausal complexity. The results for clausal complexity are inconclusive; some

studies say it is higher for expository texts than for narrative texts (Bird, Joshi, & Cleave, 2016; Berman & Nir-sagiv, 2007; Nippold, Hesketh, Duthie, & Mansfield, 2005), while other studies indicate it is higher for narrative stories (Halls-Mills & Apel, 2012). More research on clausal complexity is needed.

Discourse Level. The measures analyzed in past studies at the discourse level include comprehension and fluency. Comprehension is consistently higher for oral and written narrative texts than for oral and written expository texts (Best, Floyd, & McNamara, 2008; Dickens & Meisinger, 2016; Kucer, 2011; Scott & Windsor, 2000). Again, this result is consistent with the introduction and development of narrative story structure before expository structure, which results in a larger amount of exposure and experience with narrative language among elementary school-age children. Overall text fluency is higher in oral and written narrative stories compared to expository stories (Berman & Nir-sagiv, 2007; Koutsoftas & Gray, 2012). According to these articles, the finding that text fluency performance is higher for narrative text is indicative of elementary school children's greater experience and comfortability with narrative structure (Berman & Nir-sagiv, 2007; Koutsoftas & Gray, 2012).

Current Knowledge of Children with LI vs. TD Children's Abilities

Researchers in previous studies have also compared the results of the abilities of the children with an LI to children who are TD. The abilities of these two populations of participants were analyzed at the word and discourse level.

Word Level. The measures analyzed in past studies at the word level when comparing performance of children with an LI to children with TD include total number of words and number of different words. The total number of words produced for both

oral and written narrative and expository stories is higher for children who are TD (Koutsoftas & Gray, 2012; Roth, 1986; Scott & Windsor, 2000). This result can be expected, since children with an LI experience deficits in language production (Koutsoftas & Gray, 2012; Roth, 1986; Scott & Windsor, 2000). The results for the number of different words produced were inconclusive; one study found that the number of different words in the samples were higher for children who are TD (Koutsoftas & Gray, 2012), while another study found no significant difference between the two groups (Scott & Windsor, 2000).

Discourse Level. The measures analyzed in past studies at the discourse level include story grammar, comprehension, and fluency. The use of proper elements of story grammar in the narrative stories produced was found to be equal between children who are TD and children with an LI (Koutsoftas & Gray, 2012). In terms of comprehension, children with an LI typically have the capacity to comprehend and recall information about both narrative and expository stories, but the amount of information recalled is lower than children who are TD (Roth, 1986). The fact that children with an LI recall less information can be attributed to the fact that children with an LI often have lower inferential capabilities (Roth, 1986). The results of text fluency for both oral and written narrative and expository stories were that fluency is higher in the samples from children who are TD than children with an LI (Koutsoftas & Gray, 2012). When producing an original story, children with an LI include less descriptive vocabulary and contextual information, which reduces the fluency within the story (Koutsoftas & Gray, 2012; Roth, 1986; Scott & Windsor, 2000). Children with an LI struggle with production of stories since this task requires proper sequencing of previously created ideas, so the cohesion

within stories produced by children with an LI is typically lower than those produced by children who are TD (Roth, 1986).

Summary

In summary, there is a dearth in the literature concerning oral narrative and expository story production abilities, especially among third grade children. A majority of the previous studies conducted concerned only fourth and fifth grade children with and without an LI, and many involved both oral and written narrative and expository story analysis. There are deficits in research concerning the oral language modality as well as deficits in research involving the narrative and expository abilities of third grade children with and without an LI. Thus, this study will provide more insight into both literature gaps. As expository texts begin to be introduced heavily in the classrooms of third grade children, research needs to be completed on this topic to unearth how successfully third grade children are comprehending and producing expository stories.

Purpose

This study will compare the abilities of third grade children with and without an LI to produce oral narrative and expository stories. The results of this study of oral narrative and expository success among third grade children could provide needed insight into the low NAEP reading scores. The following research questions are asked:

- 1) How do word, sentence, and discourse language measures differ between oral narrative and expository stories?
- 2) How do children with an LI perform differently than TD children on word, sentence, and discourse language measures for oral narrative and expository stories?

Hypotheses

When comparing narrative and expository oral stories, it was hypothesized that oral narrative stories would have higher scores on word, sentence, and discourse language measures than expository stories (Berman & Nir-sagiv, 2007; Best, Floyd, & McNamara, 2008; Bird, Joshi, & Cleave, 2016; Dickens & Meisinger, 2016; Halls-Mills & Apel, 2012; Koutsoftas & Gray, 2012; Kucer, 2011; Nippold, Hesketh, Duthie, & Mansfield, 2005; Scott & Windsor, 2000). When comparing children with LI to children with TD, it was hypothesized that children with language impairment would perform more poorly on word, sentence, and discourse language measures than children with typical development (Koutsoftas & Gray, 2012; Roth, 1986; Scott & Windsor, 2000).

METHODS

Larger Study

Larger Study Participants. Data analyzed in this study are part of a larger study, which were previously collected by a current University of Nevada, Reno graduate student in the Speech Pathology and Audiology program over the 2016 to 2017 school year. Institutional Review Board (IRB) approval was obtained to conduct this study.

The graduate student who collected the data for the larger study recruited children from elementary schools in Northern Nevada. There were a total of 37 third grade children who returned consent forms. Children were included in the study if they met criteria for being clinically identified with a language impairment or typical development.

The lead speech-language pathologist assisted in the identification of children with language impairment in a two-step process. First, the speech-language pathologist reviewed her caseload to determine if children had a primary or secondary language impairment. Children were clinically identified as having either a primary or a secondary language impairment. A primary language impairment is diagnosed if the child is typically developing cognitively, and the only deficit exists in language. A secondary language impairment is diagnosed if the child has deficits in language that is typically caused by another disorder, so impairments in other areas exist. Second, each of these children were reviewed by the lead speech-language pathologist to determine if the child met the following inclusion criteria: a) clinically identified by the school district as having a primary or secondary language impairment, b) monolingual English speaker, and c) third grader.

The lead speech-language pathologist assisted in the identification of children with typical development in a two-step process. First, the lead speech-language pathologist reviewed the list of children who were clinically identified as having a language impairment. Second, she looked at class rosters to determine children who met the following inclusion criteria: a) clinically identified as having typical development, b) monolingual English speaker, and c) third grader.

Larger Study Procedures. The graduate student collected stories from children with language impairment and with typical development in the larger study. Children were seen on two separate days by the graduate student and other research assistants. On the first day, the graduate student and her research assistants administered two norm-referenced tests, one for language ability and one for cognitive ability. The Clinical Evaluation of Language Fundamentals-5th Edition assesses receptive and expressive language skills for children aged 5 to 21 years of age (Wiig, Semel, & Secord, 2013). It took approximately 40 minutes to administer. The Test of Nonverbal Intelligence-4th Edition assess nonverbal intelligence in individuals aged 6 to 89 years of age (Brown, Sherbenou, & Johnsen, 2010). It took approximately 20 minutes to administer. These were administered to describe the severity of language impairment for participant description.

On the second day, the graduate student and research assistants collected four stories: an oral narrative story, an oral expository story, a written narrative story, and a written expository story. Twin-themed story starters (see Appendix A) were used to elicit both oral and written narrative and expository stories. Twin-themed refers to question prompts that are used to elicit a narrative story and an expository story about the same

topic (Furtado & Johnson, 2010). For the larger study, the themes of *planets* and *animals* were used to elicit narrative and expository stories orally and in writing. The topic of *planets* was used to elicit the oral stories, and the topic of *animals* was provided as a prompt for the written stories.

Current Study

Current Study Participants. I used the 37 children from the larger study to compare oral narrative and expository stories. I used a two-step matching procedure to match children with an LI to children with TD. First, I placed the children from the larger study into one of two groups—LI or TD. Second, I matched the children with typical development to a child with an LI on following criteria: a) within one year of age of the matched peer with an LI, b) identified as typically developing cognitively, and c) the same gender as the matched peer with an LI. There were a total of 15 pairs, for a total of 30 children, who were matched based on age and gender and placed in one of the two groups (LI or TD). There were seven children who did not match with a peer based on age and gender. Their stories were excluded from the LI versus TD analysis. The stories given by these seven children were included in the narrative versus expository analysis, since this comparison was not reliant on matching participants between groups.

Current Study Procedures. Procedures for the current study occurred in three phases. During phase one, I obtained data from the graduate student. For this study, only the 37 oral narrative stories and 37 oral expository stories were analyzed. The graduate student gave me audio and transcription data of 37 oral narratives and 37 oral expository stories. The digital recordings were stored on a HIPAA (Health Insurance Portability and Accountability Act) protected cloud server along with Microsoft Word transcripts that

were orthographically transcribed. In phase two, I transferred the Microsoft Word transcriptions into the Systematic Analysis of Language Transcripts (SALT) software. SALT is a program that analyzes language transcripts and generates summary reports of aspects within the language sample based on outcome measure codes that are either entered in manually or calculated by the program (Miller, Andriacchi, & Nockerts, 2016). In phase three, SALT was used to code the language transcripts. Three research assistants who were blind to the purpose of the study and I manually coded both the narrative and the expository transcripts. Each transcript was coded at the word level, sentence level, and discourse level. At the word level, the number of total words and the number of different words were coded automatically by SALT. At the sentence level, the mean length of utterance was automatically coded by SALT. The subordination index was manually coded by a research assistant and myself. At the discourse level, cohesion and narrative structure were manually coded by a research assistant and myself. The coding process and explanation of each measure is explained in the outcome measure section below. See an example of a coded transcript in Appendix B.

Outcome Measures

In this study, each oral narrative and expository story was analyzed at the word, sentence, and discourse level.

Word Level Measures. At the word level, the number of total words (NTW) and the number of different words (NDW) were measured. NTW is a measure of the number of total words that a child uses in their speech sample, which is a measure of a child's semantic abilities, or knowledge of words (Koutsoftas & Gray, 2012). NDW is a measure of the number of different words that a child uses in their speech sample, which is a

measure of the child's lexicon, or vocabulary diversity (Koutsoftas & Gray, 2012). NTW and NDW were calculated automatically using SALT software.

Sentence Level Measures. At the sentence level, transcripts were coded for the mean length of utterance (MLU) and subordination index (SI) measures.

Mean Length of Utterance. The mean length of utterance, or MLU, is a measure of the average number of morphemes per utterance, or communication unit (Shipley & McAfee, 2016). A morpheme is the smallest unit of language that conveys meaning, such as adding the plural –s to “cats.” Since “cat” and the plural –s each carry a separate meaning, the word “cats” has two morphemes (Shipley & McAfee, 2016). MLU is calculated by adding up the total number of morphemes in a language sample and dividing it by the number of communication units within that sample. A child's MLU generally corresponds to their age, and it is a reliable indicator of a child's level of language development (Shipley & McAfee, 2016). MLU was calculated automatically by SALT software.

Subordination Index. The SI is a measure of the average number of clauses within each unit of communication (Nippold, 1988). A unit of communication is any utterance spoken that conveys meaning and represents a complete thought, and these utterances comprise a language sample. Communication units are made up of two types of clauses, which are main and subordinate (Nippold, 1988). A main, or independent clause, is a clause with a noun and a verb that can stand alone (Nippold, 1998). A subordinate clause, or dependent clause also includes a noun and a verb, but it is dependent on another clause for the meaning to be understood (Nippold, 1998). The number of clauses for each utterance was placed at the end of utterance, and the code [SI-

#] was used, with the # being the number of clauses in that specific utterance. The code [SI-1] was used for an utterance with one noun and one verb, [SI-2] was used for an utterance with two nouns and two verbs, and so on. If either a noun, a verb, or both a noun and a verb were missing from the utterance, it was coded as [SI-0]. A code of [SI-X] was placed after any utterance that was repeated or unintelligible, and it was excluded from the analysis. Next, the SI Index was calculated. The SI Index was calculated by adding up the total number of clauses within the language sample and dividing it by the number of communication units in the sample (Nippold, 1988). The number of clauses was coded manually in SALT by myself and a research assistant using the [SI-#] code, and the SI Index was calculated automatically by the program.

Discourse Level Measures. At the discourse level, cohesion was measured for both narrative and expository stories, and narrative performance was measured for the narrative stories.

Cohesion. Cohesion is defined as a measure of how the words, phrases, and sentences are connected within a language sample (Pinto, Tarchi, & Bigozzi, 2015). Cohesion was measured by the number of linguistic markers used throughout the transcript, including *referential ties*, *conjunctive ties*, *lexical ties*, and *substitutional ties* (Owens, 2014), which are all defined below. These linguistic markers connect the components of a language sample by referring to another element of the sample or connecting one utterance in a sample to another (Owens, 2014). The type of tie was manually coded in SALT by myself and a research assistant. Additionally, referential ties and conjunctive ties were coded as *complete* or *incomplete*, which yielded a percentage of complete ties. Complete and incomplete ties were manually coded in SALT.

Referential Ties. Referential ties (RT) consist of personal references, such as “I,” “her,” and “its”; demonstrative references, such as “that,” “there,” and “the”; and comparative references, which compare two separate nouns, such as “another” or “different” (Hughes, McGillivray, & Schmidek, 1997). For these referential ties to be considered cohesive markers, the reference needed to refer to something in a separate communication unit. Thus, if these references were used to refer to a word within the same communication unit, they would not be considered an element of cohesion (Hughes, McGillivray, & Schmidek, 1997). If a referential tie was used in an utterance, the code [RT] was typed in the transcript directly after the tie.

Conjunctive Ties. Conjunctive ties (CT) consist of coordinating or subordinating conjunctions, such as “and,” “then,” and “when,” that connect separate communication units (Hughes, McGillivray, & Schmidek, 1997). If a conjunctive tie was used to connect two utterances, the code [CT] was typed in the transcript directly after the tie.

Lexical Ties. Lexical ties (LT) are words that involve repetition, synonyms/antonyms, parts of a whole, and superordinate/subordinate relationships (Hughes, McGillivray, & Schmidek, 1997). Repetition of nouns and characters was considered a cohesive marker if the repetitions occurred in different communication units, showing cohesion between separate thoughts (Hughes, McGillivray, & Schmidek, 1997). Synonyms and antonyms are words used that refer to either the same ideas or opposite ideas, respectively, and occur in separate communication units from the original idea they are referring to (Hughes, McGillivray, & Schmidek, 1997). Parts of a whole are words in separate communication units, where one word describes the whole object or idea, and the other describes a part of it. For example, if “mug” is used in one

communication unit, and “handle” is used in another communication unit to describe the handle of the same mug, it would be considered a part/whole relationship (Hughes, McGillivray, & Schmidek, 1997). Superordinate/subordinate relationships occur when a word is used to describe a category of items, and another word is used in a separate communication unit to describe one element of that category. The category is the superordinate, and the subordinate in the lexical relationship is the element within that category. For example, if “dessert” is used in one utterance to refer to many kinds of dessert, and “cupcake” is used in another utterance to refer to one of the types of dessert, “dessert” would be the superordinate and “cupcake” would be the subordinate in that relationship. (Hughes, McGillivray, & Schmidek, 1997). If any lexical tie was used in an utterance, the code [LT] was typed in the transcript directly after the lexical tie.

Substitutional Ties. The last type of cohesive tie is substitutional ties (ST), which describe words or phrases that are used in place of a phrase or clause. Noun phrases, verb phrases, or entire clauses can be substituted by a single word or a phrase. The substitution must occur in a separate communication unit from the original phrase or clause. For example, if the clause “go to the store” is used in one utterance and it is substituted with the word “that” in another utterance, “that” would be a substitutional tie. (Hughes, McGillivray, & Schmidek, 1997). If any substitutional tie was used in an utterance, the code [ST] was typed into the transcript directly after the substitutional tie.

Complete and Incomplete Ties. The referential and conjunctive ties were coded as complete or incomplete based on whether they correctly corresponded to a logical referent or if they were used properly to connect communication units (Hughes, McGillivray, & Schmidek, 1997). If they correctly corresponded to a referent or

connected communication units properly, the ties were coded as complete. For example, if a child introduced the noun, “Suzie’s ball” in one utterance, and in another utterance used the words “her ball” to refer back to the original ball, that would be a complete tie. Complete ties were coded by typing a [C] after the code for the type of tie ([RT], [CT], [LT], [ST]) in the utterance. If the ties did not correspond to the proper referent or they did not properly connect communication units, the ties were coded as incomplete. For example, if a child introduced “her ball” in one utterance, without specifying who the ball belonged to, that would be an incomplete tie. If the tie was incomplete, it likely resulted in the reader or listener being confused by the speaker of the story. Incomplete ties were coded by typing an [I] after the code for the type of tie ([RT], [CT], [LT], [ST]) in the utterance.

Calculating Cohesion. The total number of each type of tie was calculated by SALT. The program added up the number of occurrences of each type of linguistic marker (referential ties, conjunctive ties, lexical ties, substitutional ties; Hughes, McGillivray, & Schmidek, 1997). The percentage of complete ties (referential and conjunctive) was calculated by Microsoft Excel. Microsoft Excel added up the number of complete ties, divided by the number of complete ties plus incomplete ties, and multiplied this number by 100 to calculate that percentage.

Narrative Performance. Additionally, story complexity was measured for the narrative stories using the Monitoring Indicators of Scholarly Language measure (MISL; (Gillam, Gillam, Fargo, Olszewski, & Segura, 2017). This measure was used because of its psychometric properties for spontaneous stories. Because the MISL is a measure of narrative story complexity, this scoring only applies to the narratives, and not the

expository stories. MISL has two scoring subcategories, macrostructure and microstructure, and the oral narrative transcripts were scored for both elements. The transcripts were scored using the 4-point rating system (“0,” “1,” “2,” “3”) of the MISL based on the complexity and integration of macrostructure and microstructure elements. Each element of the macrostructure and microstructure subcategories is explained below, followed by an explanation of the scoring procedure.

Macrostructure. The macrostructure includes the following narrative structural elements: 1) character, 2) setting, 3) initiating event, 4) internal response, 5) plan, 6) action/attempt, and 7) consequence (Gillam & Gillam, 2010). The *character* element describes any character introduced in the story, either by name or by an ambiguous noun. The *setting* describes any specific or general locations or time periods for the story. The *initiating event* is an event or problem that begins the story, and it initiates actions from the main characters. The *internal response* is any emotions of the main characters that are explicitly stated in the story. A *plan* within a narrative includes any words that describe an intent to perform an action later in the story. An *action/attempt* is any direct action taken by the main character(s) within the story, and a *consequence* is any result of those actions that is explicitly identified (Gillam & Gillam, 2010). The macrostructure elements were coded by typing a [CH] after each character, an [S] after each setting element, an [IE] after each initiating event, an [IR] after each internal response, a [P] after each explicit plan, an [A] after each action, and a [CO] after each consequence within the transcript.

Microstructure. The MISL microstructure elements consist of literate language factors including 1) coordinating conjunctions, 2) subordinating conjunctions, 3) mental

verbs, 4) linguistic verbs, 5) adverbs, and 6) elaborated noun phrases (Gillam et al., 2016). *Coordinating conjunctions* consist of “and,” “for,” “or,” “so,” “but,” “then,” “yet,” and “nor.” *Subordinating conjunctions* consist of words such as “after,” “before,” “when,” “once,” and “because,” and these words connect a subordinate clause to a main clause. *Mental verbs* are cognitive verbs such as “think,” “hear,” and “decide.” *Linguistic verbs* are verbs that relate to speaking and writing such as “talk” and “yell.” *Adverbs* are any words that modify a verb to enhance its meaning. *Elaborated noun phrases* consist of descriptive words, such as adjectives and articles, that modify a noun (Gillam & Gillam, 2010). The microstructure elements were coded by typing [CCONJ] after each different coordinating conjunction used, [SCONJ] after each different subordinating conjunction used, an [M] after each different mental verb used, an [L] after each different linguistic verb used, [ADV] after each different adverb used, and [ENP] after the elaborated noun phrase with the highest number of modifiers within the transcript.

Scoring. The scoring for MISL is based on a scale from zero to three, and each element was scored individually (Gillam & Gillam, 2010). After each macrostructure and microstructure element was coded, each element was given a score from zero to three. A score of zero in any of the macrostructure or microstructure elements demonstrated that no words or phrases were included that fulfilled that element. A score of three for any macrostructure element indicated that two or more words or phrases that fulfilled that element were included in the narrative. For example, if a child used two proper names within their story, a score of 3 for the Character element was given. A score of three for any microstructure element indicated that three *different* words were used that met the criteria of those elements (Gillam & Gillam, 2010). For example, if a child used three

different mental verbs in their story, a score of 3 was given. A child could not score higher than 3, so even if four mental verbs were used in their story, a score of 3 was given. An exception for these scoring rules applied to elaborated noun phrases. Only one [ENP] code was used in each transcript, since the score for ENP was given based on the highest number of modifiers used for one single noun, from zero to three. The [ENP] code was placed after the noun with the highest number of modifiers preceding it. An example of the scoring procedure and coding is provided in Appendix B. The individual element scores for each category were then added up, providing a macrostructure and microstructure score for each narrative. Additionally, the two categories were added together to yield a composite score for the narrative stories.

Interrater Reliability/Training

Three research assistants with Collaborative IRB Training Initiative (CITI) certification and training were utilized throughout the process of coding. The coding of each outcome measure was performed separately by myself and another research assistant, or double-coded. The research assistant for subordination index coding exceeded an accuracy score of 85% for coding a collection of three speech samples that were not included in the study in order to obtain interrater reliability. The coding of the final SI data was accepted when interrater reliability reached 90%, or when the coding results matched 90-100%. Interrater reliability was obtained for the research assistants for the cohesion and MISL measures through collaboration between research assistants when coding the final data.

RESULTS

Before statistical analyses were conducted, separate Shapiro-Wilk tests were conducted for each outcome measure to determine if the data collected were normally distributed (Green & Salkind, 2011). The results of these tests indicated the data were not normally distributed. Therefore, non-parametric test statistical analyses were conducted for this study because the data were not normally distributed.

To determine if the children's performance between narrative and expository stories differed, a Wilcoxon signed rank test was conducted to evaluate these differences in outcome measures at the word, sentence, and discourse levels. The Wilcoxon signed rank test analyzed differences between paired, dependent scores. In this case, narrative and expository story scores were dependently paired. This means the narrative story that was compared to the expository story was produced by the same child (Green & Salkind, 2011). For a difference to be statistically significant, the alpha value was set at .05. This means a p-value needed to be less than 0.05 to be statistically significant. Results of the Wilcoxon signed rank test indicated there were statistically significant differences on NTW ($z = -2.24, p = 0.03$), NDW ($z = -2.03, p = 0.04$), the total number of conjunctive cohesive ties (CT) ($z = -2.83, p = 0.01$), and the percentage of those conjunctive cohesive ties that were complete ($z = -4.68, p = 0.00$). For each of these measures, the children's mean performance was higher for narrative stories. These findings indicate that the participants had a greater knowledge of words associated with narrative structure, based on the NTW outcome, as well as a more advanced lexical diversity for narrative structure than expository structure, based on the NDW outcome. The higher number of total and complete conjunctive cohesive ties for narrative stories indicates that the structure of

children's narrative stories was more organized and connected than for the expository stories. Since the conjunctive cohesive scores were higher for narrative stories, more conjunctions were used to connect utterances, so there were less tangential or unrelated utterances found in the narrative stories. All other outcome measures were not statistically significant in the analysis of narrative story performance versus expository story performance. See Table 1 below for results and statistics comparing narrative oral (NO) stories and expository oral (EO) stories.

To determine if the typically developing children's performance differed from the performance of the children with a language impairment, the Mann-Whitney U test was conducted. The Mann-Whitney U test evaluated whether the medians for a tested variable differed between two independent groups, and whether these differences were statistically significant (Green & Salkind, 2011). The two independent groups compared were the LI group and the TD group. Results comparing the LI and TD groups' performance on narrative and expository stories at the word, sentence, and discourse level indicated no statistically significant differences on all outcome measures, since all p-values were greater than 0.05. This means that children with LI told oral narrative and expository stories that were similar in language productivity, lexical diversity, linguistic complexity, and cohesiveness compared to children with typical development. Additionally, children with language impairment told stories of similar narrative quality (MISL) as children with typical development. See Tables 2 and 3 below for results comparing the performance of children with an LI to the performance of TD children for both narrative and expository stories.

Table 1

Results Comparing Narrative Oral (NO) Stories to Expository Oral (EO) Stories

	NO Mean (Standard Deviation)	EO Mean (Standard Deviation)	Narrative vs. Expository (n = 37)	
			Test statistic	P-value
NTW	107.46 (119.02)	83.89 (99.72)	$z = -2.24$	$p = 0.03$
NDW	50.43 (39.66)	42.03 (33.92)	$z = -2.03$	$p = 0.04$
MLU	8.68 (2.26)	7.90 (2.38)	$z = -1.96$	$p = 0.05$
SI	1.25 (0.32)	1.16 (0.27)	$z = -1.33$	$p = 0.18$
Macro	6.27 (4.13)	N/A	N/A	N/A
Micro	8.14 (4.11)	N/A	N/A	N/A
MISL sum	14.41 (7.79)	N/A	N/A	N/A
RT	15.16 (19.15)	11.62 (16.03)	$z = -1.88$	$p = 0.06$
CT	8.22 (9.66)	5.70 (7.82)	$z = -2.83$	$p = 0.01$
LT	3.62 (5.99)	2.86 (4.67)	$z = -1.40$	$p = 0.16$
ST	0.05 (0.23)	0.00 (0.00)	$z = -1.41$	$p = 0.16$
%compRT	82.91% (21.74)	80.50% (29.14)	$z = -0.08$	$p = 0.94$
%compCT	94.58% (11.87)	91.00% (23.90)	$z = -4.68$	$p = 0.00$

Note. NTW = number of total words; NDW = number of different words; MLU = mean length of utterance; SI = subordination index; Macro = macrostructure MISL elements; Micro = microstructure MISL elements; MISL sum = MISL composite score; RT = referential ties; CT = conjunctive ties; LT = lexical ties; ST = substitutional ties; %compRT = percentage of complete RT; %compCT = percentage of complete CT

Table 2

*Results Comparing Narrative Performance of Children with Language Impairments (LI)**to Children with Typical Development (TD)*

	LI Mean: NO (Standard Deviation)	TD Mean: NO (Standard Deviation)	LI vs. TD: Narrative (n = 30)	
			Test statistic	P-value
NTW	116.81 (146.25)	95.19 (72.06)	$z = -0.51$	$p = 0.61$
NDW	50.81 (46.33)	49.94 (30.20)	$z = -0.78$	$p = 0.43$
MLU	8.36 (2.57)	9.10 (1.78)	$z = -1.26$	$p = 0.21$
SI	1.22 (0.32)	1.28 (0.32)	$z = -0.86$	$p = 0.39$
Macro	6.05 (4.53)	6.56 (3.65)	$z = -0.84$	$p = 0.40$
Micro	7.71 (4.58)	8.69 (3.46)	$z = -1.02$	$p = 0.31$
MISL sum	13.76 (8.84)	15.25 (6.35)	$z = -1.03$	$p = 0.30$
RT	17.00 (23.37)	12.75 (11.87)	$z = -0.06$	$p = 0.95$
CT	9.33 (11.78)	6.75 (5.91)	$z = -0.39$	$p = 0.70$
LT	4.19 (7.31)	2.87 (3.72)	$z = -0.19$	$p = 0.85$
ST	0.05 (0.22)	0.06 (0.25)	$z = -0.20$	$p = 0.85$
%compRT	78.48% (25.65)	88.47% (14.51)	$z = -1.21$	$p = 0.23$
%compCT	91.92% (13.70)	97.92% (8.33)	$z = -1.90$	$p = 0.06$

Note. NTW = number of total words; NDW = number of different words; MLU = mean length of utterance; SI = subordination index; Macro = macrostructure MISL elements; Micro = microstructure MISL elements; MISL sum = MISL composite score; RT = referential ties; CT = conjunctive ties; LT = lexical ties; ST = substitutional ties; %compRT = percentage of complete RT; %compCT = percentage of complete CT

Table 3

Results Comparing Expository Performance of Children with Language Impairments (LI) to Children with Typical Development (TD)

	LI Mean: EO (Standard Deviation)	TD Mean: EO (Standard Deviation)	LI vs. TD: Expository (n = 30)	
			Test statistic	P-value
NTW	102.71 (124.26)	59.19 (46.18)	$z = -0.32$	$p = 0.75$
NDW	46.43 (41.35)	36.25 (20.46)	$z = -0.06$	$p = 0.95$
MLU	7.75 (2.72)	8.10 (1.92)	$z = -0.54$	$p = 0.59$
SI	1.14 (0.24)	1.18 (0.30)	$z = -0.02$	$p = 0.99$
RT	15.00 (20.17)	7.19 (6.10)	$z = -0.55$	$p = 0.58$
CT	7.67 (9.80)	3.13 (2.50)	$z = -1.02$	$p = 0.31$
LT	3.95 (5.81)	1.44 (1.81)	$z = -1.45$	$p = 0.15$
ST	0.00 (0.00)	0.00 (0.00)	$z = 0.00$	$p = 1.00$
%compRT	82.44% (30.85)	77.97% (27.52)	$z = -1.10$	$p = 0.27$
%compCT	90.00% (20.70)	92.00% (27.70)	$z = -1.53$	$p = 0.13$

Note. NTW = number of total words; NDW = number of different words; MLU = mean length of utterance; SI = subordination index; Macro = macrostructure MISL elements; Micro = microstructure MISL elements; MISL sum = MISL composite score; RT = referential ties; CT = conjunctive ties; LT = lexical ties; ST = substitutional ties; %compRT = percentage of complete RT; %compCT= percentage of complete CT

DISCUSSION

The purpose of this study was to learn more about the narrative and expository production of stories by third grade children. Specifically, narrative and expository stories were compared in the oral language modality at the word, sentence, and discourse level. Additionally, comparisons were made between children with a language impairment and children with typical development for both narrative and expository story performance. Findings from this study have the potential to add to the gap in the literature regarding these comparisons in oral language modality abilities of third grade children.

Narrative vs. Expository

The hypothesis that performance on oral narrative stories would be higher than performance on oral expository stories on word, sentence, and discourse measures was partially confirmed. As shown in Table 1, our findings indicated that only NTW, NDW, the total number of conjunctive cohesive ties, and the percentage of those conjunctive ties that were complete were higher in narrative than in expository stories. This first hypothesis was only partially confirmed since not all outcome measure comparisons resulted in a statistically significant difference between narrative and expository stories.

At the word level, our finding that the NTW was higher in narrative stories was supported by the results in previous literature that also found that number of total words was higher in narrative stories compared to expository stories (Berman & Nir-sagiv, 2007; Koutsoftas & Gray, 2012; Scott & Windsor, 2000). Additionally, narrative NDW was significantly higher than expository, which means children produced a greater lexical diversity in oral narratives than oral expository stories.

At the sentence level, our results indicated that MLU in oral narrative and expository stories were not significantly different. Additionally, there was also no statistically significant difference in the clausal complexity (SI) measure. It was noted that the mean value for MLU and the SI were slightly higher for narrative stories than the mean value for expository stories. Findings regarding MLU corroborate with Halls-Mills and Apel (2012), who also found that there was no statistical difference between written narrative and expository stories. Findings regarding SI were in corroboration with prior literature that also found clausal complexity was higher in narrative stories than expository stories (Halls-Mills & Apel, 2012; Scott & Windsor, 2000). Interestingly, this finding disagreed with other literature that found clausal complexity was higher in expository stories than narrative stories (Bird, Joshi, & Cleave, 2016; Berman & Nir-sagiv, 2007; Koutsoftas & Gray, 2012; Nippold, Hesketh, Duthie, & Mansfield, 2005).

At the discourse level, our findings indicated that only some of the cohesion measures were statistically different. The total number of conjunctive cohesive ties and the percentage of those conjunctive ties that were complete were higher in the narrative stories than the expository stories. Although previous literature has examined cohesion in narratives (Burns, Villiers, Peterson, & Champion, 2012; Horton-Ikard, 2009; Pinto, Tarchi, & Bigozzi, 2015; Thorne & Coggins, 2016), none of these studies compared cohesion in narrative and expository oral stories. The current study's findings are new in the literature that compares narrative and expository cohesion in children with an LI and children with TD.

One reason there were statistically significant differences between oral narrative and expository stories on two word level and two discourse level measures could be

because children are exposed to narrative structure long before expository structure. Therefore, children have a better knowledge of narrative structure than expository structure due to higher exposure over their lifespan.

A reason why the rest of the outcome measures were not significantly different between oral narrative and expository stories could be that third grade children did not yet possess the knowledge and ability to distinguish between the two genres when forming a story. Much of the instruction until third grade is rooted in narrative discourse. Thus, in third grade, there is a shift to target more expository skills. It is possible that the children did not understand these differences so they did not produce differences in their oral narratives.

LI vs. TD

The second hypothesis that typically developing children would perform higher on all measures for both narrative and expository stories than children with a language impairment was not confirmed. As shown in Table 2 and Table 3, our findings indicated that there were no statistically significant differences between the LI and TD groups for all outcome measures examined.

At the word level, our result of this study indicated there was no statistically significant difference between the LI and TD groups for NTW and NDW. The finding for NTW was not supported by the previous research that indicated the NTW was higher in both the narrative and expository stories produced by children who are TD than in the stories produced by children with an LI (Koutsoftas & Gray, 2012; Scott & Windsor, 2000). However, our result of no statistically significant difference between children with

LI and TD groups for NDW was supported by other research that also indicated there was no difference between LI and TD groups in terms of NDW (Scott & Windsor, 2000).

At the sentence level, there were no statistically significant differences between children with LI and TD on narrative and expository stories for MLU and SI measures. The MLU findings are new in the literature regarding comparisons between oral narratives and expository stories as well as children with and without LI. Our findings corroborated with studies that found no statistically significant difference between children with LI and TD on clausal complexity (Koutsoftas & Gray, 2012; Scott & Windsor, 2000).

At the discourse level, our findings indicated there were no statistically significant differences between children with and without LI on cohesion measures. This is a new finding in the literature. There was also no statistically significant difference between children with LI and TD on narrative performance (MISL). This finding was supported by the research that also found there was no difference between children with LI and TD on the use of story grammar elements in written narratives (Koutsoftas & Gray, 2012).

The reason there were no statistically significant differences between children with LI and TD at the word, sentence, or discourse levels could be due to lack of emphasis on narrative and expository structure during instruction. If children with TD had more exposure, we would expect to see them perform higher on the outcome measures than children with LI. Oral language is foundational to reading/writing, and if it is not being practiced adequately in early elementary school, the deficits in reading/writing could be reflected in later elementary school grades.

Another reason could be that differences between children with and without LI may not be noticeable in the modality of speaking, whereas it might be more noticeable in the modality of writing. Because children with and without LI have had a large amount of exposure to oral language, they may be performing similarly. However, when children are asked to perform a less practiced skill such as writing, differences may exist.

Limitations

One of the limitations of this study was that there were only 37 participants, which is a small number. Due to the nature of participant recruitment, it was difficult to obtain responses and approval from parents. Another limitation was the nature of the oral expository story prompt, which can be found in Appendix A. Because the prompts for the two stories were related (both involving planets), children may not have distinguished one prompt as a narrative story and the other prompt as an expository story. Instead, the children may have considered the expository prompt to be a continuation of their planetary narrative story. Additionally, the examiner did encourage some answers from children who were reluctant to speak, so the examiner's prompting could have impacted some of the children's responses.

Clinical Implications

Because oral narrative and expository narrative performance was similar among third grade children with and without language impairment, a shift in the focus on genre instruction may be warranted. Educators could continue to target the oral language modality because it seems as though children are not mastering oral language skills required of Common Core State Standards. Altered instruction can target similarities and differences between narrative and expository genres. The Common Core State Standards

expect third grade children to have a knowledge of how to read and write narrative and expository stories. If third grade children do not have the ability to orally distinguish between narrative and expository genres, they cannot adequately construct and produce each genre as a separate structure to meet these standards. Providing instruction on linguistic structures that differentiate narrative and expository texts could be helpful for children to discriminate between these two genres. It would be expected that appropriate exposure to these genres may subsequently lead to differences between children with LI and children with TD, where the oral language skills of children with TD would surpass children with LI.

CONCLUSIONS

When comparing oral narrative to oral expository stories, our findings indicated statistically significant differences in some of the word and discourse measures. If children do not have the ability to orally distinguish between narrative and expository genres, they will not be able to adequately construct and produce each genre as a separate structure and meet these standards. As mentioned previously, examining oral language may provide insight into substandard fourth grade NAEP reading scores.

Third graders are expected by the Common Core State Standards (CCSS) to have knowledge of how to read and write both narrative and expository stories. Based on the findings in this study, the third grade children in this study would be considered as not meeting certain CCSS. Specifically, since the children did not distinguish between narrative and expository stories, they are not meeting the standards that require third grade children to “introduce a topic and group related information together” (CCSS.ELA-LITERACY.W.3.2.A), “develop the topic with facts, definitions, and details” (CCSS.ELA-LITERACY.W.3.2.B), and “use linking words and phrases to connect ideas within categories of information” (CCSS.ELA-LITERACY.W.3.3.C).

When comparing performance between children with LI and children with TD, our findings indicated no statistically significant differences between any of the word, sentence, and discourse measures. Children who are TD are performing at the same level as children with an LI.

Having less than 50% of children be at proficient reading levels is problematic for children’s educational success. There is much to be learned about how to improve

children's reading scores. Future research is needed to determine if there is a correlation between oral narrative and expository story ability and NAEP reading performance.

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Appendix A

Twin-Themed Story Starters

Oral Narrative Prompt:

Our solar system is composed of 8 planets that revolve around the sun. Imagine that you were able to ride in a spaceship out to the Moon. Tell me a story about your journey. Make sure your story has a beginning, middle, and end.

Oral Expository Prompt:

Our solar system is composed of 8 planets that revolve around the sun. You have just discovered a planet that no one has ever seen before. Describe the planet to me and tell me at least three characteristics about your planet.

Appendix B

Sample Coded Transcript

- 0:39

C I was at the moon [S] [SI-1].

C And [CCONJ] [CT][C] there were a lot of crater/s [SI-1].

; :06

C I [RT][C] could see [M] earth from where [SCONJ] I was stand/ing [SI-2].

C And [CT][C] it [RT][C] look/ed beautiful [SI-1].

; :11

C (I could also see something low/ing) [SI-X].

; :04

C I [RT][C] could also see something glow/ing and a crater [IE] [SI-1].

C (I) I [RT][C] went over [ADV] to investigate [A] [SI-1].

C And [CT][C] there was a shuttle, a space_ship [SI-1].

C And [CT][C] it [RT][C] was glow/ing bright orange [SI-1].

C It [RT][C] look/ed like [SCONJ] there was a big dent in the front [SI-2].

C (I as*) I [RT][C] assume/ed [M] it [RT][C] probably [ADV] ran out of fuel and crash/ed on the [RT][C] moon [LT] [SI-2].

; :13

C Suddenly [CT][C] the door open/ed [IE] [SI-1].

C And [CT][C] this green creature [ENP] pop/ed out [SI-1].

C I [RT][C] was (scare/ed and) [SI-1].

; :07

C (Mm) Scare/ed [IR] and excite/ed [IR] at the same time [SI-0].

C He [RT][C] said [L] something in a language I [RT][C] could/n't understand [M] [SI-2].

C I [RT][C] ran back to the [RT][C] ship, got my laser gun and shot it [A] [SI-1].

C And then [CCONJ] [CT][C] I [RT][C] told [L] Houston [CH] that [SCONJ] I found it [RT][I] [SI-2].

C And then [CT][C] I [RT][C] went back [ADV] home [CO] [SI-1].

E Nice, that it?

- 2:49

MISL Score Total: 29

Macrostructure: 14

Character (CH) = 2; Setting (S) = 2; Initiating Event (IE) = 3; Internal Response (IR) = 3;

Plan (P) = 0; Action (A) = 2; Consequence (CO) = 2

Microstructure: 15

Coordinating Conjunctions (CCONJ) = 2; Subordinating Conjunctions (SCONJ) = 3;

Mental Verbs (M) = 3; Linguistic Verbs (L) = 2; Adverbs (ADV) = 3; Elaborated Noun

Phrases (ENP) = 2