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An investigation of primary school first-grade students' print awareness and basic writing skills[1]

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ABSTRACT

This study aims to examine the print awareness and basic writing skills of first-grade primary school students. A descriptive survey method was used for the study. The study group consisted of 116 first-grade students (56 female and 60 male) in Ankara. Data were collected using the Personal Information Form, Print Awareness Test, and Basic Writing Skills Test from the Early Literacy Diagnostic Assessment Tool (ELDAT). The Print Awareness Test contains 15 items, and the Basic Writing Skills Test contains 16 items. These tests are evaluated using a low, medium, or high scale. After obtaining the necessary permissions, the tests were administered individually to each student in four different sessions. We checked whether the data met the normality assumption, and we performed a Kolmogorov-Smirnov test. The skewness and kurtosis coefficients of the scores obtained from the Print Awareness and Basic Writing Skills tests were examined, and the tests' normality status was determined. Accordingly, an independent samples t-test and ANOVA were used to analyze variables with a normal distribution, while a Mann-Whitney U-test and a Kruskal-Wallis H-test were used to analyze variables without a normal distribution. The analyses revealed that the writing awareness of first grade primary school students was high, differing slightly from the medium level, and that their basic writing skills were also high. Another result revealed that the basic writing skills and writing awareness of first-grade primary school students did not differ significantly according to gender. The writing awareness and basic writing skills of the first-grade primary school students who participated in the study were found to differ significantly in the context of the variable of receiving preschool education. The study also revealed that the writing awareness of first-grade primary school students differed significantly according to their socioeconomic level. Considering the results of this study, further research examining the relationship between print awareness and reading and learning skills is recommended.

KEYWORDS

Writing awareness, literacy, writing skills.

Instruction

As a cultural phenomenon, literacy develops over time and in different spaces as a societal need. Literacy serves to develop different aspects of society, such as history, the economy, politics, education, and literature. It begins at birth and continues throughout life as a cultural skill. Language fosters emotional and mental development, as well as skills such as thinking, understanding, learning, focusing, and evaluating. Primary school is an important stage in literacy education that develops regularly and systematically, starting from the preschool period. Children encounter shapes, graphics, and texts in printed and digital materials daily. These signs, labels, logos, billboards, and packaging are the first elements of literacy that children encounter (Bayraktar, 2018). As one of the main indicators of literacy, writing is an indispensable tool for

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learning. The permanence of writing has made it a necessary and valuable tool in the process of reviewing and evaluating ideas.

Writing is a task that requires coordination of many body parts while also requiring mental planning. While grasping the pen and moving their hand, the writer must think and decide what to write, remember the letters, and write them in the correct order. They must also design and implement the order of syllables, words, and sentences and create a meaningful structure by spacing them out. In addition to managing skills such as hand-eye coordination, the brain engages many psycholinguistic skills, such as choosing appropriate words, applying grammar rules, maintaining focus during the writing process, recalling information, and checking and correcting mistakes. The main goal for a child learning to write is to learn the structure of letters and write legibly. Print awareness includes knowledge of writing forms, styles, and functions. Print awareness includes understanding that writing has meaning, recognizing writing in one's environment, knowing the basic elements of a book (title, cover, author's name), understanding writing direction, and recognizing all the letters of the alphabet (Lefebvre et. al., 2011). According to Delican and Ateş (2021b), print awareness—defined as knowledge about book and writing arrangements, as well as the functions of print—is interactive with the process of learning to read. Reading consists of discovering, rediscovering, and elaborating on the functions and rules of the writing system. Literature research suggests that this process has two basic components: alphabetic and orthographic knowledge. Alphabetic knowledge involves learning the shapes of letters and their corresponding sounds. This knowledge is an important determinant of reading accuracy and is acquired in early childhood through play, naming, and letter writing (Zugarramurdi et al., 2022). Orthographic knowledge refers to mastering specific letter combinations that make up words. Knowledge of a word's orthographic features, such as its combinations and letter positions, develops gradually in early childhood (Tucker et al., 2016) and predicts automatic and fluent reading in primary school (Wang et al., 2014). Practicing handwriting supports the development of orthographic knowledge (Conrad ve Deacon, 2023). This is because writing helps us to visually process letter and sound sequences in words. Handwriting practice has been identified as a key exercise that supports the acquisition of alphabetic and orthographic knowledge during the pre-reading stage because it involves precisely reproducing letter forms through perceptual-motor activities. The idea is that the tactile and mechanical tasks of handwriting play an important role in embedding alphabetic and orthographic knowledge into learning mechanisms in the brain (Bosse et al., 2014; Deacon et al., 2019). Basic literacy skills include designing and creating written texts in terms of form and content, formally evaluating a text, and comprehending its content. Print awareness should be considered a learning and comprehension tool for children.

Basic writing skills include drawing shapes and patterns, using small motor skills; the physical elements of writing, such as sitting, wrist posture, hand posture, and holding a pen and paper; and letter-writing skills (Delican, 2018). Writing is a complex task that develops with practice. It progresses with consciousness and personal guidance, including the skillful use of different yet intertwined mental processes. Therefore, rather than approaching writing as a simple language skill, it is important to recognize that writing involves understanding and production, combining ergonomic habits (Graham et al., 2013), such as holding a pen or paper, with aesthetic perception. In schools, activities that raise awareness about writing should be based on this assumption. Children with typical development acquire handwriting skills in the first grade of primary school (ages 6–7), and these skills stabilize by the middle of the second grade (ages 7–8). For third graders (ages 8-9), regular practice and intensive work on writing develop skills from previous grades. Handwriting becomes automatic and organized, facilitating the expression of ideas (Gosse et al., 2021; Karlsdottir & Stefansson, 2002; Overvelde & Hulstijn, 2011). This information shows that writing skill development progresses linearly, with each grade level influenced by the previous one. Understanding the challenges that hinder children's ability to correctly form letters is crucial for addressing the needs of beginning writers in handwriting development. This is also important for teachers and researchers who assist children with

handwriting difficulties. The purpose of this study is to determine the handwriting awareness and basic writing skills of first-grade students. In accordance with this purpose, the problem statement is as follows: "What is the level of print awareness and basic writing skills of first-grade primary school students?" The subproblems of the research are listed below.

1. What is the level of print awareness of first grade primary school students?
2. Primary school first grade students' print awareness;
   2.1.Does it show a significant difference according to gender?
   2.2. Does it differ significantly according to the status of receiving pre-school education?
   2.3. Does it differ significantly according to socio-economic level?
3. The level of basic writing skills of first grade primary school students;
   3.1. Does it show a significant difference according to gender?
   3.2. Does it show a significant difference according to the status of receiving pre-school education?
   3.3. Does it differ significantly according to socio-economic level?

Method

Research model

This study used a descriptive survey model. Descriptive studies aim to define a particular situation as thoroughly and carefully as possible. Such studies can collect information about individuals' or groups' abilities, preferences, behaviours, attitudes, opinions and skills, and provide an overview of their characteristics and visibility. They can also reveal the current situation. Identifying the factors that trigger the development of writing awareness and basic writing skills in first-grade students provides important evidence for programme developers, teachers and researchers. Therefore, this study used a descriptive survey model to analyse students' basic writing skills and their current level of writing awareness.

Study group

A total of 116 students were included in the study group, of whom 56 (48%) were girls and 60 (52%) were boys. All of the students were in the first year of primary school and were attending schools in the Mamak and Etimesgut districts of Ankara. Table 1 provides information on the preschool education status and socioeconomic levels of the participating students.

Table 1 Information about students in the study group

Preschool Education Status	f	%
Those who received pre-school education	59	51.3
Those who did not receive pre-school education	57	4.7
Socio-Economic Level (SEL)		
Low SEL	10	8.5
Medium SEL	83	71.8
High SEL	23	19.7
Total	116	100

Information about the preschool education status and socio-economic levels of the students taking part in the study was obtained from their families and teachers. As shown in Table 1, the vast majority of students in the study come from middle socio-economic backgrounds. The age at which the students started school was also determined. The age range at which they started school varies from 68 to 100 months. Accordingly, it can be seen that most students started school at 72, 75, 76, 77, 78 or 80 months of age. In Turkey, children who reach 69 months of age by the end of September in the year of registration are enrolled in the first year of primary school. Additionally, children aged 66, 67 and 68 months whose parents submit a written request are also accepted into the first year of primary school. Children aged 60–66 months who are

developmentally ready for primary school may also be enrolled in the first year if their parents submit a written request. It is also noteworthy that 31 students aged 81–100 months participated in the study.

Data collection tools

The Personal Information Form, Writing Awareness Test and Basic Writing Skills Test from the Early Literacy Diagnostic Assessment Tool (ELDAT), which was developed by Delican and Ateş (2021b), were used as data collection tools in the study. The ELDAT comprises a booklet containing six standardised tests: the Basic Visual Perception Test, the Listening, Watching and Comprehension Test, the Visual Reading and Comprehension Test, the Phonological Awareness Test, the Writing Awareness Test and the Basic Writing Skills Test. Following validity, reliability and item analysis studies on the ELDAT, which was developed in a study involving 781 students, it was found that the Basic Visual Perception Test comprised 17 items under four dimensions, the Listening, Watching and Comprehension Test comprised 20 items under one factor, the *Visual Reading and Comprehension* Test comprised 15 items under three factors, the Phonological Awareness Test comprised 55 items under eight factors, the *Writing Awareness Test* comprised 15 items under two factors, and the Basic Writing Skills Test comprised 16 items under two factors. The researcher has received training in administering and evaluating these tests, and has been granted permission to use them. As a result of this training, the researcher has obtained a certificate for the ELDAT application process. For this study, the Personal Information Form, the *Writing Awareness Test* and the Basic Writing Skills Test were used in accordance with the ELDAT application manual guidelines. Explanations of the data collection tools are provided in the headings.

Personal information form: This form includes sections on the student's name, surname, gender, pre-school education status, socio-economic level and practitioner information. It was completed by students' parents and teachers.

Writing awareness test: This test consists of two trial items and 15 test items designed to assess the writing awareness skills of first-grade primary school students. The items are categorised under the headings 'recognising book concepts' and 'recognising writing concepts'. There is one trial item for each of the six items related to identifying book concepts, and one for each of the nine items related to identifying writing concepts. The evaluation criteria for the Writing Awareness Test are as follows: 0–5: Low; 5.01–10: Medium; 10.01–15: High.

Basic writing skills test: This test consists of two sample items and sixteen test items designed to assess the basic writing skills of first-grade primary school students. The items are categorised under the headings 'copying patterns and shapes' and 'writing letters'. There are nine items related to copying patterns and shapes, and seven items related to writing letters. Scoring for the Basic Writing Skills Test is as follows: 0–0.33: low; 5.34–10.67: medium; 10.68–16: High.

The application supplements included in ELDAT were used alongside data collection tools. These supplements are a storybook, a copying page and a letter-writing page. The researcher duplicated the application supplements while administering the ELDAT tests.

Data collection process

During the data collection phase, communication was established with students' families, school administrators and classroom teachers, and information about the purpose of the research was provided. After obtaining consent from parents and school administrators who completed the “Parent Consent Form”, a meeting was held with the Year 1 teachers. They were given detailed information about the purpose of the research, the data collection tools to be used and the implementation process. Appointments were made with the teachers at a convenient time, and the days and times for administering the tools were determined. The data collection tools were administered to each student individually in four separate sessions. Each

student took the following tests separately at different time intervals:*(1)Book Concept Recognition Test; (2)Writing Concept Recognition Test; (3)Copying Patterns and Shapes Test; (4) Letter Writing Test Support* was provided by the classroom teacher and assistant researcher during the administration of the tests. Once the data collection process was complete, the forms were sorted and reviewed. The scores obtained by each student on the Book and Writing Concept Recognition tests were added together to calculate the total *Writing Awareness Test (WAT)* score, and the scores obtained on the *Pattern and Shape Copying and Letter Writing* tests were added together to calculate the total *Basic Writing Skills Test (BWST)* score. These scores were then entered into a computer-based statistical programme.

Data analysis

To decide which analyses to perform on the data obtained from first-grade primary school students, we first checked whether the data met the normality assumption. To this end, a Kolmogorov–Smirnov test was conducted and the resulting values are presented in Table 2.

Table 2 Skewness and Kurtosis values for writing awareness and basic writing skills tests

Test / Size	Kolmogorov-Smirnov			Distortion		Flatness		Normality Condition
	Statistics	sd	p	Statistics	sh	Statistics	sh	
-Writing Awareness Total Score	.10	116	.003	-.50	.225	-.44	.446	Normal Distribution
1.Size: Recognising Book Concepts	.19	116	.000	-.63	.225	-.70	.446	Normal Distribution
2.Size: Recognising Writing Concepts	.15	116	.000	-.63	.225	-.32	.446	Normal Distribution
-Basic Writing Skills Total Score	.15	116	.000	-.68	.225	-.06	.446	Normal Distribution
1.Size: Copying Patterns and Shapes	.15	116	.000	-.36	.225	-.63	.446	Normal Distribution
2.Size: Writing Letters	.35	116	.000	-2.83	.225	12.67	.446	*Non-Normal Distribution*

Examining the findings from the Kolmogorov–Smirnov test in Table 2 revealed that the variables did not exhibit a normal distribution. To determine whether the variables meet the normality assumption, different methods are employed alongside normality tests. If the skewness and kurtosis coefficients fall within the range [-1 ≤ … ≤ 1] (Büyüköztürk et al., 2020), the variables can be considered normally distributed. For this reason, the skewness and kurtosis coefficients of the scores obtained by primary school students on the Writing Awareness and Basic Writing Skills tests were examined to decide whether the variables were normally distributed. According to the values in Table 2, the scores obtained by students on the Writing Awareness Test and its sub-dimensions, and on the Basic Writing Skills Test and its Copying Patterns and Shapes sub-dimension, show a normal distribution. However, it was determined that the scores on the Letter Writing dimension of the Basic Writing Skills Test did not follow a normal distribution. Consequently, the Independent Samples t-Test and ANOVA were employed to analyse the variables exhibiting normal distribution, while the Mann-Whitney U-Test and Kruskal–Wallis H-Test were utilised for the variable displaying non-normal distribution.

Findings

Findings regarding first-grade primary school students' awareness of writing

Descriptive analyses were made to determine the print awareness levels of the first grade primary school students participating in the study and the findings are presented in Table 3.

Table 3 Print awareness levels of first grade primary school students

Size	N	$\overline{X}$	Ss
1. Size: Recognising Book Concepts	116	4.64	2.07
2. Size: Recognising Writing Concepts	116	6.00	2.42
-Writing Awareness Total Score	116	10.63	3.98

The findings in Table 3 show that the mean score $\overline{X}$ = 10.63 in the *Print Awareness Test* of the first grade primary school students in the study group. When the sub-dimensions of the test were analysed, it was determined that the mean score of the *Recognition of Book Concepts* dimension was $\bar{X}$= 4.64 and the mean score of the Recognition of Writing Concepts dimension was $\bar{X}$= 6.00 Considering that the highest score that can be obtained from this test is 15 and the middle level range is "5.01-10", it can be stated that the writing awareness levels of first grade students are at a high level but very close to the middle level.

Investigation of basic writing skills of first grade primary school students

Descriptive analyses were conducted to determine the level of basic writing skills of first-grade primary school students participating in the study, and the findings are presented in Table 4.

Table 4 Basic writing skills levels of first grade primary school students

Size	N	$\overline{X}$	Ss
1.Size: Copying Knitting Patterns and Shapes	116	5.97	2.01
2.Size: Letter Writing	116	6.47	1.05
-Basic Writing Skills Total Score	116	12.43	2.59

Table 4 shows that the average score for first-grade primary school students on the *Basic Writing Skills Test* $\bar{X}$=12.43. The average score for the *Copying Patterns and Shapes* sub-dimension is $\bar{X}$= 5.97, while the average score for the *Letter Writing* sub-dimension is $\bar{X}$ = 6.47. Considering these findings, it can be stated that first-grade students have a high level of basic writing skills.

Examining writing awareness and basic writing skills according to gender variables

An independent samples t-test was conducted to determine whether first-grade elementary school students' levels of writing awareness differed according to gender. The findings are presented in Table 5.

Table 5 Results of the Independent Samples t-Test for students' writing awareness by gender

Size	Gender	N	$\overline{X}$	Ss	t	p
-Writing Awareness Test Total Score	Female	56	10.66	3.69	.06	.95
	Male	60	10.61	4.10		
1.Size: Understanding Book Concepts	Female	56	4.58	2.17	-.28	.77
	Male	60	4.70	2.00		
2. Size: Recognising Writing Concepts	Female	56	6.05	2.37	.22	.81
	Male	60	5.95	2.48		

The findings in Table 5 show that there is no significant difference in the level of writing awareness between first-grade primary school students based on gender. It was determined that girls' scores were higher than boys' scores, but this difference was not statistically significant.

To determine whether the basic writing skills of the students participating in the study differed by gender, an Independent Samples t-Test and a Mann Whitney-U Test were conducted, and the findings are listed in Table 6.

Table 6 Results of the Independent Samples t-Test and Mann Whitney-U Test for students' basic writing skills by gender

Size	Gender	N	$\overline{X}$	Ss	p	p
1.Size:Copying Knitting Patterns and Shapes	Female	56	6.34	1.92	1.90	0.60
	Male	60	5.63	2.05		
- Basic Writing Skills Test Total Score	Female	56	12.80	2.43	1.46	1.45
	Male	60	12.10	2.70		
	Gender	N	$\overline{X}$	Ss	U	p
2.Size: Letter Writing	Female	56	6.46	1.19	1593.5	.570
	Male	60	6.48	.92		

According to Table 6, there is no significant difference in the basic writing skills of first-grade primary school students based on gender. Although girls' scores are higher than boys' scores, this difference is not statistically significant.

Examination of writing awareness and basic writing skills according to preschool education status

An independent samples t-test was conducted to determine whether there were significant differences in the level of writing awareness among first-grade primary school students based on whether they had received pre-school education, and the findings are presented in Table 7.

Table 7 Results of the Independent Samples t-Test for writing awareness according to preschool education

Size	Preschool Education Status	N	$\overline{X}$	Ss	t	p
1.Size: Understanding Book Concepts	Yes	59	5.33	1.62	3.86	.000*
	No	57	3.92	2.25		
2. Size: Recognising Writing Concepts	Yes	59	6.49	2.29	22.6	.026*
	No	57	5.49	2.47		
-Writing Awareness Test Total Score	Yes	59	11.79	3.48	3.31	.001*
	No	57	9.43	4.14		

**p<.05*

When the findings in Table 7 are examined, it is seen that first-grade primary school students' awareness of writing shows a significant difference according to whether they have received pre-school education, and that this difference is in favour of students who have received pre-school education. Furthermore, when examining the sub-dimensions of the test, it was determined that there were significant differences between the groups in both the *Book Concept Recognition* and *Writing Concept Recognition* dimensions. This difference was found to be in favour of students who had received preschool education. In this regard, it can be stated that first-grade students who have received preschool education have higher writing awareness than students who have not continued preschool education.

In order to determine whether the basic writing skills of first-grade primary school students differ according to their preschool education status, an Independent Samples t-Test and Mann-Whitney U Test were conducted, and the findings are presented in Table 8.

Table 8 Independent Samples t Test and Mann Whitney-U test results of basic writing skills according to preschool education status

Size	Preschool Education Status	N	$\overline{X}$	Ss	t	p
1.Size: Copying Knitting Patterns and Shapes	Yes	59	6.33	1.76	2.00	.047*
	No	57	5.59	2.20		
	Yes	59	12.93	2.29	2.11	.037*

- Basic Writing Skills Test Total Score	No	57	11.92	2.79		
	Preschool Education Status	N	$\bar{X}$	Ss	U	p
2.Size: Letter Writing	Yes	59	6.62	.78	1523.0	.298
	No	57	6.31	1.26		

*p<.05

The findings in Table 8 show that there is a significant difference in the basic writing skills of first-grade elementary school students depending on whether they received preschool education. This difference is in favor of students who received preschool education. Furthermore, when the scores on the subdimensions of the test are examined, a significant difference in favor of students who received preschool education is observed in the "Copying Patterns and Shapes" subdimension. Based on these findings, it can be said that first-grade students who received preschool education have significantly higher basic writing skills than those who did not receive preschool education.

Yazı examining writing awareness and basic writing skills according to socioeconomic level

A one-way analysis of variance was conducted to determine whether first-grade elementary school students' awareness of writing differed according to socioeconomic status, and the findings are listed in Table 9.

Table 9 Results of One-Way Analysis of Variance (ANOVA) according to the socio-economic level variable of writing awareness

Size	Socio-Economic Level	N	$\overline{X}$	Ss	F	p	Fark
1.Size: Understanding Book Concepts	Low (1)	10	4.90	1.85	4.981	.008*	2-3
	Medium (2)	83	4.30	2.10			
	High (3)	23	5.78	1.67			
2.Size: Recognizing Writing Concepts	Low (1)	10	6.10	1.85	13.350	000*	1-3
	Medium (2)	83	5.40	2.37			
	High (3)	23	8.08	1.56			2-3
Writing Awareness Test Total Score	Low (1)	10	11.00	3.43	11.729	.000*	1-3
	Medium (2)	83	9.69	3.87			
	High (3)	23	13.86	2.83			2-3

*p<.05

According to the findings in Table 9, first-grade elementary school students' awareness of writing differs significantly according to socioeconomic status. When examining which groups this difference occurs between, it was determined that there are significant differences between students with high socioeconomic status and those with low and medium socioeconomic status; the significance was found to be in favor of students with high socioeconomic status in both groups. Similar differences between groups were also observed in the sub-dimensions of the test. In the Book Concept Recognition dimension, the significant difference between students with medium and high economic levels was in favor of students with high economic levels. In the "Recognizing Writing Concepts" dimension, the significant difference between students with high economic levels and those with medium and low economic levels was in favor of students with high economic levels in both groups. Accordingly, it can be interpreted that a high socioeconomic level positively affects writing awareness levels.

To determine whether the basic writing skills of first-grade elementary school students differ according to socio-economic level, a one-way analysis of variance (ANOVA) and Kruskal Wallis H test were performed; the findings are presented in Table 10.

Table 10 Results of One-Way Analysis of Variance (ANOVA) and Kruskal Wallis H Test for basic writing skills according to socioeconomic level variables h testi

Size	Socio-Economic Level	N	$\overline{X}$	Ss	F	p	Fark
1.Size: Copying Knitting Patterns and Shapes	Low (1)	10	5.40	2.95	1.327	.269	--
	Medium (2)	83	5.89	1.95			
	High (3)	23	6.52	1.72			
Basic Writing Skills Test Total Score	Low (1)	10	11.40	3.83	1.789	.172	--
	Medium (2)	83	12.36	2.43			
	High (3)	23	13.17	2.42			
	Socio-Economic Level	N	$\bar{X}$	Ss	X^2	p	Fark
2.Size: Letter Writing	Low (1)	10	6.00	1.05	7.982	.018*	1-3 2-3
	Medium (2)	83	6.49	.83			
	High (3)	23	6.60	1.64			

*p<.05

When the findings in Table 10 are examined, it is seen that there is no significant difference in the Basic Writing Skills levels of first-grade elementary school students according to their socioeconomic levels. Although the average Basic Writing Skills scores of students increased as their socioeconomic level increased, this difference was not found to be significant. However, it was determined that the scores obtained from the Letter Writing subscale of the scale showed significant differences according to the students' socioeconomic levels. To determine which groups this difference occurred between, a Bonferroni-corrected Mann Whitney-U test was performed. The analysis revealed that the significant difference between students with high socioeconomic status and those with low and medium socioeconomic status was in favor of students with high socioeconomic status in both groups. Accordingly, it can be said that students with high socioeconomic status have better Letter Writing scores than students with low and medium socioeconomic status.

Conclusions, discussion and recommendations

The results of the study indicate that although first-grade elementary school students scored high in terms of writing awareness, this range is quite close to the middle level. In addition, it can be said that these students' basic writing skills (holding a pen and paper, using their hands) are at a high level. Karlsdottir and Stefansson (2002) make two observations regarding the development of writing skills in the early years of elementary school: First, children's handwriting quality should develop rapidly in first grade and become permanent in second grade. If slow development is observed, corrective measures may be necessary. Another point is that in order to prevent handwriting disorders in the later years of elementary school, it is very important to demonstrate certain characteristics of letter shapes with visual and verbal cues when introducing letters for the first time, and then to systematically repeat the introduction of some or all of the letter shapes. Classroom teachers must use strategies for correction and control to develop their students' writing awareness. To do this, teachers must first carefully observe each student's writing process and understand how the student uses this skill. For example, the following guidelines may be used in the feedback and correction process:

> "You have written the title of this text in capital letters."
> "You have put a period at the end of your sentences."

In addition, after the teacher has read the students' texts, it would be appropriate to give them time to prepare draft texts and add examples related to the topic in order to develop the content of the text and enable them to express their ideas more strongly over time, to encourage them to establish cause-and-effect relationships by asking questions, and to create opportunities for sharing the written text. In this way, the teacher can support students in clarifying their thoughts on the topic and adding details to their writing. Discussing and debating students' writing can

help them strengthen their knowledge of handwriting, spelling, and writing concepts (such as capitalization and punctuation) (Rohlof et al., 2023). Uyanık Aktulun and Gözüm (2024) investigated the effect of visual perception-supported reading and writing preparation activities on writing awareness. The study found that using objects with different shapes, textures, and colors in the activities, developing hand-eye coordination, and drawing attention to similarities and differences provided significant support in understanding the relationships and differences between letters and words related to writing. Bayraktar (2018) states that children whose writing awareness skills are supported learn to read and write more quickly in elementary school. Therefore, children's writing awareness skills need to be supported by adults.

According to the results obtained in the study, when the basic writing skills and writing awareness of first-grade elementary school students were examined, it was found that there was no significant difference between the scores of girls and boys. Similarly, in a study conducted by Delican and Ateş (2021a) with 781 first-grade students, it was determined that there was no significant difference in writing awareness and basic writing skills according to gender. There are many international studies comparing girls and boys in terms of writing development, and they yield different results. For example, Maurer (2024) examined early writing skills and the motor and cognitive factors influencing them in a study involving 120 first-grade students. The study found that girls wrote more legibly than boys and were more consistent in writing speed, while boys showed variability in writing speed and accuracy. A study conducted by Polat and Kesik (2023) revealed that first-grade students demonstrated moderate proficiency in characteristics such as “letter size, spacing, slant, and line awareness,” but were deficient in correctly forming the formal characteristics of letters. In addition, it was determined that while female students were able to write letters structurally correct and in the appropriate order, male students were more successful in spatial parameters (direction and line awareness). Adams and Simmons (2019) examined writing skills according to gender in a study involving 116 children aged 5-6 in England. The results showed that boys wrote shorter texts than girls and made more spelling mistakes than girls in their texts. Although there was no significant advantage for girls in terms of vocabulary, letter knowledge, and phonological awareness, a gender effect was observed in writing quality independently of these factors. The study involved 363 first-grade students who speak German, and measurements and observations were conducted over the course of a year. As a result, it was found that students who made efforts to write quickly and legibly at the beginning of the school year began to consciously balance their behavior of writing letters correctly and writing quickly as the end of the year approached (Truxius et al., 2025). The differences observed in the research results in terms of gender can be attributed to factors related to the environment, motivation, and teachers. The general context of the research, the measurement tools used, and the study designs may lead to different results in relation to the gender variable. Repeating similar studies at different time intervals and with different tests may support a more detailed explanation of this issue.

According to the research results, first-grade elementary school students' writing awareness differs significantly in the context of the variable of receiving preschool education. Additionally, there are significant differences between the groups in terms of both Book Concept Recognition and Writing Concept Recognition. This difference favors students who have received preschool education. It can be stated that the writing awareness of first-grade elementary school students who have received preschool education is higher than that of students who have not received preschool education. According to another result of the study, students' basic writing skills differ significantly depending on whether they have received preschool education. This difference is in favor of students who have received preschool education. There is no difference in the *Letter Writing* dimension according to whether or not students received preschool education; however, in the Copying Patterns and Shapes dimension, a significant difference was observed in favor of students who received preschool education. Accordingly, it can be stated that preschool education has a positive effect on the basic writing skills and writing awareness of first-grade elementary school students. In line with this result, Delican and Ateş (2021a) found a significant

difference in favor of those who received preschool education in the *Writing Awareness* and *Basic Writing Skills* tests. In a study conducted by Temel, Efe, and Yıldız Altan (2025), a positive and moderately significant relationship was found between the visual perception and writing awareness skills of 132 children who received preschool education. This result emphasizes the importance of considering and supporting children's visual perception skills for writing awareness. In a study conducted with preschool teachers, it was determined that there are many materials related to writing awareness in preschool classrooms, that these materials are appropriate for children's developmental characteristics, but that they are not positioned appropriately in classrooms. Additionally, it was understood that teachers preferred large group activities in their efforts to develop letter awareness and emphasized the necessity of "teaching pencil grip skills" to develop letter awareness (Benli et al., 2022).

The Writing Awareness of first-grade students participating in the study differs significantly according to socio-economic level. Students with a high socio-economic level have a higher level of writing awareness than other students. However, students' Basic Writing Skills levels do not differ significantly according to socio-economic level. Although the average Basic Writing Skills scores of students increase as their socioeconomic status increases, this difference is not significant. In the study, which included 304 first-grade students, students' writing skills were evaluated in terms of vocabulary and literacy skills at different periods. It was determined that students' socioeconomic status had a negative effect on writing quality (Kim et al., 2015). Salas and Pascual (2023) investigated the effect of socioeconomic status on literacy development and concluded that there were differences in spelling and handwriting according to students' individual socioeconomic status. When evaluated according to the school's overall socio-economic level, it was determined that low-level groups struggled with text coherence and idea development in writing. In his study with elementary school students from low socioeconomic backgrounds, Jones (2023) emphasized that many students showed serious deficiencies in paper and pencil control and that these students needed intervention. At this point, it is necessary to acknowledge that reading and writing education in schools in low socioeconomic environments generally needs to be supported more in terms of writing awareness and basic writing skills. Preparatory work carried out at the beginning of the reading and writing teaching process in the first grade of elementary school should be supportive of basic writing skills. Particular attention should be paid to structuring the relationship between students in this age group and pencils, notebooks, and books. Gökkuş and Akyol (2020) state that phonological awareness instruction has a high level of impact on the development of early literacy skills (phonological awareness, writing awareness, and vocabulary) in first-grade elementary school students. In this context, it may be advisable to carry out careful work aimed at developing sound and alphabet awareness, particularly in the first grade during the initial reading and writing teaching process. First-grade elementary school students should be encouraged to regularly express their thoughts about their own reading and writing development. Such thoughts about themselves can be noted by their families and teachers, and children who have learned to write can be encouraged to write short pieces about their own development. In this way, such assessments can be used in both diagnostic processes and general assessments. In addition, students should select some of the written materials to be kept in their files and briefly explain the reasons for their choices (Whitehead, 2002). Preparatory activities for elementary school can be carried out in the preschool period to develop students' writing awareness. It is recommended that long-term studies be conducted to examine the relationship between writing awareness and reading and learning skills. These studies could examine the impact of pedagogical interventions on writing awareness and basic writing skills.

Conflict of interest statement

"There is no financial conflict of interest with any institution, organization, or individual in this article titled "Examining First Grade Students' Awareness of Writing and Basic Writing Skills."

Ethical statement

"Ethical permission for this research titled "Examination of First Grade Elementary School Students' Writing Awareness and Basic Writing Skills" was obtained from the Kırıkkale University Social and Human Sciences Research Ethics Committee with decision date 17.05.2025 and letter number 337408.

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