Investigation of Preservice Teachers' Anxiety Levels for the Productive Skills

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Abstract

Productive skills which are speaking and writing uses when an individual's thoughts, emotions, knowledge, etc. transferring to the other person. Regardless of its field of study, every teacher is expected to be successful in speaking and writing. Because, in all aspects such as knowledge transfer and skill acquisition, they can be productive in parallel with their success in these skills. The general purpose of this study; to determine anxiety levels of preservice teachers' productive skills and to examine these levels in terms of determined variables. The study was carried out by descriptive scanning method. The data analyzed in the study were collected at the last week of 2019-2020 Academic Year Fall Semester in the faculty of education at a state university in Turkey, from preservice teachers in the first class. Data collection tools used in the study; It is the Scale of Speaking Anxıety for Prospective Teachers of Kinay and Özkan (2014) and the Writing Anxiety Scale of Karakaya and Ülper (2011). The data were analyzed with the SPSS 25.0. Unrelated Samples t Test and One Way ANOVA were used in the study. The results of the analysis indicate that anxiety levels of preservice teachers' productive skills are low for both speaking and writing skills. In the results of study; gender, speaking anxiety has a significant effect on the physiological symptoms subscale, and writing anxiety. It was understood that the situation of wanting to be a teacher and the average number of books read in a year did not affect the writing anxiety, while in the total score of speaking anxiety and some subscale caused differentiation. The results of the study are show that thinking their dictions are correct, and speaking situations face the community are effective on speaking anxiety; writing habits, and the frequency of written expression in secondary and high school are effective on the preservice teachers' writing anxiety. It can be said that speaking anxiety and writing anxiety do not differ according to the main disciplines of preservice teachers. Analyzes conducted indicate that writing anxiety and speaking anxiety are moderately and significantly related.

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Introduction

Language, which is the basic means of understanding and communication of human beings, consists of four basic skill areas. These areas according to the order of education; listening, speaking, reading and writing. Skill areas; it can be divided into two main groups as comprehension and productive skills. Comprehension skills, reading and listening, an individual's event, situation, concept, etc. It can be explained as understanding and structuring information through various mental processes. Productive skills, on the other hand, are used by the person to understand a thought, feeling, knowledge, etc. Speaking and writing skills used in the process of transferring to the other person.

Thoughts and feelings are conveyed to the other person through speech, but speech should not be seen as just a vocal process. Speaking is a process that starts in the mind and ends with the verbal expression of thoughts (Güneş, 2016). Speaking, which has an important place in individual and social life, is also one of the factors that determine success in education and business life (Temizkan, 2016). Qualified speaker is a person who makes planned, knowing the subject to speak, knowing the listener, observing, using time effectively and efficiently, controlling excitement, knowing the limits of his voice, knowing the limits of his voice, knowing Turkish, open to criticism, using body language, correct style, having a solid character and personality and paying attention to etiquette (Topçuoğlu-Ünal & Özden, 2018, pp. 106-111). Katrancı and Melanlıoğlu (2013) state that providing preservice teachers to become competent in speaking skills during undergraduate education will affect the quality of their education in formal education institutions in the following years.

Writing, which is another of the productive skills, is an indispensable field of skill especially in education life. Writing skill is a skill that is acquired later and is relatively more difficult than other skill areas. Güneş (2016) defines writing as the act of transferring using various symbols in accordance with certain rules using writing, thoughts, feelings, etc. in our minds.

Anxiety, which gives individuals feelings such as sadness, worry and tension, is a feeling that can negatively affect both daily life and education and business life. High levels of anxiety towards language skills can also be detrimental to one's understanding, expression and sharing. Breakey (2005) states that speaking in front of a community, regardless of size, is often an act that most people dislike and avoid. It can be thought that if a teacher continues his lesson with anxious speech, it will cause distraction of the students, the teacher being a wrong example for them and the lesson time will be inefficient (Katrancı & Kuşdemir, 2015). Anxiety towards writing is generally reflected in the products written and the attitudes and behaviors during writing (Daly & Wilson, 1983). In addition, "speaking and writing anxiety can create emotional states that reduce the quality of learning processes and pose an obstacle to the individual" (Barutcu, 2020, pp. 86-87).

As teachers are role models of students, how and how they speak or write is important to their students. Teachers should support what they say by showing them as well as advising students what is good and what is right. In addition, as Bodie (2010) stated, educators have an obligation to help their students overcome their fear of speaking. It can be thought that this situation is also necessary in overcoming the fear of writing.

Regardless of the branch, every teacher is expected to be successful in speaking and writing, which are productive skills. Because they can be efficient in all matters such as transferring knowledge to their students, acquiring acquisitions, and gaining skills, only in parallel with the success levels in these skills. In this context, it is important for preservice teachers, who are the teachers of the future, to develop themselves in the aforementioned areas.

When the literature on preservice teachers' speaking anxieties is reviewed, the studies that generally address the speaking anxiety of the Turkish teacher candidates (Baki & Kahveci, 2017; Baki & Karakuş, 2015; İşcan & Karagöz, 2016; Kardaş, 2015; Lüle-Mert, 2015; Şen, 2017) were understood to done. In addition, there are also studies that examine the speaking anxiety of only classroom teacher candidates (Deringöl, 2018; Tolun, 2019) or only social studies teacher candidates (Durmuş & Baş, 2016). In addition to these, there are also studies that carry out their application with two different branches of science (Gömleksiz & Koç-Deniz, 2019; Temiz, 2013). There are limited number of studies that can be detected in the literature, which are collected data from more than two

main disciplines and regarding the speaking anxiety of preservice teachers: three of them (Özkan & Kinay, 2015; Suroğlu-Sofu, 2012; Temiz, 2015) are scanning method and one (Katrancı & Kuşdemir, 2015) is experimental method are researches.

As a result of the literature review regarding the writing anxieties of pre-service teachers, the studies were generally conducted with Turkish teacher candidates (Demir & Çiftçi, 2019; İşeri & Ünal, 2012; Ürün-Karahan, 2017), classroom teacher candidates (Kuşdemir, Şahin & Bulut, 2016) or two It was understood that the group was taken together (Kalaycı & Erdoğan, 2017). The only study that has been found to be practiced with three different branches of science is a study that belongs to Karakaya and Ülper (2011) and includes Turkish and elementary teacher candidates as well as elementary mathematics teacher candidates. In the aforementioned study, in addition to examining writing anxiety, the scale used in this study was also developed.

When all these studies are taken into consideration, it is seen that about the anxiety levels of the preservice teachers in speaking and writing skills a limited number of study and especially applied the branches of Turkish education. In addition, the researchers determined the anxiety levels of only speaking or only writing skills and made examinations in terms of some variables. However, speaking and writing are parallel to each other and when considered together as productive skills; anxiety for one may also be related to the other.

In this context, the general purpose of the study is; to determine the level of anxiety of preservice teachers about productive skills and to reveal the status of these levels in terms of determined variables. For this purpose, the questions to be answered are listed as follows:

1. What are the preservice teachers' anxiety about speaking and writing?
2. Preservice teachers' speaking and writing anxiety; does it differ significantly according to their gender, departments, their willingness to be a teacher, and the average number of books they read in a year?
3. Speaking concerns of preservice teachers; does it differ significantly according to the situations of thinking that their diction is correct and having spoken in public before?
4. Writing concerns of preservice teachers; does it differ significantly according to the writing habits, the frequency of written expression in secondary school and the frequency of written expression in high school?
5. Is there a significant relationship between preservice teachers' anxiety about speaking and writing?

Method

This study is a descriptive research and was carried out by scanning method. Karakaya (2014) states that survey research is widely used in social sciences, and researchers describe a situation in detail with screening research.

Population and Sample

The population of the study are preservice teachers in different departments of education faculties of universities in Turkey. Easily accessible sampling was preferred in the selection of the sample group for the study. The sampling of the mentioned type; "It is carried out on volunteers who are in the immediate vicinity and are easy to reach, available and want to participate in the research" (Erkuş, 2019, p. 145). The sample of the research; preservice teachers who are in the faculty of education at a state university in Turkey, studying in first grade and taken Turkish Language I course from the same teacher of during a semester.

The distribution of preservice teachers, who are the sample of the study, according to various variables is given in Table 1, Figure 1 and Figure 2:

Table 1. Distribution of preservice teachers by gender and departments

	F	M	T
Science Teaching	46	8	54
English Teaching	33	19	52
Mathematics Teaching	33	16	49
Preschool Teaching	21	10	31
Special Education Teaching	35	35	70
Social Sciences Teaching	14	13	27
Total	182	101	283
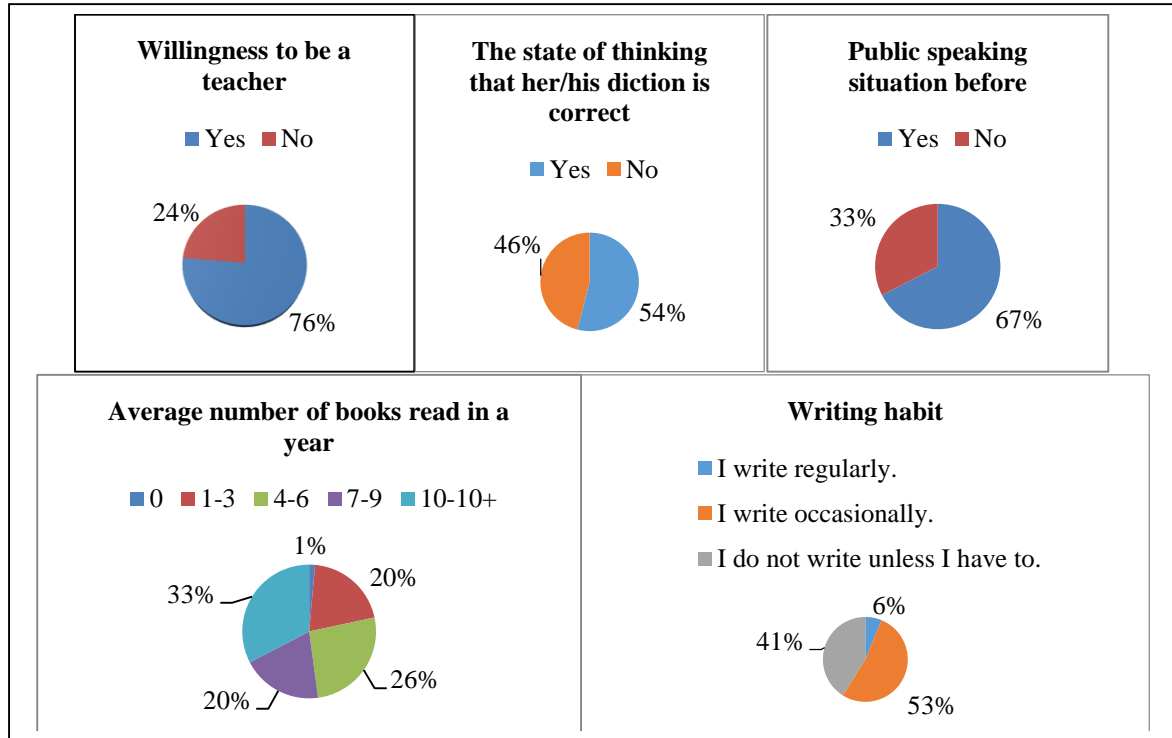
Figure 1. Distribution of preservice teachers according to various variables
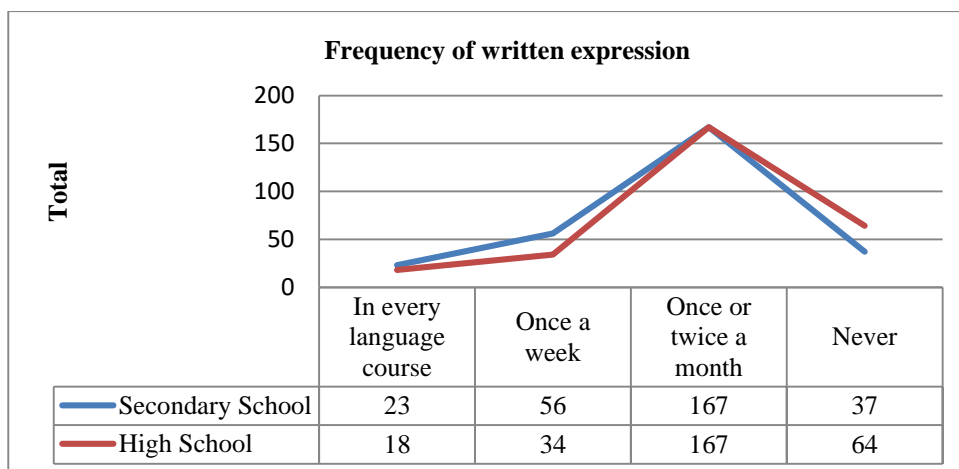
Figure 2. The frequency of preservice teachers to make written expressions in secondary and high school

Data Collection Instruments

In this study, besides the personal information form prepared by the researcher, two different scales whose validity and reliability were determined were used. Information on the scales used is as follows:

The Scale of Speaking Anxiety for Prospective Teachers, developed by Kinay and Özkan (2014), is a scale consisting of 3 subscales and 40 items. The subscale of the scale; physiological symptoms (11 items), skill-related anxiety (6 items) and psychological state (23 items). These three subscales explain 42.34% of the total variance. The factor loads of the items in the scale were found between .444 and .716. The fit indices of the scale were examined with confirmatory factor analysis and it was found that the Chi-square value ($x2 = 1925.70$, N = 336, sd = 737, p = 0.00) was significant. The fit index values were given by the researchers (RMSEA; 0.069, SRMR; 0.059, CFI; 0.96, IFI; 0.96, NFI; 0.93, NNFI; 0.96, $x2 / df = 2.61$). The reliability coefficient of the scale is; It was calculated between .942 for all items and between .785 and .927 for the subscales of the scale. Test-retest reliability of the scale was also calculated, and it was found .835 for the whole scale and .627 and .788 for its subscales.

The Writing Anxiety Scale, developed by Karakaya and Ülper (2011), is a one-dimensional scale consisting of 35 items. One factor explains 48.90% of the total variance. Item loads on the scale are mostly over .60. The fit indices of the scale are given as (RMSEA; 0.009, SRMR; 0.061, CFI; 0.95, NFI; 0.95, NNFI; 0.97). The reliability coefficient of the scale was calculated by the researchers as .970. The scale was prepared in five-point likert type as "Always, Most of the Time, Sometimes, Very Rarely, Never". 5 points were given for the "Always" option of the scale, which is scoring gradually decreased. The total score obtained from the scale is directly proportional to the level of anxiety.

From the applied scales; The Writing Anxiety Scale has 35 items and the lowest score that can be obtained from the scale is 35 and the highest score is 175. The Scale of Speaking Anxiety for Prospective Teachers consists of 40 items and the lowest score that can be obtained from the scale is 40 and the highest score is 200. The high scores on the scales indicate a high level of anxiety.

Tekin's (2019) "string width / number of groups to be made" formula was used in determining the value ranges to interpret anxiety levels. Table 2 shows the ranges of the highest and lowest scores that can be obtained from the scales and the scores obtained:

Table 2. Value ranges of scale scores

Scale and subscales	Number of items	Min	Max	Anxiety levels and ranges of values				
				Very low	Low	Medium	High	Very high
Writing anxiety	35	35	175	35-63	64-91	92-119	120-147	148-175
Speaking anxiety	40	40	200	40-72	73-104	105-136	137-168	169-200
Physiological symptoms	11	11	55	11-19,8	19,9-28,6	28,7-37,4	37,5-46,2	46,3-55
Skill-related anxiety	6	6	30	6-10,8	10,9-15,6	15,7-20,4	20,5-25,2	25,3-30
Psychological state	23	23	115	23-41,4	41,5-59,8	59,9-78,2	78,3-96,6	96,7-115

Data Collection and Analysis

For this study, both scales were applied to preservice teachers together with the personal information form prepared by the researcher. The data were collected in one class hour in the last week of the fall semester of the 2019-2020 academic year.

Anxiety data about productive skills collected from preservice teachers were analyzed using SPSS 25.0 package program. The Cronbach Alpha reliability coefficient of the Writing Anxiety Scale applied in this study ($α=, 960$); The Cronbach Alpha reliability coefficient of the Scale of Speaking

Anxiety for Prospective Teachers was found at (ɑ=, 942). This indicates that the data are highly reliable.

Since the distribution of the data obtained in the study showed normalcy, parametric tests were used in examinations to be made for variables. Unrelated Samples t Test was used for variables with two categories, and One Way ANOVA for variables with three or more categories. The Scheffe test was preferred for the scores that were found to be significant as a result of the ANOVA test - considering the homogeneity of the variances and the differences between the sample numbers in the groups.

Cohen and Manion (1998) state that many researchers who will conduct statistical analysis on data agree that the sample size is at least thirty. For this reason, groups with less than thirty persons in the variables to be analyzed were excluded from the analysis. In determining the relationship between productive skills, Pearson Correlation analysis was used as the data were distributed normally.

Findings

The relationship between the preservice teachers' anxiety levels about speaking and writing, which are their productive skills, and the relationship between them and the analysis findings according to the variables specified in the sub-problems are as follows:

Table 3. Anxiety levels of preservice teachers about productive skills

	N	Min	Max	χ	S	Anxiety level*
Writing anxiety	283	35	144	79,35	24,75	Low
Speaking anxiety	283	44	148	92,37	24,22	Low
Physiological symptoms	283	11	41	22,96	6,78	Low
Skill-related anxiety	283	6	28	16,20	4,64	Medium
Psychological state	283	23	91	53,21	15,62	Low

* In the interpretation, the value ranges given in Table 2 were taken into consideration.

When Table 3 is examined, it is seen that the anxiety levels of the preservice teachers about both speaking and writing skills are low. The results show that only skill-related anxiety subscale is a medium level in the speaking anxiety.

Table 4. Analysis of anxiety levels towards productive skills by gender

	Gender	N	χ	S	df	t	p
Writing anxiety	Female	182	81,67	25,18	281	2,13	.034*
	Male	101	75,16	23,50			
Speaking anxiety	Female	182	93,93	24,51	281	1,45	.147
	Male	101	89,56	23,54			
Physiological symptoms	Female	182	23,74	6,84	281	2,62	.009**
	Male	101	21,55	6,48			
Skill-related anxiety	Female	182	16,32	4,76	281	0,59	.557
	Male	101	15,98	4,43			
Psychological state	Female	182	53,87	15,80	281	0,95	.342
	Male	101	52,03	15,29			

* p < .05, ** p < .01

When Table 4 is examined, in which the anxiety levels towards productive skills are analyzed according to the gender variable, it can be said that this variable causes a significant difference in the physiological symptoms subscale of writing anxiety and speaking anxiety. When the averages are examined, it is seen that writing anxiety is higher in female preservice teachers than in male. In addition, it can be said that female preservice teachers have higher levels of anxiety in the subscale of physiological symptoms about speaking.

Table 5. Analysis of anxiety levels towards productive skills according to departments

	Source of variance	Sum of squares	df	Mean of squares	F	p	Significant difference
Writing anxiety	Between groups	1928,760	4	482,190	0,808	.521	No difference
	Within groups	149867,678	251	597,082			
	Total	151796,437	255				
Speaking anxiety	Between groups	3255,736	4	813,934	1,490	.206	No difference
	Within groups	137114,124	251	546,271			
	Total	140369,859	255				
Physiological symptoms	Between groups	320,905	4	80,226	1,884	.114	No difference
	Within groups	10685,904	251	42,573			
	Total	11006,809	255				
Skill-related anxiety	Between groups	289,808	4	72,452	3,536	.008**	English Teaching and Mathematics Teaching ($\eta^2=0,053$)
	Within groups	5143,630	251	20,493			
	Total	5433,438	255				
Psychological state	Between groups	964,963	4	241,241	1,044	.385	No difference
	Within groups	57980,877	251	231,000			
	Total	58945,840	255				

** $p < 0.01$

When the anxiety levels of preservice teachers towards their productive skills were examined according to the departments, it was understood that there was only a differentiation in the skill-related subscale of speaking anxiety. As a result of the Scheffe test, it is seen that this difference is between English and Mathematics preservice teachers. The calculated effect size is ($\eta2 = 0.053$) and it is medium.

Table 6. Average scores of anxiety levels by departments

	Departments+	N	χ	S
Skill-related anxiety	Science teaching	54	16,24	4,42
	English teaching	52	14,54	4,77
	Mathematics Teaching	49	17,71	3,84
	Preschool Teaching	31	17,16	5,27
	Special Education Teaching	70	15,93	4,51
	Total	256	16,20	4,62

+ Since 27 students from the social studies teaching department participated in the study, the preservice teachers in this group were excluded from the analysis in the comparisons made according to the department.

When the averages of the sub-dimension of anxiety about skills are compared, it can be said that the mathematics teacher candidates have higher levels of anxiety than the pre-service English teachers.

Table 7. Analysis of anxiety levels towards productive skills according to the willingness to be a teacher

	The willingness to be a teacher	N	χ	S	df	t	p
Writing anxiety	Yes	216	79,10	25,36	281	0,30	.766
	No	67	80,13	22,81			
Speaking anxiety	Yes	216	90,73	23,95	281	2,06	.041*
	No	67	97,66	24,51			
Physiological symptoms	Yes	216	22,74	6,90	281	0,97	.335
	No	67	23,66	6,37			
Skill-related anxiety	Yes	216	16,19	4,65	281	0,05	.958
	No	67	16,22	4,64			
Psychological state	Yes	216	51,80	15,14	281	2,77	.006**
	No	67	57,78	16,37			

* $p < .05$, ** $p < .01$

When Table 7 is evaluated, it can be said that the speaking anxiety of the preservice teachers who do not willing to be a teacher, is significantly higher than the candidates who wanted to be teachers. In addition, the psychological anxiety levels of the candidates who do not come to the teaching profession voluntarily are significantly higher than the other candidates.

Table 8. Analysis of anxiety levels towards productive skills according to the average number of books read in a year

	Source of variance	Sum of squares	df	Mean of squares	F	p	Significant difference
Writing anxiety	Between groups	1747,556	3	582,519	0,946	.419	No difference
	Within groups	168738,707	274	615,835			
	Total	170486,263	277				
Speaking anxiety	Between groups	6693,628	3	2231,209	3,886	.010*	1-3 and 10-10+ (η^2=0,041)
	Within groups	157336,286	274	574,220			
	Total	164029,914	277				
Physiological symptoms	Between groups	230,876	3	76,959	1,661	.176	No difference
	Within groups	12695,833	274	46,335			
	Total	12926,709	277				
Skill-related anxiety	Between groups	197,659	3	65,886	3,085	.028*	1-3 and 10-10+ (η^2=0,033)
	Within groups	5851,852	274	21,357			
	Total	6049,511	277				
Psychological state	Between groups	2962,230	3	987,410	4,181	.006**	1-3 and 10-10+ (η^2=0,044)
	Within groups	64707,601	274	236,159			
	Total	67669,831	277				

* $p < .05$, ** $p < .01$

According to Table 8, it can be said that the average number of books the preservice teachers read in a year makes a significant difference between the total score of speaking anxiety and the subscales of anxiety about skills and psychological status. Scheffe tests conducted show that these differences are between those who read 1-3 books a year and those who read 10 or more books. It can be said that the effect sizes ($\eta2$ = 0.041), ($\eta2$ = 0.033) and ($\eta2$ = 0.044) are medium and close to each other.

Information on the averages of the groups whose differences are determined as a result of the analysis are given in Table 9:

Table 9. Average scores of anxiety levels according to the number of books read in a year

	Number of books+	N	χ	S
Physiological symptoms	1-3 books	57	99,95	24,53
	4-6 books	74	94,63	24,36
	7-9 books	55	91,25	23,37
	10-10+ books	92	86,68	23,64
	Total	278	92,42	24,33
Skill-related anxiety	1-3 books	57	17,33	4,16
	4-6 books	74	16,81	4,59
	7-9 books	55	15,82	4,81
	10-10+ books	92	15,22	4,80
	Total	278	16,19	4,67
Psychological state	1-3 books	57	58,26	16,22
	4-6 books	74	54,30	14,92
	7-9 books	55	53,34	14,95
	10-10+ books	92	49,28	15,42
	Total	278	53,26	15,63

+ Since only 4 of the preservice teachers who participated in the study stated that they had not read any books, these people were excluded from the analysis in the comparisons made according to the number of reading books.

When the direction of the differences is determined by considering the averages, it is seen that those who read 1-3 books a year have more anxiety than those who read more than 10-10 books. This situation can be interpreted as those who read less books have higher anxiety levels.

Table 10. Analysis of anxiety levels towards speaking according to the state of thinking that their diction is correct

	The state of thinking that their diction is correct	N	χ	S	df	t	p
Speaking anxiety	Yes	153	86,90	23,83	281	4,24	.000**
	No	130	98,81	23,14			
Physiological symptoms	Yes	153	21,86	6,66	281	3,01	.003**
	No	130	24,25	6,72			
Skill-related anxiety	Yes	153	15,08	4,42	281	4,53	.000**
	No	130	17,51	4,56			
Psychological state	Yes	153	49,96	15,43	281	3,90	.000**
	No	130	57,05	15,02			

** p < 0.01

Table 10 shows that preservice teachers who think that their diction is not smooth have significantly higher anxiety level than preservice teachers who think that their diction is smooth in all subscales with total score of their speaking anxiety.

Table 11. Analysis of anxiety levels towards speaking according to the state of public speaking before

	The state of public speaking before	N	χ	S	df	t	p
Speaking anxiety	Yes	191	88,71	25,10	217,2	4,03	.000**
	No	92	99,98	20,37			
Physiological symptoms	Yes	191	22,42	6,81	281	1,92	.056
	No	92	24,06	6,62			
Skill-related anxiety	Yes	191	15,56	4,82	215,7	3,64	.000**
	No	92	17,52	3,94			
Psychological state	Yes	191	50,72	16,11	215,4	4,25	.000**
	No	92	58,39	13,19			

** p < 0.01

When Table 11 is evaluated, it is seen that the situations of speaking in public before preservice teachers differ significantly in the total score of speaking anxiety and the subscales of anxiety about skill-related and psychological state. When the averages are examined, it is understood that the anxiety levels of the preservice teachers who have not given a public speech before are higher.

Table 12. Analysis of writing anxiety levels according to writing habits

	Writing habits+	N	χ	S	df	t	p
Writing anxiety	I write occasionally	142	72,44	20,70	206,8	5,87	.000**
	I do not write unless I have to	111	90,13	25,94			

+ Since there were 17 preservice teachers who said they wrote regularly; they were excluded from the analysis.

** p < 0.01

Table 12 shows that writing habit significantly affects writing anxiety. The findings show that the writing anxiety of the preservice teachers who do not write unless they have to, is higher than the preservice teachers who write occasionally.

The writing anxiety of the preservice teachers was addressed according to the frequency of their written expression in secondary school. Table 13 gives the results of the analysis conducted for this purpose:

Table 13. Analysis of writing anxiety levels according to the frequency of written expression in secondary school

	Source of variance	Sum of squares	df	Mean of squares	F	p	Significant difference
Writing anxiety	Between groups	13643,141	2	6821,570	12,305	.000**	Once a week and never, Once or twice a month and never (ɳ²=0,087)
	Within groups	142470,844	257	554,361			
	Total	156113,985	259				

** p < .01

When Table 13 is examined, it is seen that the frequency of written expressions made in secondary school has a significant effect on pre-service teachers' writing anxiety. With the Scheffe test conducted, it is understood that this difference is between those who made written expression once a week in secondary school and those who never do, and between those who made written expression once or twice a month and those who never do.

Table 14. Average scores of anxiety levels according to the frequency of written expression in secondary school

	The frequency of written expression in secondary school	N	χ	S
Writing anxiety	Once a week	56	72,79	24,85
	Once or twice a month	167	79,58	23,44
	Never	37	97,08	21,94
	Total	260	80,61	24,55

When the averages in Table 14 are taken into consideration, it is understood that those who do not make any written expression in secondary school have the highest level of writing anxiety.

The writing anxiety of the preservice teachers was also addressed according to the frequency of their written expression in high school. Table 15 contains the results of the analysis:

Table 15. Analysis of writing anxiety levels according to the frequency of written expression in high school

	Source of variance	Sum of squares	df	Mean of squares	F	p	Significant difference
Writing anxiety	Between groups	14040,737	2	7020,368	12,291	.000**	Once a week and never, Once or twice a month and never (ɳ²=0,086)
	Within groups	149650,003	262	571,183			
	Total	163690,740	264				

** p < .01

According to Table 15, the writing anxiety of preservice teachers differs significantly according to the frequency of written expression in high school. As a result of the Scheffe test conducted to determine among which groups this difference is, it was found that, as in the frequency of written expression in secondary school, it was found between those who made written expression once a week and those who did not do it at all, and those who did not make written expressions once / twice a month and those who did not.

Table 16. Average scores of anxiety levels according to the frequency of written expression in high school

	The frequency of written expression in high school	N	χ	S
Writing anxiety	Once a week	34	66,85	19,87
	Once or twice a month	167	77,92	23,96
	Never	64	90,81	25,61
	Total	265	79,61	24,90

When the averages in Table 16 are examined, it is seen that the writing anxiety of the preservice teachers who have never made written expression in high school is much higher than the other groups.

In the study, Pearson moment product correlation was used to examine the relationships between writing anxiety, speech anxiety and all subscales of this anxiety of preservice teachers. The findings of the analysis are as in Table 17:

Table 17. Analysis of the relationship level between the levels of anxiety towards productive skills

N: 283	Writing anxiety	Speaking anxiety	Physiological symptoms	Skill-related anxiety	Psychological state
Writing anxiety	1	0,571	0,484	0,501	0,527
		.000**	.000**	.000**	.000**
Speaking anxiety	0,571	1	0,798	0,822	0,960
	.000**		.000**	.000**	.000**
Physiological symptoms	0,484	0,798	1	0,586	0,629
	.000**	.000**		.000**	.000**
Skill-related anxiety	0,501	0,822	0,586	1	0,722
	.000**	.000**	.000**		.000**
Psychological state	0,527	0,960	0,629	0,722	1
	.000**	.000**	.000**	.000**	

$** \ p < .01$

When Table 17 is evaluated, it can be said that writing anxiety and speaking anxiety are moderately and significantly related. Again, writing anxiety is moderately and significantly related to all subscales of speaking anxiety.

Conclusion, Discussion and Suggestions

As a result of the study, it was determined that the anxiety levels of the preservice teachers about productive skills were low for both speaking and writing skills. It can be said that this result is gratifying when we consider the preservice teachers as future teachers. When we look at the studies in the literature on the speaking anxiety of preservice teachers, the following results are encountered: The findings of Temiz (2015) are that the speaking anxiety of preservice teachers who have pedagogical formation in different branches is very low. Researchers (Kardaş, 2015; Lüle-Mert, 2015; Şen, 2017) also determined that the speaking anxiety of the Turkish teacher candidates was low in different studies in the study group consisting only of Turkish teacher candidates. The results of the research conducted by Deringöl (2018) and Tolun (2019) with the classroom teacher candidates and Durmuş and Baş (2016) with the social studies teacher candidates also show that the candidates have a low level of speaking anxiety. Suroğlu-Sofu (2012), on the other hand, in his study examining the speaking anxiety of teacher candidates, concluded that the candidates had moderate speaking anxiety.

As a result of the research, it was stated that the writing anxiety of the preservice teachers was low as well as the speaking anxiety. The results of other studies investigating the writing anxiety of preservice teachers are as follows: İşeri and Ünal (2012) and Demir and Çiftçi (2019) for Turkish teacher candidates; Kalaycı and Erdoğan (2017) found that both Turkish and classroom teacher candidates had low writing anxiety. The findings of Ürün-Karahan (2017) are that the writing anxiety of Turkish teacher candidates is high. Kuşdemir, Şahin, and Bulut (2016) found that the classroom teacher candidates' writing anxiety was moderate.

In the study, it was concluded that gender did not have a significant effect on the total score of preservice teachers' speaking anxiety. This result coincides with the findings of Özkan and Kinay (2015). In addition, the results of the studies conducted on the speaking anxiety of Turkish teacher candidates (Baki & Karakuş, 2015; Kardaş, 2015; Lüle-Mert, 2015; Şen, 2017) show that speaking anxiety does not differ significantly according to gender. In the studies conducted by Durmuş and Baş (2016) with social studies teacher candidates and Deringöl (2018) with candidate classroom teachers, it is seen that gender does not have a significant effect on speaking anxiety. The results of Suroğlu-Sofu (2012) and Baki and Kahveci (2017) show that the speaking anxiety of female preservice teachers is significantly higher than male preservice teachers.

However, in this study, there is a gender difference in the physiological symptoms subscale of speaking anxiety. According to the averages, female preservice teachers have a higher level of anxiety

in the physiological dimension of speaking than male preservice teachers. This result corresponds exactly to the findings of the studies conducted by Gömleksiz and Koç-Deniz (2019) with Turkish and elementary mathematics teacher candidates and by Tolun (2019) with prospective classroom teachers. In the aforementioned studies, the difference based on gender is only in the physiological symptoms subscale and it is that female preservice teachers have more speaking anxiety.

As a result of the study, it was understood that gender is a variable that has a significant effect on preservice teachers' writing anxiety. The results show that female preservice teachers have more writing anxiety than men. The results of Demirel's (2019) study are in the opposite direction of this result and that male preservice teachers have more writing anxiety. In many studies in the literature that are usually conducted with Turkish and / or classroom teacher candidates (Demir & Çiftçi, 2019; İşeri & Ünal, 2012; Kalaycı & Erdoğan, 2017; Karakaya & Ülper, 2011; Kuşdemir, Şahin & Bulut, 2016) it was concluded that gender is a variable that does not significantly affect writing anxiety.

As a result of the research, it can be said that speaking anxiety and writing anxiety do not differ according to the departments that preservice teachers are trained in. Similarly, in different studies in the literature on speaking anxiety (Suroğlu-Sofu, 2012; Temiz, 2015), it is seen that the fields of preservice teachers do not have a significant effect on speaking anxiety. The only significant difference calculated for the anxiety levels of the preservice teachers studying in different departments in the study; it is in the skill-related anxiety subscale of speaking anxiety. The results show that in this subscale, preservice mathematics teachers have higher anxiety levels than preservice English teachers. Gömleksiz and Koç-Deniz (2019) compared the speaking anxiety of preservice elementary mathematics teachers and Turkish teacher candidates. Unlike this study, the researchers found no difference in the level of anxiety about skill as a result of the comparison, while they found a difference in the subscales of speaking anxiety and the total score of physiological symptoms and psychological status. Their findings are that the anxiety levels of preservice mathematics teachers are higher. However, since the Turkish teacher candidates were not included in this study, it would not be correct to make a one-to-one comparison in the results.

The results of Özkan and Kinay (2015) are that the departments are effective in the total score of speaking anxiety and subscales of anxiety about skill-related and psychological state. In their study, they state that the lowest anxiety level for all scales is in preservice teachers who receive language education. In the study of Temiz (2013) comparing the speaking anxiety of music teacher candidates and Turkish teacher candidates, it was found that Turkish teacher candidates had significantly higher anxiety levels.

The results of the study show that writing anxiety does not differ according to the departments of preservice teachers. This result coincides with the findings of Kalaycı and Erdoğan (2017). Demirel (2019) states that the writing anxiety of Turkish teacher candidates is significantly lower than other teacher candidates.

As a result of the study, it was understood that the speaking anxiety of the candidates who did not willing to be a teacher, and their anxiety about the psychological state, which is one of the subscales of speaking anxiety, was found to be significantly higher. The status of willing to be a teacher does not make a significant difference on the writing anxiety of preservice teachers.

The results of the study show that the average number of books that preservice teachers read in a year is effective in the total score of speaking anxiety and subscales of skill-related anxiety and psychological status. It was understood that the anxiety levels of the preservice teachers who read less books were higher. In Kardaş's (2015) study, it was found that the speaking anxiety of the multi-lingual Turkish teacher candidates whose second language is Turkish differs according to the number of books they read in a year. Şen (2017) concluded in his study that reading frequency does not have a significant effect on Turkish teacher candidates' speaking anxiety. The results of the study show that the writing anxiety of the preservice teachers does not differ significantly according to the average number of books they read in a year. The findings of İşeri and Ünal (2012) are that the number of books read does not affect the writing anxiety of Turkish teacher candidates.

The results of the study show that the speech anxiety of the preservice teachers who thought that diction was not smooth was at a higher level in all subscales and total score. Akkaya (2012), in his

study in which preservice teachers determined their speaking problems, found that most of these problems were caused by errors in sound, tone, stress and pronunciation. Based on these results, it can be said that it may be beneficial to give preservice teachers lectures in diction and / or eloquence during undergraduate education, regardless of their department. Because every prospective teacher will need to speak effectively and beautifully, to pronounce words correctly, to use his tone well and to emphasize correctly during his teaching. With this education, they will be able to have more self-confidence in their diction and this may lead to a decrease in speaking anxiety.

When the results are evaluated, it is understood that the anxiety levels of the preservice teachers who had not spoken in front of public before were higher in the subscales of speaking anxiety and skill-related anxiety and psychological status. The results of Özkan and Kinay (2015) indicate that the speaking anxiety scores of the preservice teachers who have not made a speech in any official ceremony before are high in all subscales and total scores. Akkaya (2012) found that getting excited while speaking in front of the community was one of the most frequently mentioned speech problems by preservice teachers. İşcan and Karagöz (2016), on the other hand, state that the Turkish teacher candidates' not having enough practice in speaking in front of the public may be one of the reasons for their high speaking anxiety. In this context, it can be said that it would be beneficial for preservice teachers, who will conduct their professional life by speaking in front of a group of students, to experience speaking in front of the public during their undergraduate years. Making into perform an application one hour of Turkish Language I and Turkish Language II courses, which are included in the first year curriculum of all departments in the faculty of education, may benefit to prospective teachers in this respect.

The results of the study show that the writing habit has an effect on writing anxiety. The writing anxiety of the preservice teachers who did not write unless they had to was found higher than the preservice teachers who wrote occasionally. İşeri and Ünal (2012) also found in their study with Turkish teacher candidates that writing anxiety increased as the frequency of writing decreased. These results can be interpreted as that prospective teachers who have writing anxiety can reduce this anxiety by doing writing activities whenever they find time.

In the study, it was concluded that the frequency of written expression in secondary school and high school years has an effect on the writing anxiety of preservice teachers. It is observed that as the number of written expression activities increased for both educational periods, writing anxiety decreased. It is understood that preservice teachers who have never done any written expression work in the aforementioned years have the highest level of writing anxiety. These results also indicate that writing exercises that are done too much will decrease writing anxiety.

The results of the study indicate that writing anxiety and speaking anxiety are moderately and significantly related. In addition, writing anxiety is moderately and significantly related to all subscales of speaking anxiety.

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