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Assessing the language skills of primary school students with and without learning disabilities in the context of narration

Şaziye Seçkin Yılmaz [a] *, Uskudar University, Faculty of Health Sciences, Faculty Member, İstanbul, 34662, Turkey, https://orcid.org/0000-0003-0488-9639

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Abstract

This study aims to examine the language skills of Turkish-speaking primary school students who have learning disabilities (LD) and of their peers with typical development (TD) in comparison, by assessing these skills in the context of narration. For this, a comparative descriptive research model was used in the study. The study participants consisted of a total of 70 primary school students: 35 with LD and 35 with TD. To collect the data, two picture books of similar complexity and a story about one of these books were used. The participants were asked to tell the stories in the contexts of narrative tell and narrative retell. The stories told were analysed and scored according to the language features. The findings have shown that the students with LD exhibited lower language performance than their peers with TD in both narrative tell and narrative retell contexts, and both groups' performances in the language elements were higher in the context of narrative retell. The findings have been discussed in line with the relevant literature, and suggestions for further research and practice have been presented.

Keywords: Learning disability; language skills; language assessment; narrative.

* ADDRESS FOR CORRESPONDENCE: Şaziye, Seçkin Yılmaz, Uskudar University, Faculty of Health Sciences, Department of Speech and Language Therapy, İstanbul, Turkey

E-mail address: saziye.seckinyilmaz@uskudar.edu.tr / Tel.: +0-216 400 2222/4098

1. Introduction

Learning disability (LD) refers to the difficulties experienced in learning and developing reading, writing, and/or arithmetic skills, despite the individual's normal and above normal intelligence, not having any inability, and being provided with sufficient educational opportunities (American Psychiatric Association, 2013). Although it has been in the literature for a long time, the exact causes of LD are not known, and it is stated to be a language-based disorder with genetic transmission. (Centanni, 2020; Norton, Gabrieli & Gaab, 2019). The language base of LD is explained by the defects in the phonology component of language (Catts, McIlraith, Bridges, & Nielsen 2017; Ziegler & Goswami, 2005).

Especially in recent studies, it has been observed that a significant number of students with LD also have problems in oral language areas other than phonology. These studies have revealed that the language development of students with LD is delayed (Snowling & Melby-Lervag, 2016) and their vocabulary is limited (Seckin Yilmaz & Yasaroglu, 2020; Snowling, Hayiou-Thomas, Nash & Hulme, 2020); they have problems in describing words and explaining interword relationships (Seckin Yilmaz & Sari, 2020); they face difficulties in learning new words (Alt et al., 2017); they are not as successful in understanding and repeating long and complex sentences as their peers with typical development (TD) (Snowling et al., 2020; Xiao & Ho, 2014); their morphological knowledge and awareness are low (Rothou & Padeliadu, 2019); and they have difficulties in understanding and using language in social contexts (Ferrara et al., 2020; Seckin Yilmaz & Semsedinovska, 2020). In fact, in some studies, it has been stated that a noteworthy number of students with LD have developmental language disorders in addition to LD (Snowling et al., 2019; 2020).

In the studies on the oral language skills of students with LD, it is seen that standardised tests based on norms are generally used in the assessment of language skills. Standardised tests based on norms are advantageous since they provide the opportunity to compare the levels of individuals' language skills according to the age group and to diagnose if there is an impairment in these skills (Paul & Norbury, 2012; Shipley & McAfee, 2021). However, these tests are insufficient in determining the intervention goal and monitoring the intervention effectiveness. Additionally, it is stated that the ecological validity of standardised tests based on norms is low, too, since they do not give information about students' use of language in natural contexts in daily and academic life (Ebert & Scott, 2014). In order to overcome these limitations, it is recommended to use language sample analyses in language assessments, in addition to these tests (Channell, Loveall, Conners, Harvey & Abbeduto, 2018).

Language sample analysis is an assessment method that requires taking a representative sample from the language skills used by individuals in natural contexts in daily life, and analysing the sample in terms of certain variables (Channell et al., 2018). Language sample analysis enables expressive language to be described in different dimensions (vocabulary, morphology and syntax), ensures the progress resulting from development and/or intervention to be monitored and reveals the strengths and weaknesses of the evaluated individual's language features (Miller, Andriacchi & Nockerts, 2016). Language sample analysis consists of taking the language sample, converting the sample into transcription and analysing the sample (Kucuk Dogaroglu, 2014).

It is recommended to take language samples from school-aged students in the context of conversation and narration (Heilmann, Tucci, Plante & Miller, 2020; Pezold, Imgrund & Storkel, 2020). Language sample analyses carried out through narration provide important information about

students' ability to use affixes and create sentences, to organise and express the story content by using consistent and related sentences (Vandewalle, Boets, Boons, Ghesquiere & Zink, 2012). The fact that students are exposed to stories at home and preschool education institutions since birth and that the narrative skill is used lifelong from the preschool period to adulthood also increases the ecological validity of narration in language assessment (Channell et al., 2018; Ebert & Scott, 2014).

When taking language samples in the context of narration, story books with no words are usually used as a stimulus. During the assessment, the methods of narrative tell and narrative retell are utilised. When using the method of narrative tell, the evaluated individual is asked to create and tell a story by looking at the picture book. In the method of narrative retell, the evaluator tells a story about the book while the evaluator and the evaluated individual look at the picture book together, and then the evaluated individual retells the story by looking at the book (Seiger-Gardner, 2009). In the studies where the story samples taken through these two methods were analysed, it was observed that in the method of narrative retell, the children told longer stories which were richer in terms of story elements (Merritt & Liles, 1989; Westerveld & Gillon, 2010). Additionally, it was stated that the method of narrative tell, in which a model and context is not presented to children before telling a story, gives more information about pragmatic language skills, vocabulary and difficulties in finding words (Liles, 1993).

For the analysis of language samples obtained through narration, audio recordings were taken during the narration and these recordings were converted into transcript texts (Heilmann et al., 2020). Conversion to transcripts was also carried out using a special computer software developed for language sample analyses. Turkish Systematic Analysis of Language Transcripts (SALT; Acarlar et al., 2006) allows language samples to be encoded, converted into transcripts and analysed in accordance with the language characteristics of Turkish. In the analyses, the language features of the stories the students tell are assessed in terms of several variables, and the structure and complexity of the language used in the story are examined in terms of semantics, syntax and morphology (Westerveld, Gillon & Moran, 2008). The total number of complete and intelligible utterances (CIUTT) and total number of words (TNW) in the stories give information on productivity; the number of different words (NDW) and type-token ratio (TTR) provide the details about word diversity; and mean length of utterance (MLU) informs about syntactic development and grammatical complexity. These variables are also called microstructural elements. Another variable obtained through the analyses, rates of linguistic mazes (RLM), i.e., filled pauses, repetitions, revisions and/or abandoned utterances, provides information on fluency (Bowles et al., 2020; Ebert & Scott, 2014).

In the limited number of studies conducted with students with LD, it is presented that these students made more grammatical mistakes in their narration and the grammatical diversity in the utterances they used during their narration was weaker in comparison to their peers with TD (Fisher, Barton-Hulsey, Walters, Sevcik & Morris, 2019; Vandewalle et al., 2012). Additionally, narrative interventions for students with TD (Schoenbrodt, Kerins & Gesell, 2010) and for those with LD (Green & Klecan-Aker, 2012; Westerveld & Gillon, 2008) are effective in developing narrative skills. These findings show that narration is an important tool in assessing and supporting the language problems of students with LD at school age.

The aim of this study is to assess the language skills of Turkish-speaking primary school students diagnosed with LD in comparison with that of their peers with TD through narration. For this purpose, answers to the following questions are sought:

1. Do students with LD and those with TD show different performances regarding the language features in the stories they tell in the context of narrative tell?

2. Do students with LD and those with TD show different performances regarding the language features in the stories they tell in the context of narrative retell?

3. Do the participants' performances regarding the language features differ according to the narration context?

2. Method

2.1. Research model

The comparative descriptive research model was used in this study where the narrative performances of primary school students with LD and TD were assessed. In this research model, the comparison groups are described by being evaluated with common scales in terms of certain variables, and then the descriptions are compared (Karasar, 2010).

2.2. Study group

The study group consists of 35 students with a diagnosis of LD and 35 students with TD, who are from five different primary schools located in Istanbul and affiliated with the Ministry of National Education of Turkey. The selection of students with LD was based on the criteria of being diagnosed with LD, continuing to study at a school of inclusive education, benefiting from supportive special education services, using Turkish as the mother tongue, having no other diagnosis other than the diagnosis of LD or holding no suspicion of an additional disability. The students with TD were selected by being matched with the students with LD by the year of birth, grade level and gender. The other criteria used in the selection of the students with TD were using Turkish as the mother tongue, showing reading success correspondent with the class level according to the teacher's statement and having no disability or suspicion for a disability. The average age of the students with LD was 9.22 years (SD = 0.93) and the average age of the students with TD was 9.09 (SD = 0.97) years. There is no significant difference between the groups in terms of age variable (U = 561.60, p = 0.54). Table 1 shows the distribution of the students participating in the study by gender and grade levels.

Table 1. The distribution of the participants by gender and grade

Grade	Gender	LD (n = 35)	TD (n = 35)
2. Grade	Female	5	5
	Male	6	6
3. Grade	Female	3	3
	Male	5	5
4. Grade	Female	7	7
	Male	9	9

2.3. Data collection tools

To assess the narrative skills of the participants in the contexts of narrative tell and narrative retell, two picture books and a story related to one of these books were used in this study.

2.3.1. Picture books and story

The picture books that were utilised in the study were selected among the picture books used in the Narrative Assessment Protocol developed by Bowles et al. (2020). These books that help to assess children's narrative skills can be used by speech-language pathologists, educators and researchers online and free of charge (http://www.narrativeassessment.com). In this study, the books titled 'Tiger Goes to Bed' and 'Wolf Cleans His Bedroom' were used. Both books consist of 16 pages and 23 black and white pictures. Sequential events and causal relationships in the books are parallel with each other. The events described in the books represent a daily situation (such as room cleaning and sleep preparation) that can be understood by children with different backgrounds. The setting and time of the stories are evident in both books. There is one character in one of the stories and two characters in the other. Both story books were prepared in a way to express a story suitable for the narrative structure.

2.3.2. Story

The story of the picture book 'Wolf Cleans His Bedroom', which was used in the context of narrative retell in this study, was translated from the original language into Turkish; the opinions of four lecturers working in the fields of speech-language pathology and special education were taken for its suitability in terms of language and expression, and the final version of the story was achieved. The Turkish version of the story consists of a total of 252 words and 44 sentences.

2.4. Data collection

The study data were collected individually in the environments where there were two chairs and a table, free of distracting stimuli, in the schools that the students continue their education. The researcher and the students sat together; the students were informed about the study by having a conversation with the researcher for a short while before the assessment and it was ensured that the students got used to the environment and the researcher. The assessments firstly in the context of narrative tell and then in the context of narrative retell were conducted and audio recordings were taken in both processes.

In the telling context, the researcher and student viewed the book together. Then, the student was asked to look at each page again and tell a story about the book. Whenever the student used an expression that was difficult to understand, the researcher repeated the expression as it was, thus avoiding the situation of incomprehension while listening to the audio recording. When the student reached the end of the book, the researcher asked 'Is there anything you would like to add?', and the student added things if any. After the assessment was made in the context of narrative tell, a short conversation was held with the student, and then the assessment in the context of narrative retell was conducted.

In the retelling context, the researcher and student viewed the book together. First, the researcher told the model story by looking at the relevant pages together with the student. The researcher paid attention to the stresses and intonations while telling the story. Subsequently, she asked the student to retell the story while viewing the pictures. When the student reached the end of the book, the researcher asked 'Is there anything you would like to add?', and the student added things if any.

2.5. Data analysis

After the data collection process was completed, the researcher listened to the audio recordings and converted the stories of the students to transcripts on a computer. An independent expert working in the field of language disorders listened to the audio recordings and compared them with the written documents. In order to examine the language features of the stories the students told, the language samples converted into transcripts were transferred to the SALT programme. The expressions in the language samples were encoded with the coding conventions in the SALT user manual and divided into utterances and morphemes. Through SALT, the total number of complete and intelligible utterances (CIUTT), total number of words (TNW), number of different words (NDW), type-token ratio (TTR), mean length of utterance in words (MLUw), mean length of utterance in morphemes (MLUm) and RLM) were calculated for each participant.

2.6. Interrater reliability

The language samples of 30% (n = 21) of the participants were randomly selected; these samples were analysed by another person who is an expert in the field of language disorders and the inter-rater reliability was calculated. In the calculations of inter-rater reliability, Kendall's coefficient of concordance (W) was used. For the language samples taken in the context of narrative tell, the coefficient of concordance was found as 0.99 (p = 0.00) for dividing these samples into utterances and 0.97 (p = 0.00) for diving them into morphemes. The coefficients of concordance for the inter-rater reliability regarding the language samples taken in the context of narrative retell were found to be 0.99 (p = 0.00) for dividing into utterances and 0.98 (p = 0.00) for dividing into morphemes.

2.7. Statistical analyses

SPSS 21 programme was used for the statistical analysis of the data. Firstly, the Kolmogorov–Smirnov Test for normality was conducted to determine whether the group scores in the variables had a normal distribution. The data were not showing normal distribution and the Mann–Whitney U test was used to compare the group performances. The Wilcoxon signed-rank test was used to examine the performance differences in the contexts of narrative tell and narrative retell within the groups. The effect sizes related to the differences obtained through the Mann–Whitney U Test and the Wilcoxon signed-rank test were also calculated. While calculating the effect sizes, the *formula r = Z / √N* was used; and the effect size was interpreted as small if it was 0.10, medium if it was 0.30 and large if it was 0.50 (Pallant, 2016).

3. Results

3.1. Comparison of the groups' language features in the context of narrative tell

The Mann–Whitney U test was conducted to compare the language features of the students with LD and TD in the context of narrative tell. Table 2 shows the results of this test.

Table 2. The comparison of the groups' language performances in the context of narrative tell

Variables	Group	$\bar{X}$	*SD*	Mean rank	Sum of rank	*U*	*p*	Effect
CIUTT	LD	25.08	5.72	29.03	1,016.00	386.000	0.01*	0.28
	TD	29.05	7.50	41.97	1,469.00			
TNW	LD	89.48	24.51	30.11	1,054.00	424.000	0.03*	0.27
	TD	116.71	35.27	40.89	1,431.00			
NDW	LD	46.31	10.94	28.09	983.00	353.000	0.00*	0.36
	TD	56.57	13.53	42.91	1,502.00			
TTR	LD	0.56	0.08	40.70	1,424.50	430.500	0.03*	0.26
	TD	0.50	0.06	30.30	1,060.50			
MLUw	LD	3.59	0.73	30.00	1,050.00	420.000	0.02*	0.27
	TD	4.06	0.91	41.00	1,435.00			
MLUm	LD	7.09	1.51	30.34	1,062.00	432.000	0.03*	0.25
	TD	8.15	2.13	40.66	1,423.00			
RLM	LD	9.25	7.13	41.56	1,454.50	400.500	0.01*	0.30
	TD	5.40	5.40	29.44	1,030.50			

*$p < 0.05$

Note: CIUTT: Total number of complete and intelligible utterances, TNW: Total number of words, NDW: Number of different words, TTR: Type-token ratio, MLUw: Mean length of utterance in words, MLUm: Mean length of utterance in morphemes, RLM: Rates of linguistic mazes.

When Table 2 is examined, it can be seen that the students with LD have a significantly lower performance in the variables of CIUTT, TNW, NDW, MLUw and MLUm and a significantly higher performance in the variables of TTR and RLM in the context of narrative tell, compared to their peers with TD. The effect sizes related to the differences between the groups are medium.

3.2. Comparison of the groups' language features in the context of narrative retell

The Mann–Whitney U Test was used to compare the language features of the students with LD and TD in the context of narrative retell. Table 3 shows the test results.

Table 3. The comparison of the groups' language performances in the context of narrative retell

Variables	Group	$\bar{X}$	*SD*	Mean rank	Sum of rank	*U*	*p*	Effect
CIUTT	LD	28.49	6.79	25.04	876.50	246.50	0.00*	0.51
	TD	35.03	8.33	45.96	1,608.50			
TNW	LD	127.03	25.14	27.06	947.00	317.00	0.00*	0.42
	TD	176.37	25.14	43.94	1,538.00			
NDW	LD	66.71	11.77	23.80	833.00	203.00	0.00*	0.58
	TD	85.82	16.25	47.20	1,652.00			
TTR	LD	0.53	0.05	41.94	1,468.00	387.00	0.01*	0.32
	TD	0.50	0.05	29.06	1,017.00			
MLUw	LD	4.52	0.84	28.54	999.00	369.00	0.00*	0.34
	TD	5.07	0.81	42.46	1,486.00			
MLUm	LD	8.68	1.67	28.23	988.00	358.00	0.00*	0.36
	TD	9.84	1.63	42.77	1,497.00			
RLM	LD	7.77	7.40	39.23	1,373.00	482.00	0.12	0.18
	TD	4.89	4.72	31.77	1,112.00			

*$p < 0.05$

Note: CIUTT: Total number of complete and intelligible utterances, TNW: Total number of words, NDW: Number of different words, TTR: Type-token ratio, MLUw: Mean length of utterance in words, MLUm: Mean length of utterance in morphemes, RLM: Rates of linguistic mazes.

When Table 3 is examined, it can be seen that there is no significant difference between the groups in the variable of RLM in the context of narrative retell. When the other variables are checked, it is observed that the students with LD showed significantly lower performance in the language variables other than TTR, compared to their peers with TD. The effect sizes related to the differences between the groups are large for the number of complete and intelligible utterances and the number of different words, and medium for the other variables.

3.3. Examining the language features in the participants' stories in the different narrative contexts

The Wilcoxon Signed-Rank Test was used to compare the language features of the students with LD and TD in the contexts of narrative tell and narrative retell. Table 4 presents the findings obtained as a result of the comparison of the language features in the stories told by the group with LD in different contexts.

Table 4. The comparison of the language features that the group with LD had in the contexts of narrative tell and narrative retell

Variables	Context	$\bar{X}$	*SD*	Mean rank	Sum of rank	*Z*	*p*	Effect
CIUTT	Tell	25.08	5.72	9.56	76.50	3.05	0.00*	0.36
	Retell	28.49	6.79	17.07	358.50			
TNW	Tell	89.48	24.51	7.83	23.50	4.69	0.00*	0.56
	Retell	127.03	25.14	18.44	571.50			
NDW	Tell	46.31	10.94	3.00	3.00	5.11	0.00*	0.61
	Retell	66.71	11.77	18.44	627.00			
TTR	Tell	0.53	0.08	17.61	334.50	0.32	0.75	0.04
	Retell	0.53	0.05	18.47	295.50			
MLUw	Tell	3.59	0.73	4.50	9.00	5.01	0.00*	0.60
	Retell	4.52	0.84	18.82	621.00			
MLUm	Tell	7.09	1.51	4.00	20.00	4.83	0.00*	0.58
	Retell	8.68	1.67	20.33	610.00			
RLM	Tell	9.25	7.13	18.44	332.00	0.92	0.36	0.11
	Retell	7.77	7.40	15.27	229.00			

$*p < 0.05$

Note: CIUTT: Total number of complete and intelligible utterances, TNW: Total number of words, NDW: Number of different words, TTR: Type-token ratio, MLUw: Mean length of utterance in words, MLUm: Mean length of utterance in morphemes, RLM: Rates of linguistic mazes.

When Table 4 is examined, it can be seen that the students with LD performed significantly higher in the variables of CIUTT, TNW, NDW, MLUw and MLUm in the context of narrative retell, compared to the context of narrative tell. The effect size for the score differences between the contexts is large for the variables of TNW, NDW, MLUw, MLUm, and the medium for the variable of CIUTT. Table 5 presents the findings obtained as a result of the comparison of the language features in the stories told by the group with TD in different contexts.

Table 5. The comparison of the language features that the group with TD had in the contexts of narrative tell and narrative retell

Variables	Context	$\bar{X}$	*SD*	Mean rank	Sum of rank	*Z*	*p*	Effect
CIUTT	Tell	29.05	7.50	7.63	61.00	4.17	0.00*	0.50
	Retell	35.03	8.33	21.07	569.00			
TNW	Tell	116.71	35.27	2.00	2.00	5.11	0.00*	0.61
	Retell	176.37	25.14	18.47	628.00			
NDW	Tell	56.57	13.53	0.00	0.00	5.09	0.00*	0.61
	Retell	85.82	16.25	17.50	595.00			
TTR	Tell	.50	.06	18.29	311.00	0.23	0.82	0.03
	Retell	.50	.05	16.71	284.00			
MLUw	Tell	4.06	.91	5.25	21.00	4.82	0.00*	0.58
	Retell	5.07	.81	19.65	609.00			
MLUm	Tell	8.15	2.13	10.00	60.00	4.18	0.00*	0.50
	Retell	9.84	1.63	19.66	570.00			
RLM	Tell	5.40	5.40	17.44	279.00	0.28	0.78	0.03
	Retell	4.89	4.72	15.56	249.00			

$*p < 0.05$

Note: CIUTT: Total number of complete and intelligible utterances, TNW: Total number of words, NDW: Number of different words, TTR: Type-token ratio, MLUw: Mean length of utterance in words, MLUm: Mean length of utterance in morphemes, RLM: Rates of linguistic mazes.

When Table 5 is examined, it can be seen that the students with TD showed significantly higher performance in the variables of CIUTT, TNW, NDW, MLUw and MLUm in the context of narrative retell, compared to the context of narrative tell. The effect sizes for the score differences between the contexts are large for all the variables.

4. Discussion

In this study, it was aimed to assess the language skills of students with LD and TD through narration and to examine them comparatively. For this purpose, the language samples in different narrative contexts were taken from 35 primary school students with LD and 35 primary school students with TD who were matched with the first group according to age, grade level and gender. The samples were analysed in accordance with the language variables (CIUTT, TNW, NDW, TTR, MLUw, MLUm and RLM).

In order to answer the first and second questions of the study, the language features of the participants in the contexts of narrative tell and narrative retell were compared. In both contexts, CIUTT, TNW, NDW, MLUw and MLUm in the stories of the students with LD were found to be significantly lower than that of their peers with TD. On the other hand, TTR was found to be significantly higher in the group with LD in both contexts. The low level of CIUTT, TNW and NDW in the stories of the students with LD indicates that their expressive vocabulary and productivity are limited compared to their peers. Although TTR is higher in the students with LD compared to their peers with TD, it is stated that this measure is not as effective as TNW and NDW in distinguishing language disorders and its effectiveness decreases with age (Acarlar, 2005; Scott & Windsor, 2000). In the literature, it is stated that the vocabulary of students with LD is more limited in the assessments made both with standardised tests (Snowling et al., 2020; Xiao & Ho, 2014) and language sample analyses (Westerveld & Gillon, 2010). Similarly, in the limited number of studies on the vocabulary of Turkish-speaking students with LD, it is presented that these students' vocabulary is limited. In studies conducted using standardised language test, it is observed that students with LD performed poorly in the subtests of picture vocabulary, expressing interword relationships and word description, compared to both the test norm and their peers with TD who participated in the study (Seckin Yilmaz

& Sari, 2020; Seckin Yilmaz & Yasaroglu, 2020). The findings of this study are also important since it reveals the vocabulary limitations of Turkish-speaking students diagnosed with LD, through language sample analysis which is a more natural assessment approach.

The fact that MLUw and MLUm of the students with LD are lower in both assessment contexts indicates that the grammatical complexity and syntactic development of these students are lower, too. Similarly, in previous studies, it is seen that the morphosyntactic developments of students with LD are not at the same level as that of their peers and these students showed poor performances in the tasks of understanding sentences, repeating sentences and completing words left blank in sentences by adding appropriate morphemes in the standardised tests (Seckin Yilmaz & Sari, 2020; Snowling et al., 2020; Xiao & Ho, 2014). Likewise, Westerveld and Gillon (2010) have found that students with LD use shorter and less structurally complex sentences during narration.

When the effect sizes related to the differences between the groups (for CIUTT, TNW, NDW, MLUw and MLUm) are examined, it can be seen that the effect sizes vary between .27 and .36 for the context of narrative tell and between .34 and .51 for the context of narrative retell. This finding shows that the context of narrative retell better differentiates the performances of students with LD and of those with TD in the language variables, and in this context, students with LD experience more difficulties. In parallel, Westerveld and Gillon (2010) have reached similar findings in their study on students with LD and TD. The researchers found that students with LD have more difficulties in the context of narrative retell than their peers with TD, because this context is affected by listening comprehension, knowledge of narrative structure and working memory, and because students with LD are only able to allocate limited cognitive resources to word usage and complex morphosyntactic structures due to the fact that they allocate a large part of their cognitive resources to these previously mentioned three skills.

When RLMs of the groups in the contexts of narrative tell and narrative retell are examined, it is observed that the RLM is significantly higher in the group with LD in the context of narrative tell and there is no important difference between the groups in terms of the context of narrative retell. The fact that the students with LD have a higher level at RLM in the context of narrative tell than their peers with TD shows that their language fluency is low, they have difficulties in finding words while speaking, they cannot complete some expressions they have started and they use filled pauses such as ‘umm, well’ more frequently. In the context of narrative tell, since students do not listen to a model story beforehand, they need to plan, construct and tell the story themselves in a consistent way. This is cognitively challenging (Merrit & Liles, 1989). Therefore, especially students with limited vocabulary may have difficulties in creating stories in the context of narrative tell, and in finding and expressing appropriate words in their narration (Lucero & Uchikoshi, 2019) and the difficulties in finding words may result in struggling.

In line with the third question of the study, the performances of both groups in the language variables were compared within themselves according to the contexts of narrative tell and narrative retell. Both groups showed higher performance in the variables of CIUTT, TNW, NDW, MLUw and MLUm in the context of narrative retell. Although the students with LD had a lower performance in the context of narrative retell, both groups told longer and grammatically more complex stories with richer word diversity in this context, which is consistent with the literature (Merritt & Liles, 1989; Westerveld & Gillon, 2010). Liles (1989) has explained that longer stories are achieved in the context of narrative retell, since more suitable conditions for taking language samples are created due to the fact that the story, which is listened to before the narration and forms a model, facilitates the communicative interaction between the evaluator and the evaluated student. Moreover, the researcher has also stated that the stories taken in this context better represent the language features of children since they are longer.

5. Conclusion and Future Directions

In summary, consistent with the international literature, it is observed in this study that the Turkish-speaking students with LD experienced difficulties in the language variables such as language productivity, word diversity, syntactic development and grammatical complexity in both contexts of narrative tell and narrative retell, compared to their peers with TD. Additionally, it is revealed that the performances in the context of narrative retell are higher in both groups in comparison with that in the context of narrative tell. In the study, it is seen that the assessments on the language samples taken through narration could reveal the differences between the language skills of students with LD and TD. It is thought that the context of narrative retell can be more useful in language assessments since the language samples taken in this context are longer, contain more word diversity, have more complex and longer sentences and divide the groups better.

Since this is the first study (within the available resources) in which narration is used in the assessment of the language skills of school-aged children whose native language is Turkish, and since it reveals the language differences of students having LD through language samples taken with narration, this is an important study. However, this study also has limitations such as having a low number of students in the participating groups, not analysing the language features according to age and gender, examining only the language features in the language sample analysis during the assessment of language skills and not analysing the variables related to the narrative structure. Thus, by using different assessment protocols and tools in groups of larger participants, future studies are recommended to evaluate the language skills of students with LD with TD through narration, examine the narrative structure in the stories too, analyse the consistencies and inconsistencies among the results of language assessments conducted through standardised tests and narration and determine the narrative norms for Turkish speaking children. As for practitioners, it is recommended not to see LD only as a difficulty in the academic fields and in the phonology component of language during the assessment and intervention processes, but to take the language skills of students with LD into consideration in the assessment and intervention processes and to increase their competencies in assessing and supporting language skills.

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