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Examining early literacy skills of children aged 60-72 months in terms of certain socio-demographic characteristics

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Abstract

In this study, it was aimed to determine whether the children aged 60-72 months were in the risk group for early literacy skills, and whether their certain socio-demographic characteristics are effective on their early literacy skills. In line with this purpose, the study was conducted using the relational screening method in the spring semester of the 2017-2018 school year. The participants were composed of randomly selected 165 preschool children aged 60-72 months on voluntary basis of their parents. The data collection tools were; the Personal Information Form developed by the researchers, and the Test of Early Literacy (TEL) developed by Kargin, Ergül, Büyüköztürk and Güldenoğlu (2015). In the analysis of the data, the TEL scores of children were calculated and those in the risk group were determined through the cut points. The Chi Square test was used to compare categorical data. Based on the Chi Square test results, variables with statistically significant differences, binomial logistical regression, and odds ratio were calculated. The results revealed that the participant children were below the cut points at a rate ranging from 15, 85% to 60, 98%, and were in the risk group in terms of early literacy skills. It was also found out that the gender variable had no effect on being within the risk group in terms of early literacy skills; the educational status and income levels of the parents increased the early literacy skills of children, in other words, having parents with high educational status and high income levels prevented the early literacy skills of children from being below the cut points, and from being disadvantageous.

Keywords: Early literacy; preschool children; preschool education; socio-demographic characterists; risk group

1. Introduction

Today, it is necessary for the individuals to acquire all the skills that will enable them to adapt to the society more easily, and to access, use and evaluate information in the early stages. In this context, literacy is a very important skill for the development of both

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the individuals and the society they live in (Kurudayıoğlu & Legal, 2010; United Nations Educational Scientific, 2004). Literacy is defined as the ability to read, understand, interpret, analyze and communicate various written sources (United Nations Educational Scientific, 2004). The development of the literacy affects such complex sub-skills starts from birth (Justice, 2006), the foundations of this process are laid in the home environment in the early stages and continue to develop in the school environment (Roskos, Christie & Ricghels, 2003).

The rich stimuli that children encounter in preschool are effective in acquiring literacy skills. Literacy skills acquired in preschool are called "early literacy". Early literacy is the pre-knowledge, skills, and attitudes that children acquire about reading and writing before they formally learn how to read and write (Gupta, 2009; Justice, Invernizzi & Meier, 2002). In order to acquire early literacy skills, children need to acquire some sub-skills in reading and writing. These skills are classified as verbal language, alphabet and letter knowledge, phonological awareness, and writing awareness. Reading comprehension is to be able to understand oneself, one's environment and the written stimuli one faces as well as interpreting about them (Lighter & Yılmaz, 2009). Reading is employed within a development process. This process for children involves feeling and recognizing the sounds, establishing relationships between letters and sounds, and understanding what they write (Herbold, 2009; Oktay & Unutkan, 2003).

Verbal language skill and vocabulary knowledge are used in accordance with the context of words in the process of reading, writing, understanding, listening, and perceiving. Vocabulary acquisition in children is employed by combining the stimuli they receive from their surroundings (Ambruster, Lehr & Osborn, 2003; Coyne, McCoach & Kapp, 2007) through the act of listening and speaking, and by receiving, interpreting, and evaluating written or non-written, verbal or non-verbal messages (Pearson & Fielding, 1982). Alphabet knowledge is the knowledge of children about the type of letters, small caps of the letters, and the name and sound of each letter. Alphabet knowledge is also important for the development of writing awareness, recognizing words and gaining phonological awareness. (Pence, 2006; Report of the National Reading Panel, 2000). Phonological awareness is to be sensitive to the sound units and sounds in the language. In other words, it is, for children, to understand the phonetic organization in the word, recognize sounds corresponding to letters, and notice similar sounds (Rohl, 2000; Schnobrich, 2009). Word knowledge, alphabet knowledge, and phonological awareness skills also enhance the ability to write since they also focus on written forms of letters and sounds.

The ability to write is the symbolization of oral language into written visual symbols. Writing is a complex skill, whose development is fully completed in the primary school, starting from early periods, just like other skills (Asher, 2006; Havens, 2002). For this reason, in the preschool, particular attention should be paid to the writing awareness within the framework of writing preparation skills. Writing awareness is the preparation

phase before children have formal writing skills (Justice & Ezell, 2004). Preschool writing awareness involves knowing that writing is a means of communication, recognizing letters, knowing that the shapes of letters are different, knowing the spaces between words, pictures, and words, having an idea about the direction and starting point of the writing, knowing page turning direction accurately and recognizing punctuations (Israel, 2008). In addition to all these listed skills, listening comprehension is also a skill that forms the basis for early literacy (Özbay, 2009). The listening comprehension is the process of understanding, interpreting, editing, evaluating and storing verbal stimuli (Taşer, 2012). It is also thought that children who have the listening comprehension at an early age will also have a good ability to understand what they are studying at the next level of their education (Kargın, Güldenoğlu & Ergül, 2017).

In the preschool, during which the rapid development takes place, it is important for children to acquire early literacy skills. In this critical period, children who do not acquire early literacy skills perform less at other levels of education compared to their peers (Nelson, 2005), which turns into a disadvantage. Early literacy skill is influenced by a various socio-cultural factors such as social status, economic status, educational status, knowledge and experiences (Barratt Pugh & Rohl, 2000). Moreover, it is observed that the opportunities offered to children in the home environment concerning the early literacy skills differ according to the socio-economic level of the family (Aikens & Barbarin, 2008; Lever & Sénéchal, 2011; Marjanovič-Umek, Fekonja-Peklaj, Sočan & Tašner, 2015). Supporting children's learning skills in the home environment, spending quality time with their families in the context of early literacy, and providing rich materials to children are socio-demographic characteristics that are effective on early literacy (Hacettepe University Institute of Population Studies, 2019). Lower economic level, one of the socio-demographic characteristics, causes families to have a negative perspective on education, and deprives the family of a supportive environment and interaction. Children who grow up in such environments are disadvantaged and may take part in the risk group (Ekinci, 2011). Based on all of these factors, it can be said that the socio-demographic characteristics of children affect their inclusion into the risk group in terms of early literacy skills.

Although there are early literacy studies in the field, there has been no study identifying children in the risk group and examining their socio-demographic characteristics. It is considered that determining the children aged 60-72 months, who are in the risk group, concerning the early literacy skills and examining their socio-demographic characteristics will contribute to the future interventions to be developed on socio-demographic characteristics in the context of early literacy. In this study, it was aimed to determine whether the children aged 60-72 months were in the risk group for early literacy skills, and whether their certain socio-demographic characteristics are effective on their early literacy skills.

In line with this purpose, answers were sought to the following research questions:

1. Does the gender of children aged 60-72 months have an impact on being in the risk group in terms of early literacy skills?
2. Does the educational status of the parents of children aged 60-72 months have an impact on being in the risk group in terms of early literacy skills?
3. Does the family income level of the children aged 60-72 months have an impact on being in the risk group in terms of early literacy skills?

2. Method

a. Research design

In the study, the relational screening method was used since the aim was to determine whether the children aged 60-72 months were in the risk group for early literacy skills, and whether their certain socio-demographic characteristics are effective on their early literacy skills. Relationship variables that were considered to have an impact were defined as gender, parental education status and income level. The relational screening method, a type of general survey method, is used to examine the existence and degree of relationships between two or more variables, to obtain clues about cause and effect relationship, and to better understand the cases under examination (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz & Demirel, 2012).

b. Participants

The sample size of the study was determined through the GPOWER package program. Based on the Chi Square test, the sample size was calculated to be at least 141 with 90% power, 95% confidence, with 2 degrees of freedom in medium impact size. Accordingly, 165 children aged 60-72 months, who were attending the public preschools administered by the Directorate of National Education of Afyonkarahisar, were included in the research randomly and on voluntary basis of their parents.

It was determined that 42.1% of the participants were girls and 57.9% were boys. The mothers of 15.9% of the children were graduates of secondary education, while the mothers of 23.8% were graduates of high school, and those of 60.4% were university graduates; 8.5% of fathers were graduates of secondary education, 24.4% were graduates of high school, and 67.1% were university graduates. The family income levels of 52.4% of the children were found to be high, 40.2% were moderate, and 7.3% were low.

c. Data Collection Tools

The data were collected using the following data collection tools:

i. Personal Information Form

The Personal Information Form was developed by the researchers. The items in the form aiming to determine the gender of children, parental education status, and income levels. The income level variable is classified as high, moderate, and low. The form was filled in by the parents.

ii. Test of Early Literacy (TEL)

Test of Early Literacy (TEL) was developed by Kargın, Ergül, Büyüköztürk and Güldenoğlu (2015) to evaluate the early literacy skills of preschool children and to identify the ones in the risk group. It consists of seven sub-tests. These tests are 1. Receptive Language (15 items), 2. Expressive Language (15 items), 3. Category Naming (10 items), 4. Function Knowledge (10 items), 5. Letter Knowledge (14 items), 6. Phonological Awareness (32 items) and 7. Listening Comprehension (6 items). The correct answers given in the TEL are encoded as 1, while the incorrect ones are encoded as 0. Cut points was used in identifying the children within the risk group. These were determined as eleven for the Receptive Language and Expressive Language Sub-test, eight for the Category Naming Sub-test, six for the Function Knowledge Sub-test, two for the Letter Knowledge Sub-test, sixteen for the Phonological Awareness Sub-test, and five for the Listening Comprehension Sub-test. KR20 was used in determining the internal coefficient of TEL. The internal consistency coefficient of the test is .94 for the entire test, .68 for the Receptive Language sub-dimension, .81 for the Expressive Language Language sub-dimension, .72 for the Category Naming sub-dimension, .65 for the Function Knowledge sub-dimension, .90 for the Letter Knowledge sub-dimension, .87 for the Phonological Awareness sub-dimension, and .67 for the Listening Comprehension sub-dimension (Kargın, Ergül, Büyüköztürk & Güldenoğlu, 2015).

iii. Data Collection

The data of the study were collected in the spring semester of the 2017-2018 school year. In order to collect the data in line with the aim of the research, initially, necessary permissions were gained, subsequently, interviews were held and information was given about the research to the principals of the schools included in the sample group as well as the teachers and parents of the participant children. It was emphasized that the collected data will only be used for the purpose of the research, will not be shared with any other institution or person, and only the children of the parents who volunteered are included in the study. The Test of Early Literacy (TEL) was applied to the participant children by one of the researchers, who have a practitioner certificate of The Test of Early Literacy (TEL). The test was administered in a quiet room in schools separate from educational environments, sitting one-on-one on chairs and tables appropriate for children in order to gather their attention and provide motivation.

d. Data analysis

The TEL scores of children were calculated, and the ones in the risk group were determined based on their cut points (Kargın, Ergül, Büyüköztürk & Güldenoğlu, 2015). The grouped data were presented as percentage and frequency. In the comparison of the categorical data, the Chi Square test was utilized. The odds ratio of the variables with statistically significant differences were calculated through binominal logistic regression.

3. Results

The findings obtained in line with the objective of the research are presented below: The average score that the participant children gained from the vocabulary in the "Receptive Language" sub-dimension was 12.16, and it was determined that 19.61% were below the cut points; their average score gained from the vocabulary in the "Expressive Language" sub-dimension was 9.55, and it was detected that 56.10 % were below the cut points; the average score they gained from the "Category Naming" sub-dimension was 6.73, and it was determined that 56.71 % were below the cut points; the average score of the students for the "Function Knowledge" sub-dimension was 7.29, and it was determined that 17.68 % were below the cut points; their average scores in the "Letter Knowledge" sub-dimension was 4.58, and it was detected that 15.85 % were below the cut points; the average scores of children in the "Phonological Awareness" sub-dimension was 13.70, and it was determined that 60.98 % were below the cut points; the average score of children in the "Listening Comprehension" sub-dimension was 3.63, and it was determined that 23.78% were below the cut points; lastly, the total average score they gained from the whole TEL was 57.63, in which 51.22 % were determined to be below the cut points (See Table 1).

Table 1. Descriptive statistics concerning evaluation of the early literacy skill

TEL	n	%
Receptive Language	32	19,51
Expressive Language	92	56,10
Category Naming	93	56,71
Function Knowledge	29	17,68
Letter Knowledge	26	15,85
Phonological Awareness	100	60,98
Listening Comprehension	39	23,78
Total	84	51,22

It was also determined that there was statistically no significant difference between the gender variable and being in the risk group concerning the whole scale and all sub-dimensions of TEL (p>0,05) (See Table 2).

Table 2. Binominal logistic regression and chi square test results concerning the impact of socio-demographic variables on being in the risk group in terms of early literacy skills

TEL	**Gender**		**Mother Education Status**			**Father Education Status**			**Income Levels**		
	Girls (N=69)	**Boys (n=95)**	**Elementary (n=26)**	**High (n=39)**	**University (n=99)**	**Elementary (n=14)**	**High (n=40)**	**University (n=110)**	**High (n=86)**	**Moderate (n=66)**	**Low (n=12)**
Receptive Language	21,30%	18,95%	50,00%	23,08%	10,10%	42,86%	35,00%	10,91%	10,47%	24,24%	58,33%
p(x2)	0,830(0,046)		<0,001(21,287)			<0,001(16,152)			<0,001(16,938)		
B(%95cl)			indicator	3,3(9,7-1,1)*	8,9(24,4-3,2)*	indicator	1,4(4,8-0,4)	6,1(20,7-1,8)*	11,9(45,7-3,13)*	4,3(15,7-1,2)*	indicator
Expressive Language	59,42%	53,68%	73,08%	66,67%	47,47%	78,57%	75,00%	46,36%	44,19%	66,67%	83,33%
p(x2)	0,465(0,534)		0,020(7,801)			0,002(12,906)			0,003(11,562)		
B(%95cl)			indicator	1,4(4,0-0,5)	3,0(7,8-1,2)*	indicator	1,2(5,3-0,3)	4,2(16,0-1,1)*	6,3(30,5-1,3)*	2,5(12,4-0,5)	indicator
Category Naming	53,62%	58,95%	69,23%	58,97%	52,53%	64,29%	65,00%	52,73%	46,51%	68,18%	66,67%
p(x2)	0,497(0,462)		0,294(2,448)			0,340(2,158)			0,022(7,666)		
B(%95cl)											
Function Knowledge	21,74%	14,74%	30,77%	15,38%	15,15%	21,43%	20,00%	16,36%	12,79%	18,18%	50,00%
p(x2)	0,246(1,346)		0,162(3,636)			0,813(0,414)			0,007(10,035)		
B(%95cl)									6,8(24,9-1,8)*	4,5(16,3-1,2)*	indicator
Letter Knowledge	11,59%	18,95%	23,09%	20,51%	12,12%	21,43%	17,50%	14,55%	11,63%	18,18%	33,33%
p(x2)	0,203(1,602)		0,261(2,685)			0,760(0,549)			0,114(4,168)		
B(%95cl)											
Phonological Awareness	63,77%	58,95%	73,08%	71,79%	53,54%	71,43%	67,50%	57,27%	53,49%	66,67%	83,33%
p(x2)	0,532(0,390)		0,054(5,822)			0,369(1,992)			0,066(5,445)		
B(%95cl)											
Listening Comprehension	20,29%	26,32%	38,46%	30,77%	17,17%	50,00%	35,00%	16,36%	16,28%	27,27%	58,33%
p(x2)	0,371(0,801)		0,038(6,528)			0,003(11,018)			0,004(11,018)		
B(%95cl)			indicator	1,4(3,9-0,5)	3,01(7,7-1,2)*	indicator	1,9(6,4-0,5)	5,1(16,3-1,6)*	7,2(25,9-2,0)*	3,7(13,3-1,1)*	indicator
Total	47,83%	53,68%	65,38%	61,54%	43,43%	64,29%	67,50%	43,64%	42,86%	59,09%	75,00%
p(x2)	0,459(0,549)		0,046(6,152)			0,021(7,732)			0,025(7,368)		
B(%95cl)			indicator	1,2(3,3-0,4)	2,5(6,0-1,0)	indicator	0,9(3,1-0,2)	2,3(7,4-0,7)	4,1(16-1,1)*	2,1(8,4-0,5)	indicator

*p<0,05

As is seen in Table 2, there were statistically significant relationships between the parental education status/income level variables and being in the risk group concerning the "Receptive Language" sub-dimension (p<0,05). It was observed that, in the "Receptive Language" sub-dimension, the rate of being in the risk group was decreased in the participants whose maternal education status was high school (OR:3,3; %95 CI 9,7-1,1; p<0,05) and university (OR:8,9; %95 CI 24,4-3,2; p<0,05). Similarly, it was also observed that, in the "Receptive Language" sub-dimension, the rate of being in the risk group was decreased in the participants whose paternal educational level was university (OR:6,1; %95 CI 20,7-1,8; p<0,001). It was observed that, in the "Receptive Language" sub-dimension, the rate of being in the risk group was decreased in the participants whose income levels were moderate (OR:4,3; %95 CI 15,7-1,2; p<0,05) and high (OR:11,9; %95 CI 45,7-3,13; p<0,05).

It was also observed that there were statistically significant relationships between the parental education status/income level variables and being in the risk group concerning the "Expressive Language" sub-dimension (p>0,05). It was observed that, in the "Expressive Language" sub-dimension, the rate of being in the risk group was decreased in the participants whose maternal educational level was university (OR:3,0; %95 CI 7,8-1,2; p<0,05). Similarly, it was also observed that, in the "Expressive Language" sub-dimension, the rate of being in the risk group was decreased in the participants whose paternal educational level was university (OR:4,2; %95 CI 16,0-1,1; p<0,05). It was observed that, in the "Expressive Language" sub-dimension, the rate of being in the risk group was decreased in the participants whose income levels were high (OR:6,3; %95 CI 30,5-1,3; p<0,05). In addition, there was statistically no significant relationship between the parental education status and being in the risk group concerning the "Category Naming" sub-dimension (p>0,05), and it was observed that there was a statistically significant relationship between the income level and being in the risk group concerning the "Category Naming" sub-dimension, in favor of the ones with high income levels (p<0,05). There was no statistically significant relationship between the parental education status and being in the risk group concerning the "Function Knowledge" sub-dimension (p>0,05), and it was observed that there was a statistically significant relationship between the income level and being in the risk group concerning the "Function Knowledge" sub-dimension (p<0,05). It was observed that, in the "Function Knowledg"e sub-dimension, the rate of being in the risk group was decreased in the participants whose family income levels were high (OR:6,8; %95 CI 24,9-1,8; p<0,05) and moderate (OR:4,5; %95 CI 16,3-1,2, p<0,05).

Furthermore, there was no statistically significant relationship between the parental education status/family income level variables and being in the risk group concerning the "Letter Knowledge" and "Phonological Awareness" sub-dimensions (p>0,05). It was observed that the rate of being in the risk group was decreased as the parental education

status and income levels increased concerning the "Letter Knowledge"and "Phonological Awareness" sub-dimensions.

There was a statistically significant relationship between the parental education status/income level variables and being in the risk group concerning the "Listening Comprehension" sub-dimension (p<0,05). It was observed that, in the "Listening Comprehension" sub-dimension, the rate of being in the risk group was decreased in the participants whose maternal education status were university (OR:3,01; %95 CI 7,7-1,2, p<0,05). Similarly, it was also observed that, in the "Listening Comprehension" sub-dimension, the rate of being in the risk group was decreased in the participants whose paternal education status were university (OR:5,1; %95 CI 16,3-1,6; p<0,05). It was observed that, in the "Listening Comprehension" sub-dimension, the rate of being in the risk group was decreased in the participants whose income levels were high (OR:7,2; %95 CI 25,9-2,0; p<0,05) and medium (OR:3,7; %95 CI 13,3-1,1; p<0,05).

There was no significant relationship between the parental education level and being in the risk group concerning the total TEL (p>0,05), and it was observed that there was a statistically significant relationship between the income level and being in the risk group concerning the total TEL (p<0,05). It was observed that, in the total TEL, the rate of being in the risk group was decreased in the participants whose family income levels were high (OR:4,1; %95 CI 16-1,1; p<0,05).

4. Discussion

In this study, initially, the scores of the children in the study group gained from the whole TEL and its sub-dimensions were evaluated according to the cut points. Thus, the children in the risk group concerning the early literacy were identified. Subsequently, it was examined whether the socio-demographic variables have an impact on being in the risk group in terms of early literacy skills. Early literacy is the set of skills that children acquire before learning formal literacy. In the field of literacy, there are previous studies which concluded that early literacy skill acquired in preschool education is an important indicator for certain achievements in further educational levels such as literacy (Ambruster et al., 2003; Christie, Enz & Vukelich, 2007; Denton & West, 2002; Longcamp et al., 2008; Marulis & Neuman, 2010), reading comprehension (Lonigan, Schatschneider & Westberg, 2008), and listening comprehension skills.

When the results of this study on early literacy skills, which are accepted to be important for formal literacy in later levels of education, are examined, it can be mentioned that the early literacy skill levels of the children in the study group are low. The results of the study point towards that the scores of the participant children obtained from the whole TEL and its sub-dimensions were below the cut points at a rate ranging from 15.9% to 61%, and were in the risk group in terms of early literacy skills. In a study conducted to determine the early literacy profiles of kindergarten children, Kargin et al.,

(2017), concluded that the scores of the children in the study group were over the cut points concerning vocabulary knowledge in recipient language, knowledge on function, syllable combining, rhyme awareness, and knowledge on letters in recipient language sub-dimensions, while their scores were below the cut points concerning the other sub-dimensions. According to the results of a different study which was conducted to calculate the early childhood development index values of children aged 36-59 months in terms of their basic characteristics (in the fields of literacy-computational skills, physical, and social-emotional learning), it was concluded that only 14.4 % of the children demonstrated a normal development concerning the early literacy and computational skills (Hacettepe University Institute of Population Studies, 2019). It can be mentioned that this ratio is quite low, and a very large proportion of children are disadvantaged in terms of early literacy and computational skills. These research studies conducted in the related field support the results of the current study.

The fact that the scores of the children in the study group obtained from the TEL and its sub-dimensions were below the cut points was considered to be resulting from certain factors such as their acquisitions were quite less concerning the development of their early literacy skills in the preschool education program (Kargin et al., 2017), the preschool teachers consider that the efforts for early literacy skills are the subject of the primary schools, they have a small number of written materials in their classrooms, and their knowledge on early literacy is at a low level (Cash, Cabell, Hamre, DeCoster & Pianta, 2015; Cunningham & Davidson, 2005; Deretarla Rose & Bal, 2006; Ergül et al., 2014; Hindman & Wasik, 2008). It is also considered that the obtained results may be due to the socio-demographic variables. Early literacy is a process of focusing on and exploring language, and motivation, and can be influenced by various socio-demographic characteristics. It was reported that the socio-demographic characteristics widely influence children's frequency to encounter early-literacy stimuli in their environments (Burgess, 2005; Harste & Woodward, 1989) and early literacy skills (Barratt Pugh & Rohl, 2000; Luke, 1993). The study concluded that the genders of children aged 60-72 months, who were receiving preschool education, had no effect on being in the risk group concerning their early literacy skills. It can be mentioned that the gender variable does not have an impact on early literacy skills, since all children receive equal education and go through the same educational processes. In some previous studies, it was determined that there were statistically no significant differences between the gender variable and lexical knowledge, phonological awareness, knowledge on alphabet, and listening comprehension (Enerem, 2018); recipient and expressive language levels (Öztürk, 1995); phonology awareness (Karaman & Üstün, 2011; Sarı & Aktan Acar, 2013); language development and sound studies (Polat Unutkan, 2006); early literacy and computational skills (Hacettepe University Institute of Population Studies, 2019) and school maturity levels (Keleş Ertürk, 2017).

Children identify with their parents and model their parents in preschool. The literacy behaviors of parents who give positive feedback to children concerning early literacy skills, behave positively, and have high level reading behaviors, are modeled by children, enabling children to have a positive attitude towards early literacy (Santrock, 2013). It can be said that the behaviors and attitudes of parents towards early literacy have an important place in the development of children's early literacy skills. It is noted that previous studies examining disadvantaged children in terms of early literacy skills focus on the income and education status of the parents (Duncan & Brooks-Gunn, 2000; McLoyd, 1998). In this study, the effect of parents' educational status on early literacy levels of preschool children was examined. In this study, it was concluded that as the educational level of the parents increased, children's early literacy skills increased, and that higher parental education status prevented early literacy skills of children from falling below the cut point and from being disadvantaged. This can be mentioned to be owing to the facts that parents are more conscious as their education status increase, they spend more time with their children, they provide an early-literacy-rich home environment, they have high levels of knowledge and positive attitudes towards early literacy. In previous studies in the literature, it was concluded that the parental education level is a significant predictor of children's early literacy skills, and as the parental education status increase, the early literacy skills (Bracken & Fischer, 2008), language development (Marjanovic Umek, Fekonja Peklaj & Sočan 2017), and vocabulary knowledge (especially complex words) (Marjanovic-Umek, Fekonja-Peklaj & Podlesek, 2012) of children increase as well. According to the data of Hacettepe University Institute of Population Studies (2019), it was observed that the normal development levels of children, whose maternal education level is high school and above, were higher concerning early literacy and computational skills, the mothers with an educational level of high school and above conduct more activities with their children, and children, whose maternal education level is high school and above, read more books. Similarly, in another study, it was reported that there is a positive relationship between the parental education level and their beliefs about early literacy, and as the beliefs of parents about early literacy increase, the early literacy skills of children may increase as well (Lynch, Anderson, Anderson & Shapiro, 2006). McKean et al., (2015) reported that early literacy skills and language developments of children were associated with their parental education level, and related with presenting this educational level through early-literacy-rich home environments. In addition, in previous studies, it was concluded that parental education level influence their knowledge levels about early literacy developments of their children (Rowe, Denmark, Harden & Stapleton, 2016) and it was determined that early literacy skills of children are positively influenced from the trainings given to families in preparation for literacy (Özen Altınkaynak, 2014).

Another socio-demographic characteristic that affects early literacy is the income level. It is widely accepted that there is an inequality of achievement in early literacy skills of

children of different income groups (Barratt Pugh, 2000). From the environmental impact point of view, it is emphasized that socio-economic level has an impact on children's early literacy skills (McNaughton, 1995). In this study, it was examined whether the family income levels of children are influential on being below the cut points in terms of early literacy skills. In this study, it was concluded that children's early literacy skills increased as the parental education level increased, and that higher educational levels of parents prevented early literacy skills of children from falling below the cut point and from being disadvantaged. This can be mentioned to be owing to the facts that parents with higher education status invest more on early literacy activities compared to the families with lower educational levels, and families with higher educational levels spend more time for their children in gaining early literacy skills and acquiring positive attitudes. In previous studies, it was concluded that families with higher socio-economic levels are more likely to involve their children in early literacy activities (Gonzalez et al., 2011; Hemmerechts, Agirdag & Kavadias, 2017). In a longitudinal study conducted by Niklas and Schneider (2013), it was concluded that, compared to the children at the higher socio-economic levels, children at the lower socio-economic levels were more deficient in phonological awareness, vocabulary and letter knowledge skills both in preschool and primary school periods. Another study concluded that families with higher socio-economic levels gave their children a higher early-literacy-rich home environment, which positively affected the early literacy skills of children (Marjanovič-Umek et al., 2015). Similarly, it was concluded that the early-literacy home environments offered to children by families at lower socio-economic levels were inadequate and their early literacy skills were lower than those at moderate and high socio-economic levels (Lever & Sénéchal, 2011). Book reading activities are one of the most important ways of supporting early literacy (Hindman, Skibbe & Foster, 2014). In previous research studies in the literature, it was concluded that families with higher socio-economic levels read more books to their children and are highly being models to their children for reading (Işıkoğlu Erdoğan, 2016; Özbek Ayaz, Güleç & Şahin, 2017).

5. Conclusions and Suggestions

In this research, it was concluded that the scores of the participant children obtained from the whole TEL and its sub-dimensions were below the cut points at a rate ranging from 15.9% to 61%, and were in the risk group. It was also determined that the gender variable had no effect on being in the risk group in terms of early literacy skills. It was concluded that children's early literacy skills increased as the educational level of the parents increased, and that higher parental education status prevented early literacy skills of children from falling below the cut point and from being disadvantaged.

In line with these results, the following suggestions can be put forward:

This research is limited to examining the early literacy skills of children in terms of gender, parental education level and income level variables. In further studies, early literacy skills of children can be compared by taking into account other socio-demographic characteristics related to families, early home literacy, attitudes and knowledge levels of parents and teachers towards early literacy, and professional experiences of teachers.

The study group of this research is limited to the number of children determined by the Gpower technique. The sample of the study can be planned through probabilistic sampling methods and the research can be applied to wider groups.

Children identified as being in the risk group can be monitored and evaluated more closely in terms of their early literacy skills and the necessary interventions can be planned to improve their skills.

The measurement tool used in this study does not have a writing awareness sub-test. More comprehensive results can also be obtained by using a measurement tool that measures writing awareness as well.

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