



## A Study on Writing Preparedness Levels of First Grade Students

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### Abstract

The aim of this study is to analyse the preparedness levels of first year primary students in writing regarding some variables. Mixed method has been used in the study. The quantitative part of the study involves the data regarding the students' preparedness levels and their distribution according to gender, age and getting a pre school education. Whereas, the qualitative part includes the student interviews. The study has been carried out with 90 first year primary school students in the city center of Trabzon. Asdata collection tools, a personal information form prepared by the researchers, a semi-structured interview form and three assessment tools to determine the preparedness levels of the students have been used developed by Yangın (2007). Quantitative data regarding the study have been calculated the frequency, percentage and arithmetic mean. It has been analyzed by statistical methods (SPSS program) that students' level of writing preparedness differ whether according to the variables taken into consideration in the research. The results obtained from this research indicate that about more than half of the students hold the pencil correctly while nearly half of them hold the pencil incorrectly. In the research, it is asserted that more than half of the students do not hold paper correctly and a part of them do not leave the right distance between paper and eye. Looking into the research results, it is seen that students are in "Average" level regarding the drawing lines properly and correctly; hand skills, on the other hand, are at a "satisfactory" level. It is stated in the research that students are aware of directional concepts except right-left. While students' levels of preparedness and sub-dimensions are influenced by gender; students' levels of preparedness and sub-dimensions are not influenced by age. Findings of the research display that levels of writing preparedness changes according to whether the student has received a preschool education only in terms of hand skills. This research also reveals that students have positive opinions regarding writing.

### Keywords

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## Introduction

Writing preparedness is a developmental stage that requires having the knowledge and skill prior to the learning of the writing skill (Marr, Windsor, & Cermak, 2001). This stage requires perceptual-motor skills, visual-motor coordination, motor planning, perceptual / cognitive skills and adequate performance in tactile and kinesthetic sensitivity (Öztürk & Uysal, 2013). Children's readiness for learning writing skill is closely related to the development of fine motor skills, hand-eye coordination besides their familiarity with writing tools and their use and their enthusiasm (Gupta, 2009). Preparedness is very important in the process and performance of writing skill. Aside from the mental requirements, students are also expected to have progressed in terms of psychomotor behavior (Temur, 2011). According to Rosenblum (2008), a child developing his cognitive skills required for writing preparedness has made progress in the process learning how to write. However, this is not satisfactory for writing preparedness. According to Peverly (2006), a child not adequately developed in terms of fine motor skills, will not be able to perform tasks that require psychomotor skills. Hence, this influences the writing process.

Pre-school period is a developmental term during which children gain experience on the reading-writing process. During this term, children who develop their language abilities also tend to express themselves in written form. This naturally results in their self-expression through writing, scratching, coloring, drawing and discovering written language in which they are eager to express. This discovery leads them to the notion that what can be written can also be read and vice versa, hence finding out the aim and function of writing. White (2005) states that in this stage, the child uses writing as a tool for sharing ideas and to interact with others and tries them out on paper. At first, children notice letters, writings, symbols and words (Morrow, 2007). Later on, they distinguish the difference between writing and drawing and scratch words (Venn & Jahn, 2004). After this stage comes the discovery of letters and their shapes which later leads to their use (Bradley & Jones, 2007). These trials are of crucial importance in the process of being ready to the learning of the challenging and complex skill of writing. In preschool, first writing this development process, from writing letters from experience, Sulzby (1985) by writing by drawing, writing by scribbling, writing, drawing and letter-like shape, good learned units or writing through the sequences of letters, letter-sound relationships writing by exploring, it is divided into six stages including writing traditional letter-sound relationships (Morrow, 2007).

In the process of learning how to write, cognitive skills, visual motor and small motor skills effect the writing performance (Richards et al., 2011; Volman, Van Schendel, & Jongmans, 2006) as the oral explanations provided in the learning process, help the perception of spatial expressions and therefore the correct writing of letters. For instance, being familiar with concepts such as above-below, right-left, up-down, in-out, front-back, vertical-italic is a part of the learning process. Therefore, students having difficulty in understanding these expressions cognitively, may also have difficulty in handwriting (Marr et al., 2001). For this reason, it is necessary in pre school years to introduce students with learning environments involving these concepts in order to develop their writing skills. Gaining experience regarding these concepts enables students to be familiar with the direction of writing, indentation and page flow. The child, being aware of the sounds and shapes of letters and that words are made up of letters, is cognitively being prepared to the writing process. In addition, enthusiasm and interest in writing, writing materials and letters help prepare the child to the process mentally. In this respect, it is essential in pre school, to include tasks involving the development of hand-eye coordination and hand-finger muscles (Beaty, 2006).

Diamond, Gerde, and Powell (2008) state that children who gain familiarity with concepts related to writing recognize letters much easier and their preparedness levels are more developed. Yangın (2007) states that in order for children to be ready to write, they need to perform basic tasks such as grasping the pencil, the paper/notebook in the proper way, keeping the eye and paper at the right distance, drawing free lines, writing proper lines etc. During this process, children's work should constantly be checked, their mistakes corrected and correct answers reinforced.

The work effecting the levels of preparedness in writing in the pre school period help students to explore the written form and the function of writing and also relate spoken language with written form of language (Eliason & Jenkins, 2003). In addition, through these works, they recognize the writing tools and practise their correct use. All the activities involved in this process support the development of small motor skills, nerve-muscle and hand-eye coordination of children. Children who gain these skills in their pre school years are prepared to the writing process that is taught in the formal education in the first year of primary school. In the research conducted by Duran (2009), writing process of italic writing academic studies based on a kindergarten class and first-year students in primary school on the observations and opinions of teachers, was evaluated in terms various variables (sitting down, the paper holding pen holding, writing direction, connection speed compliance with the rules of spelling and legibility). In the study, while the kindergarten class training through a program in the experimental group (48 hours) italic writing preparation activities and worksheets have been implemented. It was observed that almost all the students in the experimental groupsit suitable for italic writing, teaching, pen how to hold and papers which the holder slope, page how they know that they will turn from left to right and they start writing, knowing that they must leave the top down, have not difficulty in establishing the connection between letters. It has been shown to be more successful and be legible font that students in the experimental group wrote faster writing than students in the control group and to follow the rules of spelling. It was observed that the control group of students experiencing problems in developing these skills.

There have been various variables affecting writing preparedness and performance. Researches conducted, demonstrate the effectiveness of various variables such as sitting posture, paper position, writing direction, small and large muscle development, hand-eye coordination in the process (Akyol, 2007; Duran, 2009; Temur, Aksoy, & Tabak, 2011; Yıldız, Açıan, Berber, Bulut, & Zalimhan, 2015). According to Duran (2009), there are notable aspect of the issue thatthe studentsacquire writing skills the holding pen, sitting right next academic paper handling before teaching writing. Several studies that reference Temur (2011) compared the writing on research obtained variables addressed in holding pens, speed, legibility, gender, visual perception, muscle strength, hand-eye coordination. In general, it is revealed in results that writing speed is increasing with age and girls writes faster than boys (Temur, Aksoy, & Tabak, 2012). The research conducted by Temur et al. (2011), writing position papers and writing speed of the pen grip point variables and error scores of students were found to lead to differences in the average. It has also been observed to vary according to the way of a sitting of elementary first grade students writing speed. Also, the research conducted by Yıldız, Açıan, Berber, Bulut, and Zalimhan (2015), it is revealed that the majority of students writes using right hand and a large portion of them control writing paper by the hand not used. It also has the correct seating position is approximately half of the students, but it has been determined that a similar percentage of students in order to more lean. But the students have the right items in the handling of one of the five, it was seen that the majority of the pen grasp with thumb and forefinger. It has been determined that most of them, grasp the pen the near point of pencil and also, half of the students are in the right slope of the paper and about similar percentage of the students position perpendicular to body.

An important variable in discussion on the process of writing and writing preparedness is the "age" variable. Especially with changes taking place in our education system, this variable is cause for intense debate about children start school at 6-year-olds. According to Öztürk and Uysal (2013), calendar years in the formation of students preparedness to literacy is an important factor. Chronological age, continues to be an important factor in determining the preparedness. The research conducted by Öztürk and Uysal (2013), it is stated that classroom teachers had experienced many problems with children 60-66 months than other children in the writing process. Classroom teachers as reasons for these differences in "the 60-66 months group; have made such statements; "have not developed the fine motor skills, the fact that pre-school education, hand-eye coordination and the weakness of the first voices". According to Calp (2014), wherein the sole criterion for writing preparedness, is not the child's schedule. Today, in our country, whether they are ready to children of primary school age it is decided taking into account the calendar. This situation is whether it is healthy is a matter of debate. When deciding on the need for starting or starting school children, besides being based on the calendar year, knowing the behavior of age it should be considered as important. The research conducted by Calp (2014) "The Comparison of Reading, Writing, Pencil Grip, Course Participation and Academic Achievement of the First Grade Students in Different Age Range, " says the study, writing quality and the writing skills of some students who are older in favor of the couple, in some student couples in which small student's favor was found to be better. However, differences have emerged in the case could be considered a better level in terms of any student group. Pencil in respect of the right to keep an equal number of groups between 60-71 months and 72-84 months group is determined that students need to be corrected problems.

Writing skills and research made about the variables that affect this ability, in general focuses on the formal writing of children as they start to learn the elementary school period. The number of studies on children's writing preparedness and variables affecting this situation is very limited. Increasing the number of studies on this topic, is the preparedness of primary school and first grade students to the need to identify some variables that affect it. In relation with this, determining the preparedness levels and the factors effecting them are of great significance. Once this is determined, efforts should be made to work on the factors as these essential factors directly influence the development of students' preparedness levels. Thus, the necessary studies and arrangements for the relevant variable preparedness of students achieved the development of writing. On this ground, The aim of this study is to analyse the preparedness levels of first year primary students in writing regarding some variables. Answers shall be sought to the following questions to reach this aim:

1. What are the preparedness levels of first year primary school students in writing?
2. Is there a meaningful difference in the levels of preparedness in writing in terms of gender, age and getting a pre school education?
3. What are the opinions of first year primary school students regarding their preparedness in writing?

## Method

### *Model of Research*

This study, aimed to analyse first year primary school students preparedness levels in terms of some variables, has been structured based on descriptive survey model. The model is a research approach that describes a current or past condition as it is (Karasar, 2009, pp. 77-85). Mixed method study has been used in the collection of data, analysis and interpretation. The main premise of the mixed method is that the research problem and questions are more clearly understood and observed by making use of qualitative and quantitative methods (Creswell, 2013; Fraenkel & Wallen, 2006). The quantitative part of the study involves the data regarding the students' preparedness levels and their distribution according to gender, age and getting a pre school education. Whereas, the qualitative part includes the student interviews.

### *Study Group*

The study group of this research consists of first year primary school students from different socioeconomic backgrounds. Data have been collected from three different schools in terms of socioeconomic levels in Trabzon city. Information regarding the schools' socioeconomic levels has been included by taking into consideration the development levels of the neighborhoods through the data received from Turkish Statistical Institute (TSI). In addition, school principals and classroom teachers have been consulted. The study has been carried out with 90 first year primary school students. The ages range from 63-84 months. In addition, approximately 71% of students (N=64) received pre-school education, 29% (N=26) did not receive the pre-school education. Distribution of students according to age (month) and gender can be seen in Table 1:

**Table 1.** Distribution of Students According to Age (Month) and Gender

Age (month)	Gender				Total	
	Female		Male			
	f	%	f	%	f	%
60-63	0	0	1	1,1	1	1,1
64-66	6	6,7	5	5,6	11	12,2
67-69	12	13,3	10	11,1	22	24,4
70-72	13	14,4	11	12,2	24	26,6
73-75	12	13,3	7	7,8	19	21,1
76-78	6	6,7	4	4,4	10	12,1
78-81	1	1,1	1	1,1	2	2,2
81-84	1	1,1	0	0	1	1,1
Total	51	56,7	39	43,3	90	100

According to Table 1, 57% of the students participating in the study are female and 43% of the students are male. When the distribution of students according to age (month) are observed, it is seen that about 1% are 60-63 months, 12% are 64-66 months, 24% are 67-69 months, 27% are 70-72 months, 21% are 73-75 months, 12% are 76-78 months, 2% are 78-81 months and 1% are 81-84 months.

Students included in the interviews have been selected from different age and gender group and different preparedness levels: good, average and poor. A total number of 18 students have been interviewed for the research.

### *Data Collection Tools*

As data collection tools, a personal information form prepared by the researchers, a semi-structured interview form and "Writing Preparedness Scale" (three assessment tools), to determine the preparedness levels of the students have been used developed by Yangın (2007).

In the first assessment tool, controlled observation is made to determine whether students use pencil and paper in a proper way; whether they leave adequate distance between eye and paper; whether they can draw proper vertical, horizontal, italic and circular lines and their combinations. In order to carry out the observation, on a lined sheet of paper, examples of vertical, horizontal, italic, circular and curved lines and their combinations are drawn properly and clearly. It is planned for the students to draw the lines under the spaces on the paper properly and clearly. The paper in this format is copied for each student.

In the second assessment tool, in order to determine the students' understanding of concepts such as in, out, above, below, right and left, a straight and a circular line are drawn on a sheet of paper in equal distances to each other. Then students are asked to show the inner and outer part of the circle, the upper and lower part of the line and their right hands. The paper in this format is copied for each student.

In the third assessment tool, two different formats of paper are prepared to confirm if students are able to gain the skills of cutting properly, folding and sticking. On the first paper is a house with no roof and a picture of a tree with no body. On the second paper is a square that can be shaped as a house when cut and folded properly and two circles to complete a tree. Students are expected and planned to stick the missing pieces in the first picture after cutting and folding the shapes in the second picture. The two papers in this format are copied for each student.

Three different types of assessment tools such as observation, question-answer and product assessment have been applied on the students who have participated in the study in the light of the above-mentioned preparation and planning. To sustain reliability of the assessment tool, developed by Yangın (2007), it has been controlled "independent interobserver agreement". For this reason, the scale has been applied on a total of 62 6-year-old pre school students; and the measurements obtained have been evaluated separately by two experts. The technique "Kendall's Coefficient of Concordance" has been used in the calculation of concordance between the averages and a meaningful relation in .01 level (.87) has been observed. The data obtained in this research have been scored by two researchers.

### *Collecting the Data*

The data related to the preparedness levels of the students in this study have been collected by working on 90 students in the study group individually. Research data refers to 2014-2015 fall semester of the academic process. Students impressed considering the preparedness of the writing process, the study was conducted in the first two weeks of school. First, the students were asked to draw the line at the first assessment tool the blank lines properly and correctly. Meanwhile, it has been checked whether the student uses pen and paper right, draws the direction of the line right. Then the second assessment tool is given to the student. This measurement tool, it was asked to show his right hand, in order to round the inside and outside of the gold and superior line. The answers given were recorded. In the third assessment tool, the pictures has been shown to students. It was asked to determine the location of the missing of the tree and the house in the first pictures. However, it has been asked to cut and folding the shapes in the second picture and has been asked to paste the appropriate places in the first picture.

After the collection of data through assessment tools, 18 students are interviewed about pencil grasp and the writing process. Personal information forms including students' questions are filled out with their class teachers.

### Data Analysis

The criteria to be considered in scoring the first level; grasp the pencil correctly, hold the paper correctly, leave an adequate distance between the eye of paper, draw lines and lines in the right direction in the form of proper boots. Grasp the pen correctly, hold the paper correctly, leave an adequate distance between the extent of the observed papers were scored as 1 point. However, it has been scored to draw lines in the right direction and properly in the 1-5 points. The second scale is 1 point for each correct answer given by the student. Finally, cutting is made in the third scale, based on performance in the folding and gluing operation has taken scale of 1 to 5 points. Collected data were analyzed with SPSS. In parallel with the research, whether students' paper and pencil grasp and leaving the right distance between paper and eye and whether drawing lines properly and correctly and hand skillsshow a meaningful difference depending on getting a preschool education is analysed according to t-test; whether or not it shows a difference with age variable is analysed with single direction variance analysis (ANOVA). As students' sense of direction doesn't show a normal distribution, related variables are analysed using Mann Whitney U-Test and Kruskal Wallis H-Test.

### Findings and Interpretation

#### Findings Related To The First Research Question

The levels of writing preparedness of the first year primary school students have been analysed in accordance with their skills of grasping the paper and pencil properly, leaving the right distance between eye and paper, drawing lines correctly and properly and senses of direction. The data related to their levels of writing preparedness is included in Tables 2, 3, 4 and 5.

**Table 2.** Findings Related to Students' Skills of Grasping Paper and Pencil Properly, Leaving the Right Distance Between Eye and Paper, Drawing Lines Correctly and Properly

Features	Yes		No		$\bar{X}$
	f	%	f	%	
Grasping pencil correctly while writing	57	63,3	33	36,7	0,63
Grasping paper correctly	38	42,2	52	57,8	0,42
Leaving the right distance between eye and paper	65	72,2	25	27,8	0,72

As seen in Table 2, about 63% of students hold the pencil correctly; 37% don't hold the pencil correctly. In addition, while 42% of students hold the paper correctly, 58% do not. 72% of students leave the right distance between eye and paper, 28% do not. Parallel to the findings of this research, nearly half of students could be interpreted as insufficient in preparedness in terms of grasping the pencil correctly, and a part of them insufficient in terms of leaving the right distance between eye and paper, and more than half of them insufficient in terms of grasping the paper correctly.

**Table 3.** Findings Related to Students' Drawing of Lines Properly and Correctly

Features	5		4		3		2		1		$\bar{X}$
	f	%	f	%	f	%	f	%	f	%	
Drawing vertical, horizontal, italic, circular lines	10	11,1	19	21,1	38	42,2	20	22,2	3	3,3	3,14
And lines that are formed by these lines properly											
Drawing vertical, horizontal, italic, circular lines	13	14,4	29	32,2	28	31,1	7	7,8	5	5,6	3,33
And lines that are formed by these lines correctly											

When Table 3 is observed, it is clearly seen that 11% of the students are “Quite Sufficient”, 21% “Sufficient”, 42% “Average”, 22% “Insufficient”, and 3% “Quite Insufficient” in drawing vertical, horizontal, italic and circular lines and lines that are formed with them properly. It is also observed that the arithmetic mean ( $\bar{X} = 3,14$ ) of the students related to this skill is in “Average” level. It is noted that 14% of the students are “Quite Sufficient”, 32% “Sufficient”, 31% “Average”, 8% “Insufficient”, 6% “Quite Insufficient” in drawing vertical, horizontal, italic and circular lines and lines that are formed with them correctly; the arithmetic mean ( $\bar{X} = 3,33$ ) related to this skill being “Average”.

**Table 4.** Findings Related to Students’ Hand Skills

Features	5		4		3		2		1		$\bar{X}$
	f	%	f	%	f	%	f	%	f	%	
Cutting properly	16	17,8	37	41,1	24	26,7	13	14,4			3,62
Folding properly according to given example	8	8,9	40	44,4	28	31,1	12	13,3	2	2,2	3,44
Sticking properly	21	23,3	43	47,8	16	17,8	10	11,1			3,83

When Table 4 is observed, it is seen that 41% of the students are “Sufficient” in the skill of cutting properly and the arithmetic mean ( $\bar{X} = 3,62$ ) being at a “Sufficient” level. About 44% of the students are “Sufficient” in folding properly and the arithmetic mean ( $\bar{X} = 3,44$ ) related to the skill being at a “Sufficient” level. As for the sticking skill, 48% of the students are “Sufficient” as in other hand skills. The arithmetic mean ( $\bar{X} = 3,83$ ) is at a “Sufficient” level. This finding obtained from the research could be interpreted as the students being ready to write as far as hand skills are concerned.

**Table 5.** Findings Related to Students’ Sense of Direction

Concepts	Yes		No		$\bar{X}$
	f	%	f	%	
Above	85	94,4	5	5,6	0,94
Below	81	90,0	9	10,0	0,90
In	87	96,7	3	3,3	0,97
Out	81	90,0	9	10,0	0,90
Right-Left	58	64,4	32	35,6	0,64

When Table 5 is observed, it is seen that 94% of the students are familiar with the concept above, 90% of the students are familiar with below, 96% of the students are familiar with in, 90% of the students are familiar with out, and about 64% of the students are familiar with right-left in terms of their sense of direction. This finding obtained from this research, could be interpreted in this way: most of the students are aware of concepts except the concepts right and left.

#### *Findings Related to the Second Research Question*

Results related to whether students’ use of paper and pen, line work and hand skills show a meaningful difference depending on the gender is shown in Table 6.



**Table 6.** Findings Related to Students' Use of Paper and Pen, Line Work and Hand Skills Influenced by Gender

Parameters	Gender	N	X	SS	sd	t	p
Use of paper and pen	Female	51	2,54	,85	88	2,43	,017*
	Male	39	2,97	,77			
Line work	Female	51	6,78	1,96	88	1,72	,087
	Male	39	6,07	1,86			
Hand skills	Female	51	11,39	2,51	88	2,21	,029*
	Male	39	10,25	2,26			

When Table 6 is observed, it is seen that while there is a meaningful difference ( $t(88) = -2,43$ ,  $p < .05$ ) in favor of males in paper and pencil grasp; there is a meaningful difference ( $t(88) = 2,21$ ,  $p < .05$ ) in favor of females in hand skills. However, no meaningful difference ( $t(88) = 1,72$ ,  $p > .05$ ) is noted in line work and gender. This finding obtained from this research could be interpreted as boys being ready to write in terms of paper and pencil use; girls being ready to write in terms of hand skills.

**Table 7.** Findings Related to Students' Sense of Direction Influenced by Gender

Parameters	Gender	N	Mean Rank	Rank Sum	U	p
Sense of direction	Female	51	49,73	2536,00	779	,048
	Male	39	39,97	1559,00		
Total		90				

When Table 7 is observed, it is seen that gender variable has an influence on students' sense of direction ( $U = 779$ ,  $p < .05$ ). When mean rank is taken into account, sense of direction in girls is higher than those of boys. In the light of this finding, girls could be mentioned as more ready to write in terms of concepts of direction.

**Table 8.** Findings Related to Students' Use of Paper and Pencil, Line Work and Hand skills Influenced by Age(Months)

Parameter	Source of Variance	Sum of Squares	Sd	Quadratic Mean	F	p
Use of paper-pencil	Intergroup	4,400	7	,629	,871	,533
	In-group	59,200	82	,722		
	Total	63,600	89			
Line work	Intergroup	11,537	8	1,442	,747	,650
	In-group	156,418	81	1,931		
	Total	167,956	89			
Hand skills	Intergroup	11,762	9	1,307	,669	,734
	In-group	156,193	80	1,952		
	Total	167,956	89			

When Table 8 is observed, a meaningful difference is not seen between the students' skills of using paper and pencil ( $F(7- 82) = .871$ ,  $p > .05$ ), line work ( $F(8- 81) = .747$ ,  $p > .05$ ), hand skills ( $F(9- 80) = .669$ ,  $p > .05$ ) and the age variable.

**Table 9.** Findings Related to Students' Senses of Direction Influenced by Age(Months)

Parameter	Age	N	Mean Rank	sd	X <sup>2</sup>	p
Knowledge of Direction	60-63	1	66,00	7	6,734	,457
	64-66	11	34,00			
	67-69	22	43,39			
	70-72	24	45,27			
	73-75	19	52,89			
	76-78	10	49,40			
	78-81	2	45,25			
	81-84	1	24,50			
Total		90				

When Table 9 is observed, the students' skills of direction is not influenced by the age variable( $X^2(7) = 6.734, p > .05$ ). No meaningful difference is seen between skills of direction and age variable.

Findings of this research puts forward the fact that levels of writing preparedness does not change according to age. These findings, regardless of the student experience, support will be made available when required writing readiness training provided. In addition, the majority of pre-school students have been trained in working groups considered to be effective.

**Table 10.** Findings Related to the Effect of Having A Preschool Education on Paper and Pencil Use, Line Work and Hand Skills

Parameters	N	X	SS	sd	t	p
Use of paper and pencil	64	2,73	,85	88	,018	,985
	26	2,73	,82			
Line work	64	6,54	1,91	88	1,72	,087
	26	6,30	2,05			
Hand skills	64	11,23	2,39	88	2,05	,043
	26	10,07	2,48			

When Table 10 is analysed, it is seen that while paper and pencil use ( $t(88) = ,018, p > .05$ ) and line work ( $t(88) = 1,72, p > .05$ ) are not effected by preschool variable; a meaningful difference is noticed between students' hand skills( $t(88) = 2,05, p < .05$ ) and the students' having a preschool education. This finding obtained in this research could be interpreted as the students having received a preschool education are more ready to write in terms of their hand skills.

**Table 11.** Findings Related to the effect of Having A Preschool Education on Concepts of Direction

Parameter	Preschool Education	N	Mean Rank	Rank Sum	U	p
Knowledge of Direction	Students with preschool education	64	48,27	3089,00	655	,075
	Students with no preschool education	26	38,69	1006,00		
Total		90				

When Table 11 is analysed, a meaningful difference ( $U = 655, p > .05$ ) is not observed between students' skills of direction and their preschool background. This finding obtained in this research shows that skills of direction are not effected by having a preschool education.

### *Findings Related to the Third Research Question*

In this research, student opinions on their preparedness levels for writing are determined. The data related to student opinions are given in Tables 12, 13 and 14.

Students were asked if they had difficulty in grasping pencils and why they had this difficulty. 12 out of 18 students have stated that they had no such difficulty and 6 have stated otherwise. Reasons for having difficulty grasping their pencils are given in Table 12.

**Table 12.** Reasons for Having Difficulty in Pencil Grasp

<b>Reasons for Having Difficulty in Pencil Grasp</b>	<b>f</b>
Having small hands	3
Slipping of the pencil(from the hand)	2
Pain in the hands	1

According to Table 12, when asked about their reasons for having difficulty in grasping their pencils, three students mentioned the problem of having small hands. According to two other students, slipping of their hand is a reason for having the difficulty. Lastly, one student mentioned the reason as his/her hands being tired. 11 of the students stated that line work was a challenge for them. The difficulty and stress that students Ö5, Ö6, Ö10, Ö14 have expressed their views as to keep the pen.

*"...I strain so great though I'm a little more hands-on. While bothers me ..."* (Ö6)

*"... While my hands so tight it hurts, she can not get blood. Then I close hand open and say, relieved ..."* (Ö14)

*"...No. Because not too difficult to keep."* (Ö5)

*"I do not get stuck ... It's so hard, it's not heavy."* (Ö10)

Findings related to the reasons of having difficulty in line work are given in Table 13.

**Table 13.** Students' Reasons For Having Difficulty in Line Work

<b>Reasons for having difficulty in line work</b>	<b>f</b>
Hands being tired and pain	3
Difficulty of line work	3
Line work being boring	2
Not being able to draw lines without being flown out	2
Hand prevention while drawing	1

When Table 13 is analysed, it is seen that students have mentioned problems such as their hands being tired and being in pain while performing line work as line work is a challenging task. The students Ö2, Ö8, Ö9, Ö15 who participated in the survey, the opinions regarding the status line of work strain is as follows:

*"... I'm tired hand in drawing lines. Because the draw can not take my hand, I push paper all the time."* (Ö9)

*"I raise my hand to avoid flooding happens a lot. I can not keep on top of the pen line. He pushes me."* (Ö2)

*"I was struggling in kindergarten, but now I can not be forced."* (Ö8)

*"I do not get stuck. ... I draw the line without lifting my hand as I do."* (Ö15)

In the research, student opinions related to writing are determined. The opinions are given in Table 14.

**Table 14.** Student Reviews on Writing

<b>Reasons of attitude towards writing</b>	<b>f</b>
Writing is	9
Writing is challenging	4
Learning letters is good	3
Writing names is fun	1
Willingness to succeed	1

When Table 14 is observed, it could be stated that reviews of students about writing are mostly positive. 9 of the students mentioned writing as fun, 4 as challenging and 3 of the students have described learning letters as good. Indicating that the fun of writing students Ö4, Ö8, Ö17, these thoughts are stated

*"When writing my hands while I am improving, I'm having fun."* (Ö4)

*"I love writing. When writing a lot of people are having fun ..."* (Ö8)

*"... Because it's so fun to draw the line."* (Ö17) by the sentences.

Students Ö3 and Ö5 indicating that writing is very difficult:

*"... Because there's a lot in some lines, it's very difficult."* (Ö3)

*"I do not like writing and drawing the line. Because the draw is very hard for me."* (Ö5) stated their thoughts.

### **Discussion, Result and Suggestions**

The aim of this research is to analyse the writing preparedness levels of first year primary school students taking into account some variables. The results obtained from this research indicate that about more than half of the students hold the pencil correctly while nearly half of them hold the pencil incorrectly. This result is also supported by the student interviews. A part of the students interviewed have stated that writing is challenging due to having small hands, the slipping of the pencil from the hand and pain in hands. The findings related to the research shows a direct consistency with the research made by Yangın (2007). In the study carried out by Yangın (2007), a part of the students have had the difficulty of grasping the pencil correctly as well. Pencil grasp is a stage of great significance effecting the writing process and the habits caught in pencil grasp continue to exist as lifelong accustomedness. For students to write legibly and fast, it is necessary for them to reach a certain level in pencil grasp. Doing this in the wrong way leads to hands being tired easily and prevents writing properly (Akyol, 2007; Bayat, 2013; Çelenk, 2007; Güneş, 2007). In this respect, first year primary school students are required to have the necessary knowledge, skill and experience in pencil grasp. Nearly half of the students' wrong way of pencil grasp reveal that students in this research do not have adequate preparedness in this subject. This situation may stem from the inadequate education regarding this matter in preschool education. According to Temur (2011), two basic reasons lie beneath this issue. One of the reasons is that families do not give the necessary explanation to children who use pencil for the first time. One other reason is the lack of importance of the issue in preschool even if there are painting and scratching tasks.

In the research, it is asserted that more than half of the students do not hold paper correctly and a part of them do not leave the right distance between paper and eye. The research findings show consistency with the research made by Yangın (2007). In the research carried out by Yangın (2007), it is also seen that a part of the students do not hold paper correctly and about half of the students do not leave the right distance between paper and eye. Paper position and distance between eye and paper are crucial factors effecting the writing process. In order for students to write fast and legibly, they need to be aware of these factors and apply them. Paper position depends on which hand the writer writes with. The position of the paper should be inclined 40-45 degrees for a right-handed person, the body inclined on the left and the eyes 30-40 cm away from the paper (Temur, 2011). More than half of the students' not holding the paper correctly and some of the students' not leaving the right distance between the paper and the eye may stem from inadequacy in their education in this specific issue in preschool years. No explanations, information or gain is included in preschool education by Ministry of National Education curriculum (MEB, 2013). However, students are actively involved in activities such as drawing and painting during preschool period which is why students should be taught about these topics.

Looking into the research results, it is seen that students are in "Average" level regarding the drawing of vertical, horizontal, italic and circular lines and their combinations properly and correctly. In the interviews made, students have stated to have certain difficulties due to certain reasons while doing line work. Results obtained from the research are partly consistent with the research carried out by Yangın (2007). In the research by Yangın (2007), it is seen that students are "insufficient" in drawing properly and "average" in drawing correctly. It is important for the students to draw lines properly and correctly in that they write letters in the desired way. The students being on an "average" level in drawing properly and correctly may stem from the inadequate education regarding this matter in preschool education.

Hand skills, on the other hand, are at a "satisfactory" level in the research. These findings obtained in this research are consistent with the research by Yangın (2007). In the research conducted by Yangın (2007), students' hand skills are also found to be at a "satisfactory" level. During the preschool period, activities requiring hand skills such as cutting, folding and sticking and activities requiring hand-eye coordination are of great influence in the writing skills of students (Dankert, Davies, & Gavin, 2003). Students being at a satisfactory level in hand skills in this research may stem from the adequate education regarding this matter in preschool period. Educators are advised to carry out activities of cutting, folding and sticking in the preschool curriculum (MEB, 2013). In the research made by Erdoğan, Altınkaynak, and Erdoğan (2013), it is seen that mostly cutting, folding and sticking activities were included in the research in order to develop students' writing skills. It is stated in the research that students are aware of directional concepts except right-left. These findings obtained in this research are consistent with the research by Yangın (2007). Prior to their learning how to write, students need to be aware of the direction of writing. This issue is essential with regard to the neatness and correctness of the writings. This clearly shows why teachers should draw attention to directions in the line work stage. Students with no familiarity with directions may have difficulty connecting letters properly. Students' not having enough knowledge on the concepts of right-left may be interpreted as not having adequate education.

Students' levels of preparedness and sub-dimensions are influenced by gender. Results of the findings show that male students are ready to write in terms of paper and pencil use; while female students of line work. These results obtained from the research do not show consistency with the research by Yıldız, Ataş, Aktaş, Yekeler, and Dönmez (2015) and Erkan (2011). The research by Yıldız, Ataş, Aktaş, Yekeler, and Dönmez (2015) asserts that gender is not a determining factor in the development of the perception of writing in the preschool period. In the research by Erkan (2011), it is stated that gender does not make a difference in the first year primary school students with respect to students' preparedness levels.

All the sub-dimensions of the students' preparedness levels are not influenced by the age variable. This finding of the research puts forward that there is no difference in the writing preparedness levels of students in different ages (60-84 months). Today, due to being exposed to plenty of stimulants at an early age, preschool education they receive, growing up under similar conditions and experiencing specific events at an early age, they already have certain levels of writing preparedness. In other words, children at different ages may have knowledge, skill and experience in writing earlier than their ages. All these factors reduce the effect of the age variable in learning. Therefore, age is not an effective factor for children growing up under the same conditions.

Findings of the research display that levels of writing preparedness changes according to whether the student has received a preschool education only in terms of hand skills. These results obtained do not show consistency with the research carried out by Erkan (2011) and Çelenk (2008). In these researches, writing preparedness levels of students who have received preschool education were found meaningfully high. In preschool education, hand skill activities such as cutting, folding and sticking are generally done. However, tasks related to using paper-pencil, line work and direction skills are not sufficient. This situation may not have created a difference in students who have and have not received a preschool education.

Findings of this research reveal that students have positive opinions regarding writing. Majority of the students state that writing is fun, learning letters is good, writing their names is nice and that they wish to be successful. This result found in this research shows consistency with the study made by Çelenk (2007). In the study by Çelenk (2007), it is seen that the students are highly prepared for their first reading writing process affectively. Although students face problems in preparing for writing, the writing process is interesting for them and they are happy to write something as the process is a brand new experience for them. For this reason, the writing process is a fun and delightful process.

Following could be suggested in the light of the research findings:

1. In preschool period, more tasks should be practised on paper and pencil grasp, leaving the right distance between the eye and paper, drawing lines properly and correctly and right-left concepts in order to prepare students for writing.
2. More detailed information and explanation should be included about preparation to writing in preschool education.
3. In-service training should be provided to preschool teachers on preparation for writing.
4. Similar researches should be carried out on more number of students by handling more variables that could influence writing preparedness.

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