Vol.6, No.11, 2020



# The Relationship School Maturity and Writing Skills of Students with Learning Disability

Suleyman Dogru
Faculty of Education, Biruni University
Istanbul, Turkey
E-mail: dogruib@gmail.com

S. Sunay Yildirim Dogru
Faculty of Education, Dokuz Eylul University
Izmir, Turkey
E-mail: sunay.dogru@deu.edu.tr

Simge Cepdibi (Corresponding author)
Faculty of Education, Istanbul University-Cerrahpasa
Istanbul, Turkey
E-mail: simge.cepdibi@istanbul.edu.tr

The research is presented at EAK 2020 congress.

#### Abstract

Learning disability is a type of disability that is usually noticed when the child starts school. Early special education interventions can have very positive effects on the academic life of children with learning disability. For this reason, whether or not these students have reached the maturity required to start school during the transition from kindergarten to primary school will increase the effect of the intervention to be presented to them. It is also important how much the level of school maturity of students with learning disability can explain the problems they face during their literacy process. Accordingly, the aim of the study is to determine the relationship between school maturity and writing skills in first-grade students with learning disability. This research is exploratory correlational research. The sample of this research is 57 primary school students who are diagnosed with learning disability and continue to being rehabilitee. "Metropolitan School Readiness Test (MSRT)" and "Writing Skill Evaluation Form" scales are used. Besides, was included school success and demographic information of students obtained from interviews with teachers in the current study. Correlation analysis was conducted to determine the relationship between the scores obtained from the variables. As a result of the analysis, it was revealed that there was no significant relationship between school maturity and writing skills of students with learning disability. However, it was found that there is a negative relationship between the scores gathered from the Metropolitan School Readiness Test's "Word Comprehension, Matching and Copying" subscales and Writing Skill Evaluation Form "Writing Order" subscale. Also, it was found that there is a positive relationship between the scores obtained from the Metropolitan School Readiness Test "Word Understanding, Matching and Copying" subscales and "Dictation". This research once again draws attention to the unique learning features of students with learning disability. The results of this study have shown that students with learning disability are dependent on other factors rather than school maturity underlying literacy problems.

Keywords: Metropolitan School Readiness Test, Scholl readiness, Learning difficulties, Literacy

**DOI**: 10.7176/JSTR/6-11-01

#### 1. Introduction

School success is one of the most important issues for students with special needs and their families. Parents and teachers think that child's cognitive or physical disability are reasons for school failure. These impairments are the main factors that negatively affect students' academic performance. The

1 | Page www.iiste.org

Vol.6, No.11, 2020



group which we often encounter in the inclusion system from these deficiencies are children with learning disability. Learning disability is an umbrella term used for individuals who have difficulties in reading, writing, processing information, having difficulties in verbal language and/or writing, listening, thinking skills, math skills, academic skills and/or social skills acquisition (Güzel Özmen, 2019; Reiff & Gerber, 1992). However, the source of these problems is not due to mental retardation or a different disability but emphasizes the difference in children's learning styles. Children with learning disability need special education and services due to their different learning styles.

Reading and writing skills are the most important and basic skills for all children and their academic life. The acquisition of literacy for children with a disability is as important as the acquisition of literacy for children with normal development. The acquisition of literacy skills will support the academic life, social and emotional development of the children with a disability, and make easier the integration of the child within the society.

Writing is the process of creating meaning by using the written symbols of the verbal language. Thus, writing is a complex skill that involves using both language skills and symbols. By using the skill of writing, individuals express their feelings, thoughts, and plans meaningfully, and at the end of the writing process, they create a product (Erhardt & Meade, 2005; Rosenblum, Weiss, & Parush, 2003). Writing difficulties can be defined as difficulty or impairment in producing the mechanical properties of written language (Hamstra-Bletz and Blote, 1993). The literature indicates that 10 to 34% of students have deficient skills in handwriting skills (Smits-Engelsman, Niemeijer & Van Galen, 2001). The writings of children who have dysgraphia are bad, illegible, and have different sign errors. The main reason for these errors is the differences in visual and auditory perception which are the reasons of learning disability. Errors such as using letters interchangeably, mixing, and reversing are dependent on the difference in visual perception. The child also has problems in perceiving the position of the shape s/he sees. Problems such as using the letter "d" instead of "b" or writing the number "6" instead of the number "9" show that these children confuse the letters and write as if they were looking in the mirror. Each individual has unique learning styles and learning speed (Celenk, 2007). For this reason, it is very important to determine what s/he can do before starting to work with the student with a disability, to reveal her/his performance correctly and completely, to determine the possible effect of her/his disability on the development of the child. Proper teaching techniques must be chosen for learning aims and must provide the child with environmental arrangements that will support social and emotional development of his/her. It is also important that for supporting the education of the child, we must know twhether the child started school with school readiness or not. Before starting the school, the school maturity of the child should be determined and the first literacy teaching should be planned in detail. In the first literacy process, evaluations are made to evaluate the relevant outputs and to determine the effectiveness of the education and teaching methods applied. Different criteria are taken into consideration when evaluating writing skills. Writing skills are handled under 5 titles (Miller, Rakes & Choate, 2000; as cited in Döngel, 2009). These are fine motor skills, legible writing, writing flexibility, left-handed writing, and regular continuous writing. Different methods and techniques are used in teaching of reading and writing, and each technique and method has diffetent advantages and disadvantages. These methods can be adapted according to the needs and level of the student and multiple methods can be used together. Among the methods that are based on sound units, while the letter, sound, and syllable method are counted, among the methods a word, sentence, and story method are counted based on reading comprehension (Celenk, 2003). The text method, letter method, and sound method are among the methods used in writing education. The teaching of writing consists of 6 phases: the preparatory phase, sound phase, syllable phase, word phrase, sentence phase, and free text phase. Writing is essential for all academic skills and a way to achieve social communication (Dennis & Swinth, 2001). School life continues with activities involving 30% to 60% of writing (McHale and Cermak, 1992).

Children with learning disability encounter different problems in their academic lives due to differences in their learning styles. Learning reading and writing together when students first start the primary school is one of the most challenging processes for children with learning disability. The primary school period, which is the beginning of the academic life of the child, can be differentiated and supportive for the child with appropriate special education and support services. For this reason, it is very important to work with experts and provide appropriate methods, techniques and supports to the child.

Children who have problems with the mechanical skills of writing are defined as children with writing difficulties (Marr & Cermak, 2001). While the rate of writing difficulties is higher in male students, this

Vol.6, No.11, 2020



rate is lower in female students (Rubin & Henderson, 1982). Writing disorder is common in children and adults with learning disability, as well as in children with general coordination disorders (Cratty, 1994; Johnson, Hancock, Carter & Pool, 2013; Laszlo, 1990; Waber & Bernstein, 1994). The impairment of writing skills, which is the basis of academic skills, negatively affects the academic life of the student. Writing disorder negatively affects the student's attitude towards school, the perception of adequacy, and social acceptance. For these reasons, it is very important to identify students who have learning disabilities earlier and to intervene early. The literature has some studies in which the effects of school readiness and various variables on literacy are investigated on children with normal development(Gündüz & Çalışkan, 2013; Arı & Özcan, 2016). It is found in the studies that the students with high school maturity have better literacy performance compared to students with low school maturity (Arı & Özcan, 2016). However, it was not found any study in the literature which investigate the relationship between school maturity and literacy performance of students with learning disability. For this reason, it is important to determine the school maturity levels of students with learning disability and to reveal the relationship between school maturity levels and their performance level in reading and writing. Thus, in that study, it was carried out to determine the relationship between school maturity levels and writing skills of students diagnosed with learning disability. For this reason, the relationship between the mechanical dimension of writing and school maturity was evaluated with correlational analysis and observations.

#### 2. Method

#### 2.1 Research Design

This research is exploratory correlational research because of the fact that the relationship between two variables was investigated without interfering with the school maturity, which is the independent variable of the research, and the writing skill, which is the dependent variable of the research. Word comprehension, sentences, general information, matching, numbers, and copying skills are handled within school maturity. Relevant literacy objectives include those determined by the Ministry of National Education (MoNE, 2018).

#### 2.2 Research Sample

This research is exploratory correlational research because of the fact that the relationship between two variables was investigated without interfering with the school maturity, which is the independent variable of the research, and the writing skill, which is the dependent variable of the research. Word comprehension, sentences, general information, matching, numbers, and copying skills are handled within school maturity. Relevant literacy objectives include those determined by the Ministry of National Education (MoNE, 2018).

#### 2.3 Research Instruments and Procedures

'Metropolitan School Readiness Test' and 'Writing Skill Evaluation Form' were used to collect research data. Also, children's school success levels and demographic information were obtained through teacher interviews. The first literacy process was regularly recorded in the researcher's journal. The research was carried out in three stages. In the first phase of the research, the 'Personal Information Form' was filled by interviewing with the teachers during the compliance week, the first week of September. In the second stage of the study, the 'Metropolitan School Readiness Test' was applied to the student in the rehabilitation center as well as the first-year students, and their school maturity was measured. At the last stage of the research, students were observed during the 4-month writing teaching process. Students were evaluated according to their skills in the process of teaching writing. In this context, the "Writing Skill Evaluation Form" was filled by the researchers with the help of teachers of first graders.

'Metropolitan School Readiness Test' is a performance test which was adapted to Turkish by Oktay (1983) to measure the characteristics and achievements that are required for 1st grade. The test consists of 6 subscales and 100 items in total. These subscales are; word comprehension, sentences, general information, matching, numbers, and copying subscales. The word comprehension subscale consists of 19 items, sentences, and general information scale each consists of 14 items, matching consists of 19 items, numbers consists of 24 items, and copying subscale consists of 10 items. The entire test is completed in 29.5 minutes. The performance level of the student regarding the reading maturity, number maturity, and total maturity levels were determined. The scores obtained from the word comprehension, sentences, general information, and matching subscales indicate the reading maturity,

ISSN 2422-8702 (Online), DOI: 10.7176/JSTR/6-11-01

Vol.6, No.11, 2020



and the numbers subscale reveals the performance of the number maturity.

To evaluate the writing performance of children with learning disability in the research, 'Writing Skill Evaluation Form' was used. The form consists of three sub-sections consisting of 6 questions for writing and 18 questions for evaluation and control purposes. This form was obtained from the Turkish Ministry of National Education(MoNE) sources.

#### 2.4 Data Analysis

To analyze the data obtained through the research, SPSS 21 program was used by the researchers. The data were summarized in tables in terms of frequency, percentage, mean, and standard deviation to reflect the general characteristics of the students participating in the research. In the research, the relationships between the Metropolitan School Readiness Test and its subscales and the Writing Skill Evaluation Form Scores and its sub-items were evaluated by using correlation analysis. The results were presented in the 'Results' section.

#### 3. Results

In this study, school maturity and writing skills of children with learning disability were evaluated by considering the scores they obtained from the Metropolitan School Readiness Test and their scores from Writing Skill Evaluation Form. The result of the analysis were presented below.

Table 1. Correlations between school maturity and writing skill

Variables	n	r	p
School Maturity Score			
Writing Skill Score	57	.052	.072

When Table 1 is examined, no statistically significant relationship was found between the scores obtained from 'The Metropolitan School Readiness Test' and the scores obtained from 'The Writing Skill Evaluation Form' (r=.052, p>.05).

Table 2. Correlations between variables

	Word C	Comprehen	sion	Matchi	ng		Copyi	ng	
Variables	n	r	p	n	r	p	n	r	p
Writing Order	57	348	.008	57	389	.003	57	322	.015
Dictation	57	.305	.21	57	.379	.004	57	.291	.028

When Table 2 is analyzed, a statistically significant negative relationship was found between Metropolitan School Readiness Test's 'Word Comprehension' subscale and the Writing Skill Evaluation Form 'Writing Order' subscale (r = -.348; p < .05). A statistically significant negative relationship was determined between the scores obtained from the Metropolitan School Readiness Test's 'Matching' subscale and the scores of The Writing Skill Evaluation Form's 'The Order of Writing' subscale (r = .389; p < .05). As a result of the correlation analysis conducted to determine the relationship between the scores obtained from the Metropolitan School Readiness Test's 'Matching' subscale and 'Dictation', a statistically significant positive relationship was determined between the scores (r = .379; p < .05). A statistically significant negative relationship was determined between the scores the Metropolitan School Readiness Test's 'Copying' subscale and the scores The Writing Skill Evaluation Form 'Writing Order' subscale (r = .322; p < .05). As a result of the correlation analysis conducted to determine the relationship between the scores obtained from the Metropolitan School Readiness Test's 'Copying' subscale and 'Dictation', a statistically significant positive relationship was found between the scores (r = .291; p < .05).



Table 3. Correlations between writing order and variables

Variables	n	r	р
Font Size	57	.656	.000
Write on Lines	57	.494	.000
Space Between Words	57	.545	.000
Spelling of Letters	57	.454	.000
Writing Cleanliness	57	.353	.007

When Table 3 is evaluated, as a result of the Pearson Correlation Analysis conducted to determine the relationship between the scores obtained from the Writing Skills Evaluation Form "Writing Order" subscale and the scores obtained from the Writing Skill Evaluation Form "Font Size" subscale a significant relationship was found (r = 656; p < .05). The between the scores obtained from the "Write on lines" subscale and "writing order" was found a significant positive relationship at the level of p < .05 (r = 494; p < .05). Between "Writing Order" and the scores obtained from the "Space between words" subscale was found to be a significant positive relationship at the level of p < .05 (r = 545; p < .05). Between "Writing Order" and "Spelling of Letters" was found to be a significant positive relationship at the level of p < .05 (r = 454; p < .05). Between "Writing Order" and the scores obtained from the "Cleaning of Writing" subscale was found to be a significant positive relationship at the level of p < .05 (r = 353; p < .05).

Table 4. Correlations between font size and variables

Variables	n	r	p
Write on Lines	57	.592	.000
Space Between Words	57	.654	.000
Spelling of Letters	57	.545	.000
Writing Cleanliness	57	.495	.000

In Table 4, as a result of the Pearson Correlation analysis conducted to determine the relationship between the scores obtained from the Writing Skills Evaluation Form "Font Size" subscale and the scores obtained from the Writing Skill Evaluation Form subscale, a significant positive relationship was found (r =, 592; p <.05). Between the scores obtained from the "Space between Words" subscale was found to be significant positive at the level of p <.05 (r =, 654; p <.05). Between the scores obtained from the scale of the "Spelling of Letters" subscale was found to be a significant positive relationship at the level of p <.05 (r =, 545; p <.05). Between the scores obtained from the "Writing Cleanliness" subscale was found to be a significant positive relationship at the level of p <.05 (r =, 495; p <.05). As a result of the study, the students with learning disabilities show up that they have problems, related to the size of the letters, the way the letters are written, etc. and these problems consist because of their differences arising from the learning characteristics.

Table 5. Correlations between write on line and variables

Variables	n	r	p
Space Between Words	57	.927	.000
Spelling of Letters	57	.757	.000
Writing Cleanliness	57	.693	.000
Dictation	57	.365	.005

Vol.6, No.11, 2020

www.iiste.org

When Table 5 is examined, as a result of Pearson Correlation analysis conducted to determine the relationship between the scores obtained from the "Writing on Lines" and the "Space between Words" subscale a positive and significant relationship was found (r = 927; p < 05). Between the scores obtained from the "Spelling of Letters" subscale and "Writing on Lines" was found to a significant positive relationship at the level of p < 05 (r = 757; p < 05). Between the scores obtained from the subscale of the "Writing Cleanliness" and "Writing on Lines" was found to be a significant positive relationship at the level of p < 05 (r = 693; p < 05). Between scores from "dictation" and "Writing on Lines" subscale was found to be positively significant at p < 05 level (r = 365; p < 05).

Table 6. Correlations between space between words and variables

Variables	n	r	p
Spelling of Letters	57	.814	.000
Writing Cleanliness	57	.735	.000
Dictation	57	.356	.007

Table 6 shows that it is statistically significant at the level of p <.05 as a result of Pearson Correlation analysis conducted to determine the relationship between the scores obtained from the "Space between words" subscale and the scores obtained from the "Spelling of Letters" subscale a significant positive relationship was found (r = 814; p < .05). Between the scores obtained from the "Space between Words" subscale and "Writing Cleanliness" subscale was found to be a significant positive relationship at the level of p < .05 (r = .735; p < .05). The relationship between "Space between Words" and "dictation" was found to be positively significant at the level of p < .05 (r = .356; p < .05).

Table 7. Correlations between spelling of letters and variables

Variables	n	r	p
Writing Cleanliness	57	.746	.000
Dictation	57	.430	.001

When Table 7 is analyzed, between the scores of the Writing Skills Evaluation Form "Spelling of Letters" subscale and the scores of the Writing Skill Evaluation Form "Cleaning of Writing" subscale were statistically a significant positive relationship in the direction (r = 746; p < .05). Writing Skills Evaluation Form As a result of Pearson Correlation analysis conducted to determine the relationship between the scores obtained from the "Spelling of Letters" subscale and the "Dictation", was found a statistically significant positive relationship (r = 430; p < .05).

#### 4. Discussion

Literacy is the basis of all academic skills. Literacy is one of the areas where students with learning disabilities have difficulties. Considering that children with learning difficulties are noticed only when they start primary school, studies are needed to investigate whether they have reached the maturity required to start school. Considering that the development of writing skills started in pre-school period, it is also a matter of curiosity to what extent the children with learning difficulties start school with the level of writing maturity. In this study, this is the reason why it was conducted to investigate the relationship between school maturity and writing skill.

As stated in the literature, students with learning difficulties have problems in writing order, correct spelling of words, correct spelling of letters, pen handling, and self-expression in writing (Akçin, 2009; Graham ve Harris, 2005; Pierangelo ve Giuliani, 2006). These problems of the child with learning difficulties are generally noticed by the classroom teachers during the first literacy process (İlker & Melekoğlu, 2017).

In their research, Birol and Aksoy-Zor (2018) conducted semi-structured interviews with the teachers of students with learning difficulties who continue their inclusive education and identified the problems that teachers experienced. The teachers who participated in the study stated that they had problems with

Vol.6, No.11, 2020



literacy with their students who had learning disabilities.

As can be seen, there are studies in the literature that describe only the written expression levels of students who have learning disabilities. However, it is very important to investigate the effect of different variables on writing skills. In this study, the relationship between school maturity levels and writing skills of students with learning disabilities, unlike the literature, was investigated. As a result of the research, no statistically significant relationship was found between the scores obtained from the Metropolitan School Maturity Test and Writing Skills Evaluation Form. This result showed us that students with learning disabilities do not increase their performances in writing skills even if they reach sufficient school maturity. The difference between talent and success, which is one of the differential diagnoses of learning disability, is in line with the results of this research. Even though students have reached sufficient school maturity, the poor performance in writing skills is not associated with this variable, but it is thought that students with learning disabilities are associated with problems such as audio-visual processing (Güzel Özmen, 2019).

It was found that there is a negative relationship between the scores obtained from the Metropolitan School Maturity Test "Word Understanding, Matching and Copying" subscales and the Writing Skill Evaluation Form "Writing Order" subscale. This situation can be interpreted as the writing order of students began to deteriorate in parallel with this after reaching a certain level of maturity in the students' word comprehension, matching, and coping skills. Students with learning disabilities may also experience difficulties in writing due to reasons such as not being able to concentrate on skills, perceptual insufficiency, and visual images correctly (Güzel Özmen, 2019). In the researcher journal, which was kept in the research process, it was noted that when the students started to learn to read and write, they kept more regular copybooks because they spent more effort and focused their attention on the teaching of writing. But, it was realized that the correct writing patterns began to deteriorate at the end of the period. When the Pearson Correlation Analysis results, which were made to determine the relationship between the Metropolitan School Maturity Test and "Dictation", a positive relationship was found. Accordingly, it can be said that students who have reached sufficient school maturity are more successful in writing skills by dictating.

Gündüz and Çalışkan (2013) investigated whether there is a difference between groups in terms of school maturity and literacy skills of 60-62, 66-72 and 72-84 month-old children. Children between 72-84 months received higher scores on both school maturity and the first literacy skills evaluation form. In this study, unlike the literature, no significant relationship was found between writing skills and school maturity.

Arı and Özcan (2018), on the other hand, investigated the school maturity levels of first year students and the effect of school maturity levels on literacy learning. As a result of the study, it was determined that students with higher school maturity had better reading and writing skills. However, in this study, a negative relationship was found between the word meaning subscale of the Metropolitan School Maturity test and the writing order. Similarly, a negative relationship was found between the matching subscale of the Metropolitan School Maturity test and the writing order. However, a positive correlation was found in the scores obtained from the dictation study with the Word Understanding, Matching and Copying subscales of the Metropolitan School Maturity Test. As can be seen, there is a negative relationship between the mechanical properties of writing and the sub-scales of the Metropolitan School Maturity test. However, the scores obtained from the dictation study in which the correctness of the words are measured and the Metrology School Maturity Test's word comprehension, copying and matching subscale are in a positive relationship. Accordingly, it can be said that as the level of school maturity increases, success increases in dictation studies that include sub-skills such as listening and spelling. However, a negative relationship between school maturity and regular writing indicates that clean writing is influenced by different factors (For example, writing motivation). The fact that children with learning disabilities encounter problems in the field of literacy affects their motivation for reading and writing (Yıldız, 2004). At the same time, attention problems in children with learning difficulties come with learning problems (Asfuroğlu & Fidan, 2016). For this reason, it is thought that students' writing order is distorted because of other problems accompanying their learning disabilities rather than their level of school maturity.

#### 5. Conclusion

Written product; visual memory is demonstrated through the integration of a process that requires visual perception and motor skills and hand-eye coordination (Cohen & Plaskon, 1980). Considering the effects of learning disability on the individual, it can be said that they negatively affect the writing

Vol.6, No.11, 2020



performance. For this reason, the process of teaching writing to individuals with learning disabilities should be arranged in detail and following their developmental levels. Methods supporting the visual perception should be included and the permanence of those learned with abundant learning activities should be ensured. Students especially have difficulties in the writing of letters whose spelling is the same and whose size and size can only be distinguished according to the spelling line (Boote, 2000). Students experience problems such as wrong writing of letters, mixing letters, writing in reverse, choosing uppercase, and lowercase letters (As cited in Döngel, 2009). Such problems can continue after the child learns to write, and will negatively affect the child's writing performance unless appropriate intervention is made. Mechanical errors of writing can be prevented with activities such as copying exercises, writing over it, writing on different grounds.

However, children share their knowledge with their environment without acquiring effective writing skills. In a sense, people are responsible for informing their environment with an effective writing skill that they will gain beyond just getting information from reading from the environment (Çelenk, 2007). In the studies conducted, it emphasizes the importance of early childhood in reading and writing education and the importance of the activities to be done in this period in the development of reading and writing skills (Strickland & Morrow, 2000; Akt. Yangın, 2009; Bayraktar & Temel, 2014). Also, some studies state that there is a positive relationship between children's school maturity and age. Studies have emphasized that children with a higher school starting age are more successful than those who do not, but even though chronological age is an important factor (Langer, Kalk & Searls, 1984; Harris & Sipay, 1986).

The literature indicates that students with learning disabilities have problems with early literacy skills, especially writing awareness skills are insufficient. Early writing awareness defined by Mary Clay for the first time, the child is aware of the written symbols, the signs, the words of the letters; aware of the words that make up the sentences, the space between the words; to know how to keep the book; the awareness of how the text is read; knowing how to turn over pages can be defined as understanding the relationship between verbal language and written language (Bayraktar, 2018; Bayraktar & Temel, 2017; Blake, 2014; Clay, 2000; Cabell vd., 2009; Erdoğan, 2013; Justice & Sofka, 2010; Soderman vd., 2005; Wang, 2015; Vacca vd., 2012).

Children with learning disabilities can occur these problems such problems are; academic failure, language disorders, weak motivation, generalization problems, weak social skills, memory problems, cognitive and metacognitive problems, perception problems, motor and coordination problems, attention deficit and hyperactivity, misinterpretation of social and visual cues and hand - insufficient eye coordination, etc. (Güzel Özmen, 2019; Mamen, 2007). When the written products of these children are examined, it is seen that their writings are irregular and their handwritings are poor.

Most of these symptoms are only noticed when the child starts school. Families can react to this situation, which is noticed at school age. However, in order to support the child in the best way, it is very important to get help from the professionals in order to accept the diagnosis of the child and to draw a suitable road map for her child. For this reason, it is also important for the child's development to be able to get over the "denial" phase quickly. The longer the denial phase takes, the more negatively the child's development is affected (Sarı, 2008). The child's developmental and psychological readiness before teaching literacy is the main factor for successful teaching. In this process, the attitude of the school, special education specialist, psychological services, guidance teacher family, and child should be supportive of development. If the child did not believe that she could do it with learned helplessness, the process of reading and writing and all other academic fields were adversely affected in this psychological state of the child. However, if the child receives the support and education appropriate for their developmental characteristics, the process of reading and writing will be easier and the need to accomplish the child will contribute positively to all areas of development. Unless the different learning styles of children with learning disabilities are noticed and appropriate arrangements and plans are made, both the academic life of the children will be negatively affected and the children will also be at risk for secondary situations such as anxiety disorders. Anxiety will adversely affect a child's social skills and well-being. It is very important that the first literacy teaching, which is a serious source of stress for children with learning disabilities, will be properly supported as it will deeply affect the child's current and future performance. The literature shows that children with learning disabilities accompany different psychiatric diagnoses in addition to learning disabilities. But providing that was taken into account their potential of these children if given appropriate support children can show their potential in cognitive, social, emotional, and academic areas in full performance (Doğan, 2012). Relations and collaboration of families, teachers, professionals, and children will help the child unleash

Vol.6, No.11, 2020



his full potential in the tough process, such as first literacy teaching (Başal & Batu, 2002). The current study was designed to only describe the relationship between school maturity and writing skills. However, considering the still undiscovered nature of learning disability, conducting quantitative and qualitative research together will help to understand the nature of learning disability. The factors that are thought to affect the literacy performance of students with learning difficulties need to be investigated with more detailed and larger sample groups. More detailed research will help both

researchers and educators and families in understanding the nature of learning disability.

#### 5. Recommendations

As can be seen, the learning processes of students with learning difficulties are affected by different variables. Effective intervention in the first literacy processes of students with all these factors and learning disabilities is important for their future academic life. Especially, writing teaching is one of the most important skills gained in education life. Providing quality education and social interaction environments to the student, providing qualified special education and support services will support the development of the child and positively affect their interest and perception towards the school. Before starting teaching with students, students' knowledge of relevant concepts, visual and auditory perception levels, verbal language, and motor skills must have reached sufficient maturity. Achieving adequate readiness is not sufficient for children with learning disabilities, as seen in the research. For this reason, the importance and suitability of the method to be selected in teaching reading and writing to children with learning disabilities increases. In order for the child to develop a positive attitude towards school life, the participation of the games in the learning-teaching activities will make the process fun and will provide the student with the opportunity to repeat.

#### References

- Akçin, N. (2009). Öğrenme güçlüğü gösteren çocukların yazma sürecinde gösterdiği özellikler. M. Ü Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi, 29, 5-18.
- Arı, A., & Özcan, E. (2016). Birinci sınıf öğrencilerinin okul olgunluğu düzeylerinin, okuma yazmayı öğrenmelerine etkisi. Dumlupınar Üniversitesi Sosyal Bilimler Dergisi, 47, 74-90.
- Asfuroğlu, B. Ö., & Fidan, S. T. (2016). Özgül öğrenme güçlüğü. Osmangazi Tıp Dergisi, 38(1), 49-54.
- Başal, M., & Batu, E. S. (2002). Zihin özürlü öğrencilere okuma yazma öğretme konusuna alt özel sınıf öğretmenlerinin görüş ve önerileri. Özel Eğitim Dergisi, 3(2), 85-98.
- Bayraktar, V., & Temel, F. (2014). Okuma-yazmaya hazırlık eğitim programının çocukların okuma yazma becerisine etkisi. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 29(3): 08-22.
- Bayraktar, V., & Temel, F. (2017). Yazı farkındalığı becerileri. F. Temel. (Ed.). Dil ve Erken Okuryazarlık (pp.63-88). Ankara: Hedef CS.
- Bayraktar, V. (2018). Okul öncesi dönem çocuklarının yazı farkındalığı becerilerinin çocuk ve ebeveyn değişkenleri açısından incelenmesi. Eğitim ve Bilim, 43(196), 49-65.
- Birol, Z. N., & Aksoy-Zor, E. (2018). Sınıf öğretmenlerinin özel öğrenme güçlüğü tanılı öğrencileriyle yaşadıkları sorunlara ilişkin görüşleri. Gazi University Journal of Gazi Educational Faculty, 38(3).
- Blake, C. (2014). Defining emergent literacy: Developing lifelong readers. Retrived from https://online.cune.edu/defining emergent-literacy/.
- Cabell, S. Q., Justice, L. M., Kaderavek, J. N., Trunbull, K. P., & Breit-Smith, A. (2009). Emergent literacy. San Diego: Plural Publishing, Inc.



- Clay, M. M. (2000). Concepts about print. Singapore: Heinemann.
- Cohen, B.S., & Plaskon, S.S. (1980). Language arts for the mildly handicapped. Charles E: Merrill Publishing Company.
- Cratty, B.J. (1994). Clumsy child syndromes, descriptions, evaluation and remediation (pp. 143–144). USA: Harwood Academic.
- Çelenk, S. (2003). İlkokuma-yazma programı ve öğretimi. Ankara: Anı Yayıncılık.
- Celenk, S. (2007). İlk okuma yazma programı ve öğretimi. Ankara: Maya Akademi Yayıncılık.
- Dennis, J.L., & Swinth, Y. (2001). Pencil grasp and children's handwriting legibility during different length writing tasks. The American Journal of Occupational Therapy, 55, 171–183.
- Doğan, H. (2012). Özel öğrenme güçlüğü riski taşıyan 5-6 yaş çocukları için uygulanan erken müdahale eğitim programının etkisinin incelenmesi (Published Doctoral Thesis). Marmara Üniversitesi, Eğitim Bilimleri Enstitüsü, İstanbul, Turkey.
- Döngel, M. (2009). Hafif düzeyde zihin engelli öğrencilere yazma becerilerinin kazandırılmasında kullanılan öğretim yöntem ve tekniklerine ilişkin öğretmen görüşlerinin değerlendirilmesi. (Unpublished Master Thesis). Selçuk Üniversitesi, Sosyal Bilimler Enstitüsü, Konya, Turkey.
- Gündüz, F. & Çalışkan, M. (2013). 60-66, 66-72, 72-84 aylık çocukların okul olgunluk ve okuma yazma becerilerini kazanma düzeylerinin incelenmesi. International Periodical For The Languages, Literature and History of Turkish or Turkic 8(8), 379-398.
- Güzel Özmen, R. (2019). Öğrenme güçlüğü olan öğrenciler. İ. H. Diken (Ed.), Özel eğitime gereksinimi olan öğrenciler ve özel eğitim (pp. 367-399). Ankara, Turkey: Pegem Akademi.
- Erdoğan, T. (2013). Okul öncesi dönemde okuma yazmaya hazırlık. T. Erdoğan (Ed.), İlkokula hazırlık ve ilkokul programları (pp. 109-131). Ankara: Eğiten Kitap.
- Erhardt, R., & Meade, V. (2005). Improving handwriting without teaching handwriting: The consultative clinical reasoning process. Australian Occupational Therapy Journal, 52, 199–210.
- Hamstra-Bletz, L., & Blote, A. (1993). A longitudinal study on dysgraphic handwriting in primary school. Journal of Learning Disabilities, 26, 689–699.
- Harris J.A., & Sipay R.E. (1986). Okuma ve Öğrenmeye Hazır Oluş. İ. Özçelik (Çev), Çağdaş Eğitim, 117, 22-24.
- İlker, Ö. ve Melekoğlu, M.A. (2017) İlköğretim döneminde özel öğrenme güçlüğü olan öğrencilerin yazma becerilerine ilişkin çalışmaların incelenmesi. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi, 18(3), 443-469.
- Johnson, E. S., Hancock, C., Carter, D. R., & Pool, J. L. (2013). Self-regulated strategy development as a Tier-2 writing intervention. Intervention in School and Clinic, 48(4), 218-222.
- Langer, P., Kalk, J. M., & Searls, D. T. (1984). Age of Admission and Trends in Achievement: A Comparison of Blacks and Caucasians. American Educational Research Journal, 21(1), 61-78.



- Laszlo, J.I. (1990). Child perceptuo-motor development: Normal and abnormal development of skilled behaviour. C.A. Hauert (Ed.), Developmental psychology: Cognitive, perceptuo-motor and neurophysiological perspective (pp. 273–308). Amsterdam: North Holland.
- Mamen, M. (2007). Understanding nonverbal learning disabilities. USA: Jessica Kingsley Publishers.
- Marr, D., & Cermak, S. (2001). Handwriting readiness: Locatives and visuomotor skills in the kindergarten year. Early Childhood Research and Practice, 3(1).
- McHale, K., & Cermak S.A. (1992). Fine motor activities in elementary school: preliminary findings and provisional implications for children with fine motor problems. The American Journal of Occupational Therapy, 46(10), 898-903.
- MoNE. (2008). Özel eğitim ve rehabilitasyon merkezi özel öğrenme güçlüğü destek eğitim program. Ankara: Milli Eğitim Bakanlığı.
- MoNE (2014). Çocuk gelişimi ve eğitimi: Öğrenme güçlüğü. Ankara: Milli Eğitim Bakanlığı.
- MoNE (2018). İlköğretim Türkçe öğretmen kılavuz kitabı. İstanbul: Zambak Yayınları.
- Oktay, A. (1983). Okul olgunluğu. İstanbul Üniversitesi Edebiyat Fakültesi Yayınları No: 3089.
- Pierangelo, R., & Giuliani, G. A. (2006). Learning disabilities: A practical approach to foundations, assessment, diagnosis, and teaching. Pearson College Division.
- Reiff, H. B., & Gerber, P. J. (1992). Adults with learning disabilities. N. N. Singh & I. L. Beale (Eds.), Learning disabilities: Nature, theory, and treatment (pp. 170-414). New York: Springer-Verlag.
- Rosenblum, S., Weiss, P. L., & Parush, S. (2003). Improving handwriting without teaching handwriting: The consultative clinical reasoning process. Australian Occupational Therapy Journal, 52(3), 199-210.
- Rubin, N., & Henderson, S.E. (1982). Two sides of the same coin: variations in teaching methods and failure to learn to write. Special Education Trends, 9(4), 7-24.
- Sarı, H. (2008). Sınıf öğretmenlerinin ilkokuma yazma öğretiminde karşılaştıkları sorunlar. (Unpublished master thesis). Beykent Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul, Turkey.
- Smits-Engelsman, B. C. M., Niemeijer, A. S., & Van Galen, G. P. (2001). The Contribution of gender, orthographic, finger function, and visual-motor processes to the prediction of handwriting status. Occupational Therapy Journal of Research 20(2), 121-140.
- Soderman, A. K., Gregory, K. M., & McCarty, L. T. (2005). Scaffolding emergent literacy. Boston: Pearson Education.
- Vacca, J. A. L., Vacca, R. T., Gove, M. K., Burkey, L. C., Lenhart, L. A., & McKeon, C. A. (2012). Reding and learning to read (8. bs.) Boston: Pearson Education Inc.
- Waber, D.P. & J.H. Bernstein (1994). Repetitive graphomotor output in L.D. and nonlearning disabled children: The Repeated Patterns Test. Developmental Neuropsychology, 10, 51–65.

Vol.6, No.11, 2020



- Wang, X.L. (2015). Understanding language and literacy development: Diverse learners in the classroom. West Sussex: John Wiley&Sons, Inc.
- Yangın, B. (2009). The relationship between readiness and reading and writing performances. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 36, 316-326.
- Yıldız, S. (2004). Öğrenme güçlüğü olan çocukların psikososyal özellikleri, sorunları ve eğitimi. Hayef Journal of Education, 1(2), 169-180.