

Home Literacy Environment and Phonological Awareness Skills in Preschool Children

Okul Öncesi Dönemde Ev Okuryazarlık Ortamı ve Fonolojik Farkındalık Becerileri

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ABSTRACT: Participating in activities such as book reading before learning to read makes it easier to learn the letters' names, shapes, and sounds. Individuals who have difficulty in recognizing letters experience problems in decoding words in the future. This study aims to analyze the differences between the knowledge of early literacy experiences of parents whose children are typically developing (TD) 5-6 year-olds and children who have language impairment (LI), and between children's existing phonological awareness skills and early literacy experiences. The sample of the study consists of a total of 20 preschoolers aged 5-6 (3 girls and 7 boys with LI, and 4 girls and 6 boys with TD). Ankara Development Screening Inventory was used to determine the developmental performance of children. The children were assessed by using the Phonological Awareness Checklist. Family Literacy Questionnaire is used in order to collect information about the characteristics of home literacy environment. The results from the study reveal that children with TD and children with LI differ in terms of phonological awareness and early literacy experiences within the family. It also reveals that children with LI and their families display lower performance in the related skills ($p < .05$).

Keywords: phonological awareness, literacy, language impairment.

ÖZ: Kitap okuma etkinliklerine katılım gibi okuma öncesi etkinlikler, harflerin isimlerini, şekillerini ve seslerini öğrenmeyi kolaylaştırmaktadır. Harfleri tanımlama ile ilgili güçlük yaşayan bireyler gelecekte sözcükleri çözümlenme problemi yaşamaktadırlar. Yapılan çalışmada, 5-6 yaş arası normal gelişim gösteren ve dil bozukluğu olan çocukların anne- babalarının erken okuryazarlık deneyimlerine ilişkin bilgi düzeyleri ve çocuklarının mevcut fonolojik farkındalık becerileri ile erken okuryazarlık deneyimleri arasında anlamlı bir farklılık olup olmadığının incelenmesi amaçlanmıştır. Araştırmanın örneklemini, okul öncesi eğitime devam eden 5-6 yaş arası dil bozukluğu olan (3'ü kız 7'si erkek toplam 10) ve normal gelişim gösteren (4'ü kız 6'sı erkek toplam 10) toplam 20 çocuktan oluşmaktadır. Örnekleme yer alan çocukların gelişimsel performanslarının belirlenmesinde Ankara Gelişim Tarama Envanterinden yararlanılmış, uyak farkındalığı, sözcük farkındalığı ve sesbirim farkındalığı kategorilerinden oluşan Fonolojik Farkındalık Becerileri Kontrol Listesi kullanılarak bireysel olarak değerlendirilmiştir. Ayrıca, ailedeki okuryazarlık deneyimleri hakkında bilgi edinmek amacıyla aile okuryazarlığı soru kâğıdı kullanılmıştır. Araştırmadan elde edilen sonuçlar, normal gelişim gösteren ve dil bozukluğu olan Türk çocukların fonolojik farkındalık becerileri ve ailede sağlanan erken okuryazarlık deneyimlerinin farklılaştığını, dil bozukluğu olan çocukların ve ailelerinin ilgili beceriler açısından daha düşük performans sergilediğini göstermiştir ($p < .05$).

Anahtar sözcükler: fonolojik farkındalık, okuryazarlık, dil bozukluğu.

1. INTRODUCTION

Early studies on the acquisition and development of literacy skills focused on students overcoming the difficulties they face in the curriculum. However, literacy today is seen as a field intertwined with the processes of communication. Therefore, it has started to be dealt within the framework of cognitive, personal, social, and academic features and accepted as a more comprehensive concept than solely gaining proficiency in reading and writing. *Literacy* is now the ability to communicate with visual symbols. Although these visual symbols or systems of symbols include different units, the symbols representing visual communication that initially come to mind are graphemes which are analogous to phonemes in letters or combination of letters in the alphabet. It should be pointed out that using the phonemic equivalent of letters to describe a word or ordering letters to make up words does not constitute the concept of literacy (Mc

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Laughlin, 1998). With the effect of recent studies on early intervention, family literacy has come to be a significant topic. *It* includes, not only parents' literacy experiences but also the involvement of families in order to develop children's reading and writing experiences (McNicol & Dalton, 2002). Family literacy comprises characteristics such as interacting with written materials, setting a model for reading and writing at home, and encouraging a home atmosphere that fosters questions about literacy.

The idea that the literacy environment of a child should be analyzed is based on Bronfenbrenner's ecological systems theory. According to this theory, immediate (micro: e.g. home and class) and extended environments (macro: cultural context) both affect the individual's development (Zucker & Grant, 2007). In the most immediate environment are parents who are the first and most important teachers of children and who contribute to their development and learning by shaping up the environment (Rodriguez & Tamis-Lemonda, 2011). Analyzing home literacy makes it possible to determine which dimensions of home environment is important in supporting the development of literacy skills. In this way, it provides information about how to support the literacy of typically developing children and children at risk of reading difficulty. In addition, it is important for shedding light on intervention programmes which aim to empower parents in order to help them support their children's development (Haney & Hill, 2004).

Home literacy has been defined in different ways by researchers as they view the concept from different perspectives. For instance, Burgess (cited in Zucker & Grant, 2007) defines home literacy as "*various resources and opportunities provided for children and skills, talents, and inclinations of parents, who determine the presentation of these opportunities*" and evaluates the concept under three headings (Burgess, Hecht, & Lonigan, 2002). The first of these involves *socio-demographic features* such as the parental level of education and school experience. The second is about *the parents' literacy habits* and shows to what extent parents model (e.g.: the parent himself reading a book, etc.) literacy activities. Finally, *parent literacy activities* include activities (e.g. such as shared reading and language activities) that parents establish in order to support the child's literacy development.

It has been revealed through research that the attainment of reading skills is connected with the family's characteristics. It has been pointed out that literacy environment at home, expectations from the child and the parents' approach to education are precursors to children's literacy development (Petrill, Deckard, Schatschneider & Davis 2005; Verhoeven, 2002). The results obtained from a study carried out by Dickinson and Tabor (2002) to analyze language and literacy skills and the approaches of pre-school teachers revealed that children whose development is at risk due to lack of language and literacy skills can overcome difficulties with the help of high quality language and literacy programmes (Girolametto, Lefebvre, & Greenberg, 2007). In addition, many studies have revealed that the factors related to children's environment (home or family life) are more effective than those that are related to school in achieving literacy success (Power, 1992; Senechal, LeFevre, Thomas, & Daley, 1998). In literature there is both theoretical and applied research that point to the importance of children gaining literacy through the participation of parents in their education. The aim is to support the literacy skills of children outside of school, who have special needs and/or who show typical development in early childhood (Boudreau, 2005; Johnson, Martin, Brooks-Gunn, & Petril, 2008; McDowell, Lonigan, & Goldstein, 2007; Roberts, Jurgens, & Burchinal, 2005).

In contrast, there has been only one study in Turkey examining the relationship between home literacy environment and emergent literacy skills. According to the relational survey carried out by Kuşçul (1993) on parents from middle and lower socio-economic backgrounds and their 5-6 year-old-children, it was concluded that children from middle socio-economic level received higher scores in writing concepts, differentiating the first sound of a word, receptive and productive language scores, and in listening comprehension tests. However, no significant

difference was found between the two groups in the skills of separating the word into its syllables, letter recognition, letter naming, and rhyme recognition. In terms of the relationship between home literacy environment and emerging literacy, it was found that while parents' reading a book to the child is related to the skills of letter naming and recognizing the initial sound, the parent's literacy habits are related to their children's skills of receptive-productive language and writing concepts. No relationship was found between the physical conditions of the home environment and the number of books found at home, and children's emerging literacy skills.

1.1. Phonological Awareness-Literacy Relationship

Participating in activities such as book reading before learning to read makes it easier to learn the letters' names, shapes, and sounds. Individuals who have difficulty in recognizing letters experience problems in decoding words in the future. However, it is not enough for children to have information just on letters. In addition, the attainment of the skill of *phonological awareness*, which means being aware of the fact that words are made up of different sounds, is also important. Phonological awareness involves the ability to manipulate the constituents of a word besides awareness and auditory differentiation (Owens, 2012, p.361).

Activities based on the rhyming ability increase awareness towards syllables and smaller units. Most children who are aware of sounds can be given formal education to gain the skill of separating words into their phonemes. Phonological awareness involves proceeding from the awareness of bigger constituents to smaller ones (Turan & Akoğlu, 2008). Children who are as young as 2 years old are aware of rhyming sounds and sound games during conversation and many children can find the syllables and rhymes in words; however, they cannot find phonemes until the age of 5-6. Many children with language impairment experience difficulty in rhyming skills, naming letters, and concepts related to writing. Therefore, children's cognitive and linguistic skills gain a lot of importance for literacy skills (Owens, 2012, p.362).

It is also well-known that phonological awareness, which is in direct relation to the skills of reading, can be supported in pre-school period by providing adequate and qualified environmental stimulus. It has been determined that there is a positive correlation between the skills of phonological awareness and early word reading skills in children, in adults with reading difficulty, and in groups diagnosed with specific language impairment and children with Down syndrome (Akoğlu & Turan, 2012; Broomfield, & Cambley, 1997; Vloedgraven & Verhoeven, 2007).

In the light of the above mentioned data, it is suggested that the presented research is a significant preliminary study which reveals the possible differences between the phonological awareness skills and home literacy experiences of the typically developing Turkish preschool children and the preschool children with language impairment.

2. METHOD

In this research causal-comparative model was applied (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz, & Demirel, 2011). The present study aims to analyze the differences between the knowledge levels of early literacy experiences of parents whose children are typically developing 5-6 year-olds and children who have language impairment, and between children's existing phonological awareness skills and early literacy experiences. Answers were sought to the questions below:

- Is there a significant difference between the phonological awareness skills of children who develop typically and who have language impairment?
- In terms of literacy experiences, is there a significant difference between children who develop typically and who have language impairment?

2.1. Participants

The sample of the study consists of 20 preschool children aged 5-6 (3 girls and 7 boys with language impairment, and 4 girls and 6 boys with typical development). Mean chronological age was 66 months. The chi-square test showed no statistically significant difference between the two groups in terms of mother's level of education ($p= 0.71$; $p>.05$), chronological ages ($p= 0.84$; $p>.05$), and gender ($p= 0.77$; $p>.05$). The educational levels of the mothers are presented in Table 1.

Table 1: Participants' Mother Education Level

Mother education level	Mothers of children with LI		Mothers of Typically developing children	
	n	%	n	%
Graduated from primary school	2	20	1	10
Graduated from secondary school	2	20	3	30
Graduated from high school	1	10	3	30
Graduated from university	5	50	3	30
Total	10	100	10	100

The children who have a diagnosis of language impairment by speech and language pathologist were reached from the special education facilities to which they maintain. Children who had been diagnosed with language impairment and typically developing children were administered Ankara Development Screening Inventory (ADSI). It was determined that children with language impairment performed lower in language development than in other areas of development on the ADSI. Children with typical development in the sample are those who continue pre-school education and who exhibit performance appropriate to their chronological age in all of the developmental areas evaluated in ADSI. The consent of children's parents was obtained and those who agreed participated in the study.

2.2. Procedure

ADSI was used to determine the developmental performance of children in the sample. The children were evaluated individually by using the Phonological Awareness Check List that is composed of rhyme awareness, word awareness, and phoneme awareness categories. In addition, the children's parents were given a family literacy questionnaire prepared by the researchers to collect information about literacy experiences in the family.

2.2.1. Ankara Development Screening Inventory (ADSI)

The development of children between 0-6 year-old was assessed by getting information from the mothers via the Ankara Development Screening Inventory (Erol, Sezgin, & Savaşır, 1993; Sezgin, Savaşır, & Erol, 2004). The Inventory consists of 154 items which are answered as "Yes, No, I don't know" by the mother and is organized according to age group. This test is composed of four sub-categories, which are linguistic-cognitive, fine motor skills, gross motor skills and social-self-care skills. The Inventory can also be used by getting answers from fathers or care-givers who closely follow the child's development and who know the child well. Depending on the child's chronological age and skills, ADSI can be completed in 30-45 minutes. According to different age groups, in accordance with norms developed for low and middle socio-economic levels, raw scores are used by converting them to T scores according to the socio-economic level the child belongs to.

Firstly, the internal consistency of ADSI was calculated by Cronbach Alpha Coefficient by using general development scores of children in three different age categories (0-12; 13-44; 45-72 months) and it was found out that internal consistency in three different age categories is pretty

high (Cronbach Alpha coefficient: 0.80-0.99). When test re-test scores are considered, it is observed that for each age category the internal consistency is 0.99, 0.98 and 0.88, and Cronbach Alpha coefficients are 0.98, 0.97 and 0.88 (Savaşır, Sezgin, & Erol, 1995).

ADSI, which has a widespread application area, was applied in this research in order to obtain information with regard to the basic developmental performances of the children in the study group.

2.2.2. Phonological Awareness Skills Check List

The sample was assessed individually by using Phonological Awareness Skills Check List developed by the researchers and which is composed of rhyme awareness, word awareness, and phoneme awareness categories. In order to identify the content validity of the checklist, opinions of nine specialists and results of pilot study were applied and the checklist was revised (Turan & Akoğlu, 2011). The steps below were followed to assess phonological awareness.

Rhyming Skills: This step is assessed in five total stages as matching rhyming words, differentiating non-rhyming words, being able to say another word rhyming with the word told, being able to remember rhyming words, and being able to group rhyming words.

Word Awareness: This stage is evaluated in three sub-steps as being able to appropriately complete the half sentences in a story read by an adult, being able to calculate the number of words found in a sentence by clapping on words when repeating a two-three-four-five word sentence, and the skill of being able to separate syllables in one-two-three syllable words by clapping.

Phoneme Awareness: This stage is evaluated in three sub-steps as being able to name the initial sounds in the words told, being able to name the last sound in the words told, and being able to combine phonemes told to form a word. Each evaluation lasted for 20 minutes in average.

2.2.3. Family Literacy Questionnaire

The researchers developed the Family Literacy Questionnaire by making use of the studies conducted by Foy and Mann (2003) and Boudreau (2005). The questionnaire initially had 30 items. Comprehensibility of the items was reevaluated in light of the opinions obtained from nine specialists who studies on child development, special education and speech and language pathology fields. Eventually, 13 items were removed and the final questionnaire included 17 items. It consists of items representing the skills of reading books, phonological awareness, and print awareness, which are found among early literacy skills. It is used in order to collect information about the characteristics of home literacy environment presented to the children by their family and the applications of the parents about literacy.

3. FINDINGS

Data from the study were analyzed with descriptive statistics and Mann Whitney U Test in order to determine whether there is a difference among two groups between phonological awareness skills and literacy experiences in the family. Effect sizes were calculated by using $r = Z/\sqrt{N}$ formula. The results related to phonological awareness skills of the sample are presented in Table 2.

Table 2: Results of Phonological Awareness Skills Check-List for Typically Developing Children and Children with Language Impairment

	Children with LI (n=10)		Typically Developing Children (n=10)		U	p	Effect size
	Mean	SD	Mean	SD			
Matches rhyming words.	1.7	.48	1.7	.48	45.00	1.00	0.07
Distinguishes non-rhyming words.	1.2	.48	1.7	.42	25.00	0.33	0.18
Tells another word rhyming with the word just told.	1.7	.13	2.0	.48	15.00	0.02*	0.41
Remembers rhyming words.	1.1	.10	2.0	.31	5.00	0.00*	0.59
Groups rhyming words.	1.3	.48	1.6	.51	35.00	0.39	0.21
Appropriately completes the sentence left half in the story.	1.3	.48	1.9	.31	5.00	0.00*	0.58
Claps the number of words in a sentence.	1.3	.48	1.5	.52	20.00	0.20	0.19
Claps the number of syllables in a word.	1.7	.48	2.0	.12	5.00	0.00*	0.59
Names the initial sound in a word.	1.2	.31	2.0	.14	5.00	0.00*	0.56
Names the final sound in a word.	1.7	.42	1.8	.48	25.00	0.33	0.22
Combines the phonemes told to make up a word.	1.3	.31	2.0	.14	5.00	0.00*	0.58

P<.05

The results of the analysis show that there is a significant difference between the two groups in terms of the skills of telling another word rhyming with the word just told ($U=15.00$, $p<.05$) and remembering the rhyming words ($U=5.00$, $p<.05$). In word awareness category there is a significant difference between the two groups in terms of the skills of appropriately completing a sentence in a story being told ($U=5.00$, $p<.05$) and clapping the number of syllables in a word ($U=5.00$, $p<.05$). In phoneme awareness category, the difference between the two groups in terms of the skills of naming the initial sound of a word ($U=5.00$, $p<.05$) and making up a word by combining the phonemes told ($U=5.00$, $p<.05$) was found to be significant. When the results obtained from phonological awareness skills check list are analyzed, it is observed that children who show typical development have higher average scores in phonological awareness skills than children with language impairment.

The results about literacy experiences presented to the children by the parents, who were evaluated by using the family literacy questionnaire, are given in Table 3 below.

Table 3: Results, Means and Standard Deviations of Literacy Experiences Provided by Families to their Typically Developing Children and Children who have Language Impairment

	Children with LI (n=10)		Typically Developing Children (n=10)		U	p	Effect size
	Mean	SD	Mean	SD			
Book Reading Skills							
Wanting to have something read to him	2.1	0.31	4.4	0.69	5.00	0.00*	0.88
Frequency of reading a book to the child	2.6	1.17	4.7	0.48	3.00	0.00*	0.82
The child's pointing to and talking about pictures while a story is read to him	3.6	1.17	4.4	0.51	6.00	0.00*	0.82
The child's asking questions about characters or events while a book is read	3.2	0.63	4.8	0.42	33.50	0.19	0.29
Imitating the act of reading a book	1.5	0.52	4.0	1.41	7.60	0.01*	0.76
Making up a story and telling it by himself	2.0	0.10	3.2	1.31	7.50	0.01*	0.76
The child's completing the words or the lines in a story while it is being read	3.2	0.13	4.2	1.03	27.00	0.06	0.41
Phonological Awareness							
Trying to teach the sounds in the alphabet or the names of letters while reading	3.0	1.11	2.2	0.91	32.00	0.09	0.37
Recognizing the words in the environment on his own	2.7	1.41	4.6	0.96	13.00	0.00*	0.66
Showing words and signs like restaurant pictures or street signs to the child	2.4	1.17	3.4	0.84	40.00	0.41	0.18
Forming another word that rhymes with a word told to himself	2.1	1.07	2.4	0.31	18.00	0.01*	0.56
Telling nursery rhyme	3.1	0.56	3.5	0.84	27.00	0.06	0.41
Naming letters in the alphabet	2.2	1.17	2.6	1.03	34.50	0.20	0.28

Trying to produce the sounds of letters in the alphabet	2.4	1.17	2.9	1.10	40.00	0.41	0.18
Print Awareness							
Writing letters	2.1	0.73	3.0	1.56	12.50	0.00*	0.67
Asking an adult to write for him	2.3	1.49	4.5	0.97	8.50	0.01*	0.73
The number of books that belong to the child	53.5	27.89	31.5	13.34	30.50	0.13	0.34

P<.05

The results of the analysis reveal that the difference between the two groups are significant in terms of the skills of the children's wanting something to be read to them (U=5.00, p<.05), the frequency of reading books to children (U=3.00, p<.05), the child's showing the pictures or talking about the pictures while reading a story (U=6.00, p<.05), imitating the act of reading a book (U=7.60, p<.05), and making up a story and telling it on his own (U=7.50, p<.05), all of which represent book reading skills. Similarly, the difference between the two groups in terms of the skills which represent phonological awareness skills, which are recognizing the words in the environment on his own (U=13.00, p<.05), making up another word that rhymes with the word told to him (U=18.00, p<.05); and print awareness skills which are writing letters (U=12.50, p<.05) and asking an adult to write for him (U=8.50, p<.05) are found to be significant. When mean values related to the variables that represent significant difference between the two groups are analyzed, it is striking to see that the mean values of typically developing children, except for the number of books that children have, are higher than children who have language impairment.

4. DISCUSSION and RESULTS

The aim of this study was to investigate whether there was any significant difference between phonological awareness skills of pre-school Turkish children, who develop typically and who have language impairment, and in terms of literacy experiences within the family. The results reveal that there are statistically significant differences between the two groups in rhyming skills, word awareness and some skills related to phoneme awareness, and reading skills, phonological awareness and some skills related to print awareness in terms of literacy experiences within the family.

When phonological awareness skills, which are analyzed according to phonological awareness skills check list, are evaluated, it is observed that the difference between the two groups' mean values related to telling another word that rhymes with a word told and the skills of remembering words that rhyme with each other, which are found under rhyming skills, are significant and that the mean value of children with language impairment is lower than the mean value of children that show typical development. When results pertaining to literacy within the family is analyzed, it is determined that the mean value related to the skill of finding another word that rhymes with a word told to him is lower than the mean value of children that show typical development. The studies found in literature and those that are conducted in languages other than Turkish, put forth that rhyming skills/awareness are among the skills that are acquired early in the development of phonological awareness skills and are among the skills with low level of difficulty, and it has been pointed out that cognitive demands of skills may be effective in performance related to phonological awareness skills (Thatcher, 2010). When the features of skills which children with language impairment have difficulty in are considered, their displaying decreased performance than children with typical development may be attributed to the fact that cognitive requirements of these skills play an important role. In the study conducted, it was observed that rhyming skills is among the skills that children with language impairment have a

significantly lower performance than children who show typical development. This may be because rhyming skills may be one of the clinically important determiners for Turkish children with language impairment. With another study to be conducted with a larger sample it may be possible to determine clinical importance of rhyming skills for Turkish children.

Completing a sentence left half in a story and clapping the number of words in a sentence, which are two of the skills in word awareness skills, are among the skills that children with language impairment have significantly lower performance compared to children who develop typically. When the results related to literacy experiences in the family are analyzed, it is observed that there is a significant difference between the two groups in terms of the skill of recognizing the words in the environment, which is evaluated under the skills of book reading skills and phonological awareness skills and which is known to be effective on word awareness. This result and the one that puts forward that children with language impairment have lower averages than children who show typical development, point out to the interaction between the experiences that children with language impairment encounter at home and the existing word awareness skills. The effect of interactive book reading with parents' support in early period on the development of word, phoneme, and print awareness is indicated in literature (Aram & Biron, 2004; Shamir, Korat, & Barbi, 2008; Ukrainetz, Cooney, Dyer, Kysar, & Harris, 2000). In this sense, it can be said that supporting especially children with language impairment with parents and intense interactive book reading activities, might enhance word awareness as well as print awareness. In literature, it is noted that the majority of children with SLI have difficulty in phonological awareness skill due to limited cognitive capacity for processing sound, word or syllable orders (Gathercole, Briscoe, Thorn, & Tiffany, 2008). Gorman (2012) points out that phonological awareness skills may be related to working memory because of the fact that the representation of sounds in a word firstly requires the activation of phonetic representations and that these representations should remain active long enough for children to be able to analyze and manipulate sounds successfully. In the study carried out, when the nature of these skills that depend on processing skills is considered, the low performance displayed, can also be taken as a reflection of the difficulties experienced by language impaired children in phonological working memory.

When phoneme awareness skills are analyzed, in terms of naming the initial sound of a word told and making up a word by combining the phonemes told, the difference between the two groups is found to be significant. When studies carried out in languages other than Turkish about the development of phonological awareness skills is examined, it is observed that phoneme awareness skills are among the skills that are acquired late. In addition, in a study conducted by Joffe (1998), when matched according to chronological and language age, a significant difference was found between children with SLI and the two groups, and that the phonological awareness average scores of children with language impairment are lower than the two groups. Similar results are obtained in this study, too and it is determined that phonological awareness skills average scores of children with language impairment are lower than typically developing children who were matched according to chronological age. In literature, it is pointed out that rhyme and phoneme awareness skills require sensitivity to understanding the ordering of speech units and thus low performance of children with speech impairment in rhyming abilities and phoneme awareness skills may point to limitations related to understanding speech units (Boudreau & Hedberg, 1999; Boudreau, 2005; Gillon 2000, 2002; Kleeck, Gillam, & Mc Fadden, 1998). It would be possible to determine the importance and effect of the limitations of speech units on understanding for Turkish children with language impairment in another study to be carried out with a larger sample.

When the results related to print awareness, which are evaluated within family literacy experiences, are analysed, it is found out that there is a significant difference between the two groups in terms of writing letters and asking an adult to write for him and the average scores of

children with language impairment is lower than children that show typical development. In another study conducted by McGinty and Justice (2009), it was determined that the quality of literacy experiences at home is one of the factors that develop print awareness in children with SLI. In this study carried out, in terms of the averages related to literacy experiences within the family in general, that children with language impairment have lower average literacy experience scores than the scores of children that show typical development create doubts as to the quality of literacy experiences presented at home to children with language impairment. Moreover, when the results related to literacy experiences within the family are taken as a whole, it is observed that the skill of trying to teach the sound in the alphabet or the names of the letters while reading, which are taken to be under phonetic awareness skills, and apart from the number of books that belong to the child, which is evaluated under print awareness skills, it is found out that the language impaired children's averages related to literacy experiences within the family are lower than the averages related to children that show typical development and their families. Although the children with language impairment have more books of their own compared to children that show typical development, they display lower performance in book reading skills, phonological awareness and print awareness skills. This situation calls into mind the possibility that families provide print material to decrease the effects of language impairment in their children; however, they cannot use these materials in a way to support language and early literacy skills. That the average scores of families of children with language impairment in terms of the skill of teaching the name of the letters or the sounds while reading are higher than the families of children that show typical development point to the fact that the focus is usually on the teaching of letters/sounds in the alphabet while reading existing books. In another study designed by Stadler and Mc Evoy (2003) to analyze the behavior displayed by the parents of children with and without language impairment during book reading activities, it was found out that parents of children with typical development exhibit more behavior to support phonological awareness than parents of children with language impairment. From this point of view it can be said that making the families gain the skills of interactive/shared book reading activities (Justice, Kadevarek, Bowles & Grimm, 2005), whose effectiveness is proven with many studies in literature, is a necessity and supporting early literacy skills with different dimensions during daily routines may contribute to the attainment of these skills.

The results from the study reveal that children with typical development and Turkish children with language impairment differ in terms of phonological awareness skills and early literacy experiences within the family. It also reveals that children with language impairment and their families display lower performance in the related skills. In order to generalize this result, which is in line with the results in literature, to Turkish children and their families, other studies with larger samples need to be carried out and they have to be at greater depth. In addition the results obtained make up a general framework about the quality of early literacy experiences presented by the families to their children. It is thought that, in this sense, it would be effective to carry out high quality interactive book reading activities within the family by relating them to daily routines. Finally, in many of the studies conducted recently, the relationships between phonological awareness skills and processing skills have been mentioned (Gathercole & Alloway, 2004; Oakhill & Kyle, 2000). Although processing skills are not directly evaluated in this study, the majority of the difficulties experienced by children with language impairment makes one think of difficulties related to processing skills. That's why it is a necessity to conduct studies on Turkish children with language impairment, to reveal the relationship between language processing and phonological awareness skills in relation to the structure of the Turkish language.

5. REFERENCES

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Uzun Özet

Çocukların yetiştikleri evin okuryazarlık ortamının değerlendirilmesi gerektiği görüşü Brofenbrenner'in ekolojik sistem yaklaşımına dayanmaktadır. Bu yaklaşıma göre bireyin gelişiminde en yakın çevreden (mikro: örn, ev ve sınıf) en uzak çevreye (makro: kültürel bağlam) kadar çevresel etkiler söz konusudur (Zucker ve Grant, 2007). Ev okuryazarlık ortamının değerlendirilmesi, gelişen okuryazarlık becerilerini desteklemede ev ortamının hangi yönlerinin önemli olduğunun belirlenmesini sağlar. Böylece, normal gelişen çocuklar ile okuma güçlüğü riski taşıyan çocuklar için okuryazarlık gelişimlerinin nasıl destekleneceği ile ilgili bilgi sağlar. Ayrıca çocuklarının gelişimlerini en iyi şekilde destekleyebilmeleri için ebeveynlerin güçlendirilmesini amaçlayan müdahale programlarına ışık tutması açısından da son derece önemlidir (Haney ve Hill, 2004). Yapılan araştırmalar, okuma ve ilişkili becerilerin kazanımının ailenin özellikleri ile ilişkili olduğunu ortaya koymuştur. Evde var olan okuryazarlık ortamı, çocuktan beklentiler

ve anne babanın eğitime yönelik bakış açısının çocukların okuryazarlık gelişimlerini yordayıcı özellikler olduğu belirtilmiştir (Pettrill, Deckard, Schatschneider & Davis 2005; Verhoeven, 2002).

Dickinson ve Tabor (2002) tarafından dil ve okuryazarlık becerileri ve okul öncesi dönem öğretmenlerinin yaklaşımlarının incelenmesi amacıyla yapılan bir çalışmadan elde edilen sonuçlar, dil ve okuryazarlığa dayalı beceriler nedeniyle gelişimleri risk altında olan çocukların bu güçlüklerinin üstesinden okul öncesi dönemde yüksek nitelikli dil ve okuryazarlık programları ile gelebildiklerini göstermiştir (Girolametto, Lefebvre & Greenberg, 2007). Ayrıca, yapılan birçok araştırmada da okuryazarlık başarısında, çocuğun içinde bulunduğu çevre ile ilişkili olan faktörlerin, okulla ilişkili olan faktörlerden daha etkili olduğu ortaya konulmuştur (Senechal, LeFevre, Thomas, & Daley, 1998; Power, 1992).

Çocukların gelecekte nitelikli okuma becerilerine sahip olabilmeleri için, sadece harfler hakkında bilgi sahibi olmaları yeterli değildir. Aynı zamanda sözcüklerin farklı seslerden oluştuğunun farkında olunması anlamına gelen *fonolojik farkındalık* becerisinin kazanımı da önemli bir beceridir. Okuma becerileri ile yakından ilişkili olan fonolojik farkındalık becerilerinin yeterli ve nitelikli çevresel uyarıların sağlanması ile okul öncesi dönemde desteklenebildiği de bilinmektedir. Çocuklarda, okuma güçlüğü yaşayan yetişkinlerde, özgül dil bozukluğu tanısı almış gruplarda ve Down Sendromu tanılı bireylerde fonolojik farkındalık becerileri ile erken sözcük okuma becerileri arasında pozitif yönde bir ilişki olduğu belirtilmiştir (Akoğlu & Turan, 2012; Broomfield, & Cambley, 1997; Vloedgraven & Verhoeven, 2007).

Yukarıdaki bilgiler ışığında yapılan araştırmada, 5-6 yaş arası normal gelişim gösteren ve dil bozukluğu olan çocukların anne- babalarının erken okuryazarlık deneyimlerine ilişkin bilgi düzeylerinin ve çocukların mevcut fonolojik farkındalık becerileri ile erken okuryazarlık deneyimleri arasındaki ilişkinin incelenmesi amaçlanmıştır. Araştırmada aşağıdaki sorulara yanıt aranmıştır:

1. *Dil bozukluğu olan ve normal gelişim gösteren çocukların fonolojik farkındalık becerileri arasında anlamlı bir farklılık var mıdır?*
2. *Ailedeki okuryazarlık deneyimleri açısından dil bozukluğu olan ve normal gelişim gösteren çocuklar arasında anlamlı bir farklılık var mıdır?*

Araştırmanın örneklemini, kronolojik yaşa göre eşleştirilen 3'ü kız 7'si erkek toplam 10 dil bozukluğu olan ve 4'ü kız 6'sı erkek toplam 10 normal gelişim gösteren ve okul öncesi eğitime devam eden 5-6 yaş arası toplam 20 çocuktan oluşmaktadır.

Örnekleme yer alan çocukların gelişimsel performanslarının belirlenmesinde Ankara Gelişim Tarama Envanteri (AGTE)'nden yararlanılmış, fonolojik farkındalık becerileri, Fonolojik Farkındalık Becerileri Kontrol Listesi kullanılarak bireysel olarak değerlendirilmiştir. Dil bozukluğu olan çocukların AGTE'de dil gelişimi alanındaki performanslarının diğer gelişim alanlarındaki performanslarından düşük olduğu belirlenmiştir. Ayrıca, örnekleme yer alan çocukların ailelerine, araştırmacılar tarafından ailedeki okuryazarlık deneyimleri hakkında bilgi edinmek amacıyla oluşturulan aile okuryazarlığı soru kâğıdı verilmiştir.

Analiz sonuçları, fonolojik farkındalık becerilerinin uyak farkındalığı kategorisinde, söylenen sözcükle uyaklı başka bir sözcük söyleme ($U=15.00, p<.05$) ve uyaklı olan sözcükleri hatırlama ($U=5.00, p<.05$) becerileri açısından iki grup arasındaki farkın anlamlı olduğunu göstermektedir. Sözcük farkındalığı kategorisinde ise, öyküde yarım bırakılan cümleyi uygun şekilde tamamlama ($U=5.00, p<.05$) ve sözcükte yer alan hece sayısı kadar ritim tutma ($U=5.00, p<.05$) becerileri açısından iki grup arasında anlamlı bir fark bulunmuştur. Sesbirim farkındalığı kategorisinde söylenen sözcüğün başlangıç sesini isimlendirme ($U=5.00, p<.05$) ve söylenen sesbirimleri birleştirerek sözcük oluşturma ($U=5.00, p<.05$) becerileri açısından iki grup arasındaki farkın anlamlı olduğu görülmüştür. Fonolojik farkındalık becerileri kontrol listesinden elde edilen sonuçlar incelendiğinde, normal gelişim gösteren çocukların fonolojik farkındalık becerilerine ilişkin ortalamalarının dil bozukluğu olan çocuklardan daha yüksek olduğu dikkat çekmektedir.

Aile okuryazarlığı soru kâğıdı kullanılarak değerlendirilen ailelerin, çocuklarına sağladıklarını okuryazarlık deneyimlerine ilişkin bulgular incelendiğinde, iki grup arasındaki farkın, kitap okuma becerilerini temsil eden, çocukların kendilerine bir şeyler okunmasını isteme ($U=5.00, p<.05$), çocuklara kitap okuma sıklığı ($U=3.00, p<.05$), hikâye okunurken çocuklar tarafından resimleri gösterme ve resimlerle ilgili konuşma ($U=6.00, p<.05$), kitap okuma davranışını taklit etme ($U=7.60, p<.05$), ve kendiliğinden hikâye oluşturma ve anlatma ($U=7.50, p<.05$) becerileri açısından anlamlı olduğu

grlmŖtr. Benzer Ŗekilde, fonolojik farkındalık becerilerini temsil eden, evredeki szckleri kendiliĐinden tanıma ($U=13.00$, $p<.05$), kendisine sylenen bir szckle uyaklı baŖka bir szck oluŖturma ($U=18.00$, $p<.05$); yazı farkındalıĐı becerilerini temsil eden, harfleri yazma ($U=12.50$, $p<.05$) ve bir yetiŖkenden kendisi iin yazı yazmasını isteme ($U=8.50$, $p<.05$) becerileri aısından da iki grup arasındaki farkın anlamlı olduĐu bulunmuŖtur. İki grup arasında anlamlı farklılık olan deĐiŖkenlere iliŖkin ortalamalar incelendiĐinde de normal geliŖim gsteren ocukların ortalamalarının, ocukların kendilerine ait olan kitap sayısı dıŖında, dil bozukluĐu olan ocukların ortalamalarından daha yksek olduĐu dikkat ekmektedir.

AraŖtırmadan elde edilen sonular, normal geliŖim gsteren ve dil bozukluĐu olan Trk ocukların fonolojik farkındalık becerileri ve ailede saĐlanan erken okuryazarlık deneyimlerinin farklılaŖtıĐını, dil bozukluĐu olan ocukların ve ailelerinin ilgili beceriler aısından daha dŖk performans sergilediĐini gstermiŖtir. Alanyazındaki bulgular ile rtŖen bu sonuların Trk ocuklar ve ailelerine ynelik olarak genellenebilmesi iin, daha geniŖ bir rneklem ile konuyu derinlemesine ele alacak alıŖmaların yapılmasına gereksinim vardır. Ayrıca elde edilen sonular, ailelerin ocukların sundukları erken okuryazarlık deneyimlerinin niteliĐine iliŖkin genel bir ereve oluŖturmuŖtur. Ailede saĐlanan yksek nitelikli etkileŖimli kitap okuma alıŖmalarının gnlk rutinlerle iliŖkilendirilerek yapılmasının bu baĐlamda etkili olabileceĐi dŖnlmektedir. Son olarak, yakın tarihte yapılan birok alıŖmada, fonolojik farkındalık becerilerinin iŖleme becerileri ile iliŖkisine deĐinilmiŖtir (Gathercole ve Alloway, 2004; Oakhill ve Kyle, 2000). Yapılan araŖtırmada iŖleme becerileri doĐrudan llmemekle birlikte, dil bozukluĐu olan ocukların glk yaŖadıkları becerilerin oĐu iŖlemeye iliŖkin glkleri dŖndrmŖtir. Bu nedenle, dil bozukluĐu olan Trk ocuklarda, dili iŖleme ve fonolojik farkındalık becerilerinin iliŖkisini ortaya koyabilecek alıŖmaların yapılması bir gereklilik olarak karŖımıza ıkmaktadır.

Citation Information

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