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SELF-EFFICACY PERCEPTIONS OF TURKISH TEACHERS TOWARDS DEVELOPING CREATIVE THINKING SKILLS

Aynur Gözde Karakaş[1]
Ali Türkel[2]
Koray Öz[3]

Abstract

In this study, Turkish teachers' self-efficacy perception towards developing creative thinking skills was analysed. The aim of the research is to determine to what extent Turkish teachers have self-efficacy in developing their students' creative thinking skills. This research is a descriptive research. In the research, the concepts related to creative thinking skills were defined. Then, Turkish teachers' perception of self-efficacy in developing creative thinking skills was evaluated through a questionnaire according to gender and professional experience variables. As a result, it was found that Turkish teachers' self-efficacy towards developing creative thinking skills was good. At the end of the study, suggestions for the development of creative thinking skills were presented.

Keywords: Turkish teachers, creativity, creativity activities

[1] Researcher, Dokuz Eylül University, Institute of Educational Sciences MA Student, gozde0948@gmail.com, https://orcid.org/0009-0003-4010-7849

[2] Assoc. Prof. Dr., Dokuz Eylül University, Faculty of Education, ali.turkel@hotmail.com https://orcid.org/0000-0003-4743-8766

[3] Corresponding Author: Dr., Dokuz Eylül University, International Relations Office, korayoz@windowslive.com, https://orcid.org/0000-0002-5530-5501

Introduction

Every individual has an innate creative thinking potential. This potential develops or atrophies over time. Education is perhaps the first field that has the most responsibility in protecting and developing the existing creative thinking potential. In this sense, as the individual takes his/her first steps into the world of education, efforts should be made to protect and develop his/her innate creative thinking potential. There are many discussions about creative thinking skills. According to our society, creativity can be described as a high-level thinking skill that emerges only in certain individuals, a skill that requires above-average intelligence, a side of us that develops spontaneously without any effort, or mental imbalance. By eliminating the misconceptions in the field and providing more information, contribution can be made to the development of the existing creative thinking potential.

Yeşilyurt (2020) expressed the stages of creativity as preparation (discovery), incubation (play), emergence (creativity-enlightenment) and evaluation (verifying results-solution). The self-efficacy perception of our teachers, who will provide creative thinking skills in schools, gains importance. The competences and equipment that Turkish teachers should have affect their self-efficacy perceptions. While gaining high-level thinking skills in the teaching process, perception levels can be evaluated as an independent variable. For this reason, in the research, self-efficacy perception levels of Turkish teachers were tried to be determined. An individual can transform his/her self-efficacy belief into a positive one by making an effort in line with his/her abilities (Bandura, 1994).

The development of creative thinking skills and techniques can be made possible by enabling the individual to learn the thinking habits and skills of specialised people and to be given the opportunity to practice them. The main purpose of the research is to find answers to two questions; Do Turkish teachers contribute to the development of students' creative thinking skills? What is the level of Turkish teachers' self-efficacy perceptions of developing creative thinking skills?

There is a need for individuals who can put forward creative ideas for existing problems in society. When the processes of thinking skills are examined, the common point can be expressed as the emergence of the idea, creation, discovery of something with a new perspective, and the formation

of a new situation. Especially in case of a problem, finding the most appropriate option to solve the problem at the time of decision making depends on the functionality of creative thinking skills. Creative thinking skill plays an important role in pioneering studies, inventions, ideas, in summary, service activities for the society in the fields of science, art, education, health, etc.

It is assumed that the study for Turkish teachers will be meaningful and useful. With the research, the points and sub-areas where teachers feel themselves deficient in developing creative thinking skills can be identified and studies can be carried out to improve them. Since there is a limited number of studies on self-efficacy perception towards skill development in the literature, it is thought that the study has novelty and originality. The study is aimed at teachers and prospective teachers. The findings can be shared with Turkish teachers during seminar studies. It can contribute to scientific studies to eliminate the deficiencies.

Problem Statement / Sub-Problem Statements

The problem statement of the research is "How is the self-efficacy perception of Turkish teachers towards developing creative thinking skills?". The sub-problems of the research are as follows:

1. According to the gender of Turkish teachers in developing creative thinking skills;

a) Is there a statistically significant difference between their views on creativity and the factors preventing it?

b) Is there a statistically significant difference between their views on teaching practices and activities?

2. According to the professional seniority of Turkish teachers in developing creative thinking skills;

a) Is there a statistically significant difference between their views on creativity and the factors preventing it?

b) Is there a statistically significant difference between their views on teaching practices and activities?

Method

This section includes information on the research model, population and sample, data collection process and analysis, validity and reliability of the research, and the role of the researcher.

Research Model / Design

The study is a quantitative study using a questionnaire design. Quantitative research is defined as "measuring variables using a numerical system and analysing these measurements using various statistical methods" (Zedeck, 2014, p. 284). Creswell and Creswell (2018) explained that quantitative research can include various research designs such as experimental, non-experimental and longitudinal designs. Survey research uses numerical values to indicate a specific situation. It may be the trends, attitudes or opinions of the population of a particular population. In essence, quantitative data usually consists of closed-ended responses in the form of a questionnaire or psychological instrument. Well-structured questionnaires are used to collect data to test existing sub-problems or hypotheses using statistical methods (Jacobsen, 2020). The research data were obtained through a questionnaire between 24.01.2023 and 04.02.2023.

Convenience sampling method was applied in the research. According to Heavey (2019), convenience sampling is a form of non-probability sampling that consists of collecting data from the existing group over a certain period of time and representing the entire subject population. Convenience sampling method is the most effective method for data analysis and during the research study, it was tried to ensure the representativeness of the universe. However, due to various limitations of the study, the entire participant population was not included.

Since the research aims to reveal an existing situation, it was designed in accordance with the survey model, one of the descriptive research methods. Descriptive researches describe a given situation as fully and carefully as possible (Büyüköztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2015). The data obtained during the research process were analysed with statistical techniques and findings were obtained.

Universe / Sample / Study Group / Participants

The research was conducted in Aydın province. In the 2022-2023 academic year in Aydın, a total of 759 people, 457 female and 302 male, are working as Turkish teachers in 240 secondary schools. Since the study group consisted of 211 people, approximately 28% of the universe was reached, it can be accepted that the findings represent the universe. The seniority distribution of the female teachers (f=156, 73,9%) participating in the study was 1-5 years (f=117, 75%), 6-10 years (f=18, 11,5%), 11+ years (f=21, 13,5%), and the male teachers were 1-5 years (f=26, 47,3%), 6-10 years (f=12, 21,8%), 11+ years (f=17, 39%).

Data Collection Process and Tools

The data of the study were collected by using the "Self-efficacy questionnaire for developing creative thinking skills of Turkish teachers" developed by the researcher. The questionnaire items were firstly presented to the Turkish teachers working in the Ministry of National Education for their opinions. Information about the level of comprehensibility was obtained. Suggestions that could be given were recorded. Then the questionnaire was sent to the experts and as a result of the expert opinions, changes were made in the order of the questionnaire items. The questionnaire was finalised and 211 participants were reached. The collected data were analysed with SPSS programme.

Data Analysis

The data were analysed with the SPSS 29.0 programme. Since the study has a descriptive characteristic, the square square including descriptive analysis such as percentage and frequency, t-test was used in the analysis of bivariate continuous data, and Anova tests were used in the analysis of trivariate continuous data.

Findings

In this section, the comparison of Turkish teachers' self-efficacy perceptions towards developing creative thinking skills and the methods they apply according to gender and seniority level is given. In the statistical analyses, the chi-square, independent t-test and Anova were used and interpreted by considering the effect sizes.

Findings Related to the First Sub-Problem of the Research

Table 1. Independent t Test Comparison of Views on Creativity According to Gender

Item	Gender	n	X	sx	df	t	p	Cohen's d
I think my creative thinking skills are developed.	Female	156	3,85	,634		-,847	,398	,611
	Male	55	3,93	,539				
I have in-depth knowledge about creative thinking skills.	Female	156	3,22	,877		-	**,050**	,861
	Male	55	3,49	,814	209	1,974		
I think creativity can be developed through education.	Female	156	4,31	,724		1,591	,113	,723
	Male	55	4,13	,721				

When the opinions about creativity were compared according to the gender of Turkish teachers, a difference was observed in the item "I have in-depth knowledge about creative thinking skills" in favour of males at a large effect level (t209=-1,974, p=,05, Cohen's d= ,861). This may be due to the higher seniority level of male Turkish teachers. There was no significant difference in the other items "I think my creative thinking skills are developed" and "I think creativity can be developed with education".

Table 2. x^2 Test Comparison of Opinions Hindering Creativity According to Gender

Item	Gender	No		Yes		p	x^2
		N	%	N	%		
I am aware of perception barriers.	Female	59	67,8	97	78,2	,090	2,875
	Male	28	32,2	27	21,8		
I am aware of emotional barriers.	Female	47	71,2	109	75,2	,543	,369
	Male	19	28,8	36	24,8		
I am aware of cultural barriers.	Female	60	66,7	96	79,3	**,038**	4,301
	Male	30	33,3	25	20,7		
I am aware of learnt disabilities.	Female	154	74,0	2	66,7	,773	,083
	Male	54	26,0	1	33,3		

When the views that hinder creativity were compared, it was found that female teachers had a higher level of awareness than male teachers in terms

of cultural barriers. It may be due to the fact that students who have just entered puberty or who are in adolescence can easily show self-disclosure behaviour to female teachers. It was understood that they had similar views on perception, emotional and learnt barriers.

Table 3. Independent t Test Comparison of Opinions on Teaching Practices According to Gender

Item	Gender	N	X	Sx	df	t	p	Cohen's d
I support students to ask different types of questions in the lesson by going beyond the stereotyped questions.	Female	156	4,60	,553		1,484	,139	,558
	Male	55	4,47	,573				
I support students' individual learning processes.	Female	156	4,46	,513	209	,524	,601	,527
	Male	55	4,42	,567				
I am tolerant when students make mistakes and give them the opportunity to re-present their ideas.	Female	156	4,53	,561		,252	,801	,581
	Male	55	4,51	,635				

There is no significant difference in teaching practices according to gender. These results mean ensuring equality and justice for students. The fact that the teacher thinks that it does not constitute an independent variable in terms of gaining Turkish competences can be considered as a positive inference in terms of the education system.

Table 4. x^2 Test Comparison of Creativity Activities by Gender

Item	Gender	No		Yes		p	x^2
		N	%	N	%		
I ask short-answer questions.	Female	101	74,8	55	72,4	,698	,151
	Male	34	25,2	21	27,6		
I'll ask oral questions.	Female	52	76,5	104	72,7	,563	,335
	Male	16	23,5	39	27,3		
I ask written questions.	Female	107	72,8	49	76,6	,556	,329
	Male	40	27,2	15	23,4		

I use the aquarium technique.	Female	123	73,2	33	76,7	,638	,221
	Male	45	26,8	10	23,3		
I use the brainstorming technique.	Female	28	71,8	128	74,4	,736	,114
	Male	11	28,2	44	25,6		
I use the speech circle technique.	Female	87	71,9	69	76,7	,435	,608
	Male	34	28,1	21	23,3		
I use the debate technique.	Female	68	70,8	88	76,5	,349	,879
	Male	28	29,2	27	23,5		
I use the scamper technique.	Female	143	73,0	13	86,7	,244	1,358
	Male	53	27,0	2	13,3		
I use creative drama technique.	Female	65	67,7	91	79,1	,060	3,542
	Male	31	32,3	24	20,9		
I make them draw pictures.	Female	68	70,8	88	76,5	,349	,879
	Male	28	29,2	27	23,5		
I create slogans or cartoons.	Female	49	64,5	107	79,3	**,019**	5,516
	Male	27	35,5	28	20,7		
I dictate a text.	Female	30	71,4	126	74,6	,679	,171
	Male	12	28,6	43	25,4		
I will have a visual poster prepared.	Female	54	68,4	102	77,3	,153	2,040
	Male	25	31,6	30	22,7		
I make them use the project method.	Female	83	73,5	73	74,5	,864	,029
	Male	30	26,5	25	25,5		
I use the six-hat thinking technique.	Female	90	72,6	66	75,9	,593	,286
	Male	34	27,4	21	24,1		
I use analogy/similarity.	Female	99	75,0	57	72,2	,648	,208
	Male	33	25,0	22	27,8		
I use simulation.	Female	125	74,4	31	72,1	,758	,095
	Male	43	25,6	12	27,9		
I use drama/role playing technique.	Female	51	68,0	105	77,2	,145	2,126
	Male	24	32,0	31	22,8		
I use the Elves technique.	Female	139	73,5	17	77,3	,706	,142
	Male	50	26,5	5	22,7		
I use the station technique.	Female	82	67,2	74	83,1	**,009**	6,779
	Male	40	32,8	15	16,9		
I use the case study method.	Female	69	71,1	87	76,3	,393	,730
	Male	28	28,9	27	23,7		
Physical (Kinesthetic) studies	Female	85	70,8	71	78,0	,239	1,388
	Male	35	29,2	20	22,0		
I co-operate with families.	Female	83	74,1	73	73,7	,951	,004
	Male	29	25,9	26	26,3		

I direct them to book fairs.	Female	49	62,8	107	80,5	**,005**	7,930
	Male	29	37,2	26	19,5		
I direct them to museums.	Female	85	70,2	71	78,9	,157	2,000
	Male	36	29,8	19	21,1		
I'll direct them to the cinema.	Female	79	68,7	77	80,2	,058	3,598
	Male	36	31,3	19	19,8		
I direct them to the theatre.	Female	65	65,7	91	81,3	**,010**	6,630
	Male	34	34,3	21	18,8		
I use exhibitions.	Female	106	70,7	50	82,0	,090	2,874
	Male	44	29,3	11	18,0		
I use the school block.	Female	127	73,8	29	74,4	,947	,004
	Male	45	26,2	10	25,6		
I use dashboards.	Female	39	66,1	117	77,0	,106	2,607
	Male	20	33,9	35	23,0		
I use science, art and culture magazines.	Female	93	71,5	63	77,8	,315	1,008
	Male	37	28,5	18	22,2		
I support their use of simulation.	Female	133	75,6	23	65,7	,225	1,471
	Male	43	24,4	12	34,3		
I help them create digital stories.	Female	113	75,8	43	69,4	,328	,955
	Male	36	24,2	19	30,6		
I encourage them to generate original ideas for digital problems.	Female	110	73,3	46	75,4	,755	,097
	Male	40	26,7	15	24,6		
I use memory.	Female	54	68,4	102	77,3	,153	2,040
	Male	25	31,6	30	22,7		
I use comics.	Female	98	72,1	58	77,3	,404	,698
	Male	38	27,9	17	22,7		
I use fictional texts.	Female	26	63,4	130	76,5	,087	2,922
	Male	15	36,6	40	23,5		
I use poetry books.	Female	51	64,6	105	79,5	**,016**	5,761
	Male	28	35,4	27	20,5		

Among the teaching activities directed towards creativity; "I create slogans or cartoons.", "I use the station technique.", "I direct to book fairs.", "I direct to theatre.", "I use poetry books." While female Turkish teachers preferred these activities at a higher rate, it was understood that gender was not a significant determinant in the preference of other teaching activities. The fact that the activities that create a significant difference in favour of female teachers mainly include art activities may be due to the importance they attach to speaking skills.

Findings Relating to the Study's Second Sub-Problem

Table 5. ANOVA Test Comparison of Views on Creativity by Seniority Year

Article	Seniority Allowance	n	x	sx
I think my creative thinking skills are developed.	1-5 years	143	3,91	.592
	6-10 years	30	3.70	,702
	11 years	38	3.84	.594
I have in-depth knowledge of creative thinking skills.	1-5 years	143	3.30	.848
	6-10 years	30	3,33	,844
	11 years	38	3,24	,971*
I think creativity can be developed through education.	1-5 years	143	4,27	0.778
	6-10 years	30	4,23	,568
	11 years	38	4,26	.644

Article		Sum of squares	df	Mean of Squares	F	P	Eta-square
I think my creative thinking skills are developed.	Intergroup	1.114	2	,557	1 501	.225	,014
	Intragroup	77,171	208	.371			
	Total	78,284	210				
I have in-depth knowledge of creative thinking skills.	Intergroup	.177	2	,088	.117	.890	.001
	Intragroup	157,605	208	.758			
	Total	157,782	210				
I think creativity can be developed through education.	Intergroup	.026	2	.013	,025	.976	,000
	Intragroup	110,637	208	.532			
	Total	110,664	210				

When the opinions on creativity were compared according to the seniority year variable, no significant difference was observed. The fact that the views on creativity do not differ as the seniority year increases is an indication that teachers have a similar understanding. This may also be the result of the fact that the trainings received before graduation are similar and do not change according to years.

Table 6. Comparison of Views that Hinder Creativity bySeniority Year x^2Test

Article	Years of Seniority	No		Yes		P	x^2
		N	%	N	%		
I am aware of the perception barriers.	1-5 years	56	64.4	87	70.2	0.544	1.217
	6-10 years	15	17,2	15	12,1		
	11 years	16	18,4	22	17.7		
I am aware of emotional barriers.	1-5 years	43	65.2	100	69	.857	,308
	6-10 years	10	15,2	20	13,8		
	11 years	13	19,7	25	17,2		
I am aware of cultural barriers.	1-5 years	62	68,9	81	66,9	687	.751
	6-10 years	14	15,6	16	13,2		
	11 years	14	15,6	24	19,8		
I am aware of the barriers learned.	1-5 years	141	68.7	2	66,7	.660	.830
	6-10 years	30	14,4	0	0		
	11 years	37	17,8	1	33,3		

No significant difference was observed in terms of seniority year, which hinders creativity, in other words, it can be accepted that teachers have similar views. This may be due to interprofessional solidarity and sharing.

Table 7. Comparison of Opinions on Teaching Practices by Seniority Year with the ANOVA Test

Article	Seniority Allowance	n	x	sx
I support students to press and go beyond the questions and ask different types of questions in the course.	1-5 years	143	4,60	,571
	6-10 years	30	4,47	.507
	11 years	38	4,53	,557
I support students' individual learning processes.	1-5 years	143	4,47	,541
	6-10 years	30	4,23	,430
	11 years	38	4,55	,504
By being tolerant when students make mistakes, I give them the opportunity to present their own ideas again.	1-5 years	143	4,51	,580
	6-10 years	30	4,50	.682
	11 years	38	4,61	.495

Article		Sum of squares	df	Mean of Squares	F	p	Eta-square	Difference
I support students to press and go beyond the questions and ask different types of questions in the course.	Intergroup Intragroup Total	0.533 65 / 220 .754	2 208 210	.267 .314	.851	.429	,008	
I support students' individual learning processes.	Intergroup Intragroup Total	1.858 370 ,227	2 208 210	0.929 271	427	**,034**	,032	6-10<1-5 6-10<11+
By being tolerant when students make mistakes, I give them the opportunity to present their own ideas again.	Intergroup Intragroup Total	.293 313 .607	2 208 210	.147 .338	.434	.648	.004	

In terms of teaching practices; "I support students' individual learning processes." ($F_{(2-208)}$= 3.427, p< .05, eta square = .032), teachers with 6-10 years of seniority stated that they gave support with a small effect size compared to teachers with 1-5 and 11+ years of seniority. In other words, they stated support at a rate of approximately 85%. The fact that the effect size is small and the averages are close to each other suggests that they may be thought to be of similar opinion.

Table 8. Comparison of Creativity Activities by Seniority Year x^2 Test

Article	Years of Seniority	No		Yes		P	x^2
		N	%	N	%		
I ask short-answer questions.	1-5 years	91	67.4	52	68,4	.713	,676
	6-10 years	21	15,6	9	11,8		
	11 years	23	17.0	15	19,7		
I ask verbal questions.	1-5 years	40	58,8	103	72.0	0.150	.793
	6-10 years	13	19,1	17	11.9		
	11 years	15	22,1	23	16,1		
I ask written questions.	1-5 years	96	65.3	47	73,4	**,029**	,066
	6-10 years	27	18,4	3	4,7		
	11 years	24	16,3	14	21,9		
I use the aquarium technique.	1-5 years	109	64.9	34	79,1	.174	502
	6-10 years	27	16,1	3	7,0		
	11 years	32	19,0	6	14,0		
I use the brainstorming technique.	1-5 years	26	66,7	117	68.0	.973	,055
	6-10 years	6	15,4	24	14,0		
	11 years	7	17,9	31	18.0		
I use the speech ring technique.	1-5 years	81	66,9	62	68,9	,942	.120
	6-10 years	18	14,9	12	13,3		
	11 years	22	18,2	16	17,8		
I use the debate technique.	1-5 years	64	66,7	79	68.7	950	.102
	6-10 years	14	14.6	16	13,9		
	11 years	18	18,8	20	17,4		
I use the scamper technique.	1-5 years	132	67,3	11	73.3	.870	0.279
	6-10 years	28	14.3	2	13,3		
	11 years	36	18,4	2	13,3		
I use the creative drama technique.	1-5 years	67	69.8	76	66,1	.473	1,499
	6-10 years	15	15,6	15	13,0		
	11 years	14	14.6	24	20.9		
I'll draw a picture.	1-5 years	67	69.8	76	66,1	,576	1,103
	6-10 years	11	11,5	19	16,5		
	11 years	18	18,8	20	17,4		
I create slogans or cartoons.	1-5 years	54	71.1	89	65,9	,700	,714
	6-10 years	9	11,8	21	15,6		
	11 years	13	17,1	25	18,5		
I print text.	1-5 years	29	69	114	67.5	.886	,241
	6-10 years	5	11.9	25	14,8		
	11 years	8	19,0	30	17,8		
	1-5 years	57	72.2	86	65.2	.539	1,236

I have visual posters prepared.	6-10 years	9	11.4	21	15,9		
	11 years	13	16,5	25	18,9		
I make you use the project method.	1-5 years	76	67,3	67	68,4	.703	,704
	6-10 years	18	15,9	12	12,2		
	11 years	19	16,8	19	19,4		
I use the six-hat thinking technique.	1-5 years	78	62,9	65	74.7	,193	3,286
	6-10 years	20	16,1	10	11,5		
	11 years	26	21,0	12	13,8		
I use Analogy/ Affinity.	1-5 years	89	67.4	54	68,4	0.990	,020
	6-10 years	19	14,4	11	13,9		
	11 years	24	18,2	14	17.7		
I use simulation.	1-5 years	112	66,7	31	72.1	,781	,493
	6-10 years	25	14,9	5	11,6		
	11 years	31	18,5	7	16,3		
I use the drama/role-playing technique.	1-5 years	53	70.7	90	66.2	,750	,576
	6-10 years	9	12,0	21	15,4		
	11 years	13	17,3	25	18,4		
I use the Elves technique.	1-5 years	126	66,7	17	77.3	.594	1.042
	6-10 years	28	14,8	2	9,1		
	11 years	35	18,5	3	13,6		
I use the station technique.	1-5 years	77	63.1	66	74,2	0.218	3.051
	6-10 years	19	15,6	11	12,4		
	11 years	26	21,3	12	13,5		
I use the case study method.	1-5 years	64	66.0	79	69.3	856	311
	6-10 years	15	15,5	15	13,2		
	11 years	18	18,6	20	17,5		
Physical (Kinesthetic) works	1-5 years	80	66,7	63	69.2	.092	4,764
	6-10 years	22	18,3	8	8,8		
	11 years	18	15.0	20	22,0		
I cooperate with families.	1-5 years	76	67,9	67	67,7	,312	2,329
	6-10 years	19	17.0	11	11,1		
	11 years	17	15,2	21	21,2		
I direct them to book fairs.	1-5 years	56	71.8	87	65,4	,510	1.345
	6-10 years	11	14,1	19	14.3		
	11 years	11	14,1	27	20,3		
I direct them to museums.	1-5 years	76	62.8	67	74,4	,172	3.519
	6-10 years	21	17,4	9	10,0		
	11 years	24	19,8	14	15,6		
I'll take you to the cinema.	1-5 years	74	64.3	69	71,9	,327	2,236
	6-10 years	20	17,4	10	10,4		

	11 years	21	18,3	17	17.7		
I'll direct you to the theater.	1-5 years	65	65.7	78	69.6	**,011**	9,005
	6-10 years	21	21,2	9	8,0		
	11 years	13	13.1	25	22,3		
	1-5 years	96	64.0	47	77	,093	4.756
I use exhibitions.	6-10 years	26	17,3	4	6.6		
	11 years	28	18.7	10	16,4		
I use the school block.	1-5 years	115	66,9	28	71.8	.425	1,714
	6-10 years	27	15,7	3	7,7		
	11 years	30	17,4	8	20,5		
	1-5 years	40	67,8	103	67,8	.679	.775
I use boards.	6-10 years	10	16,9	20	13,2		
	11 years	9	15,3	29	19,1		
I use science-art-culture magazines.	1-5 years	84	64.6	59	72.8	.183	3,392
	6-10 years	23	17.7	7	8,6		
	11 years	23	17.7	15	18,5		
I support them to use simulation.	1-5 years	116	65,9	27	77,1	,108	4.445
	6-10 years	29	16,5	1	2,9		
	11 years	31	17,6	7	20,0		
I help them create a digital story.	1-5 years	101	67,8	42	67,7	.122	4,203
	6-10 years	25	16,8	5	8,1		
	11 years	23	15,4	15	24.2		
Digital probe. I encourage them to produce original ideas.	1-5 years	97	64,7	46	75.4	**,048**	6,090
	6-10 years	27	18.0	3	4,9		
	11 years	26	17,3	12	19,7		
I use the moment.	1-5 years	59	74.7	84	63,6	—	5.331
	6-10 years	12	15,2	18	13,6	0.070	
	11 years	8	10,1	30	22,7		
	1-5 years	94	69.1	49	65.3	,386	1,906
I use comic books.	6-10 years	21	15,4	9	12,0		
	11 years	21	15,4	17	22,7		
	1-5 years	28	68.3	115	67.6	**.031**	6,936
I use fictional texts.	6-10 years	10	24,4	20	11,8		
	11 years	3	7,3	35	20.6		
	1-5 years	51	64.6	92	69.7	,304	2.382
I use poetry books.	6-10 years	15	19,0	15	11.4		
	11 years	13	16,5	25	18,9		

When the activities for creativity were compared according to the professional seniority variable, a significant difference was observed in the items "I ask written questions.", "I direct them to the theater.", "I encourage

them to produce original ideas for digital problems.", "I use fictional texts.", no significant difference was observed in other items. In the items with differences, they stated that teachers in the first years of their profession (1-5 years) applied activities at a higher rate than their senior colleagues. Items other than directing to the theater can be explained by the use of changing technology.

Discussion and Conclusion

In order to determine the level of self-efficacy perceptions of Turkish teachers towards developing creative thinking skills, 152 female and 53 male teachers were studied. When the distribution of professional experience was examined, it was applied to 205 Turkish teachers, 146 of whom were 1-5 years of seniority, 27 of whom were 6-10 years of seniority, and 32 of whom were 11 years of seniority and above. Based on the findings obtained from the questionnaires applied in this part of the research, the results of the research were discussed and suggestions were presented regarding the results discussed.

Discussion

21st-century skills differ from traditional academic skills in that they are not content-based, multifunctional, intersecting, and can be considered context-independent. UNESCO points out that not all types of education contribute to this situation and argues that they are necessary to achieve sustainable development. 21st century skills are usually divided into three areas: (1) learning and innovation skills, (2) digital literacy skills, and (3) skills related to helping in daily life and professional career. Four of the 21st-century skills included in the scope of learning and innovation are of particular importance: critical thinking, creativity, communication, and collaboration (Contreras-Espinosa, & Eguia-Gomez, 2022). In the study, the self-efficacy of Turkish teachers regarding creativity was tested according to gender and seniority. When the gender is considered according to the seniority variable, it can be said that the teachers have a similar opinion. Geçgel et al. (2020), in their study on Turkish teacher candidates, it was determined that there was no difference between the 21st century skills in terms of critical thinking and creativity regarding the gender with which the candidates had the highest average. Similarly, in the postgraduate study titled "Teacher Candidates' Conceptualization of Creative Thinking Skills" conducted by

Mert (2017), the participants expressed a positive opinion about developing creativity. When the gender variable is considered in the research, "I create slogans or cartoons.", "I use the station technique.", "I direct to book fairs.", "I direct to the theater.", "I use poetry books." A statistically significant difference was found in favor of female Turkish teachers. In the qualitative study titled "Competencies that Turkish teachers should have in the 21st century" conducted by Baki (2021), it was understood that having creative and innovative characteristics under the title of personal qualities was primarily considered important by female teacher candidates. Geçgel et al. (2020), in their study on Turkish teacher candidates, it was determined that there was no difference between the 21st century skills in terms of critical thinking and creativity regarding the gender with which the candidates had the highest average. In the study, female teachers generally expressed a high rate of opinion. In another study, Gömleksiz, Sinan and Doğan (2020) conducted a study with 809 Turkish teacher candidates studying in the Turkish Education Departments of nine different Faculties of Education in the 2018-2019 Spring Semester and consisted of quantitative and qualitative dimensions. Opinions were received from 54 Turkish teachers who were studying in the qualitative dimension. In the quantitative dimension, female teacher candidates differed significantly from male candidates in terms of using materials. In the qualitative dimension, rich learning environments were emphasized.

Similar to the results of the research, it was understood that Turkish teachers had a high level of perception in the article on self-efficacy perceptions (Lüle Mert, 2017, Ülper and Bağcı, 2012). At the end of the semi-structured interview with six Turkish teachers for the creative drama course of Sarıtekin (2023), it was stated that effective participation of students positively affected their creativity, reading and listening skills. When creativity is considered as a teaching activity, a high level of self-efficacy is expressed when asked about various teaching activities. It can be said that the sense of self-efficacy towards creativity has been important since before graduation. As a result of the structured interview with 50 senior Turkish teacher candidates from the Ahıskalı (2023) faculty of education, their awareness in field teaching was found to be high, and the importance of applying up-to-date teaching methods and techniques was stated. Similar results can be claimed to be supported by various studies (Şengül & Alkaya, 2016; Aktaş & Aslan, 2022). Creative drama practices as a teaching

technique within the scope of self-efficacy have been questioned and are among the activities that support creativity. In his research on Turkish and classroom teachers, Şahin (2018) determined that both candidate groups had moderate self-efficacy in creative drama activities. Another creativity development activity is creative writing activities. Demirel (2022) stated in his qualitative research that being interested and willing in creative writing is an important component of Turkish teacher candidates and will contribute to the development of skills in rich stimulus sources. Arıcı (2021) interviewed 130 teacher candidates in his qualitative research titled "Ideal teacher according to Turkish teacher candidates". It was described that the self-efficacy perceptions of prospective teachers were at a level that would be accepted as about half of the expected level, and it was described as the expected quality for the dimension of developing critical thinking. Susar Kırmızı, Fenli, and Kasap (2014) found a low correlation between the scores of the critical thinking disposition scale and the attitude scores towards reading habits in their study examining the relationship between prospective primary school teachers' critical thinking dispositions and their attitudes towards reading habits.

Conclusion and Suggestions

When the results of the research are evaluated holistically, it can be stated that Turkish teachers have similar views and practices about implementing creativity and creativity-oriented activities.

According to the gender independent variable discussed in the first sub-problem, it was understood that female and male teachers were in agreement in favor of men in the article "I have in-depth knowledge about creative thinking skills" regarding creativity, and in terms of obstacles to creativity and teaching practices. A total of 38 teaching activities for creativity were asked as questions. While there was a difference in favor of women in only five activity types ("I create slogans or cartoons.", "I use the station technique.", "I direct to book fairs.", "I direct to the theater.", "I use poetry books."), no statistical difference was observed between male and female Turkish teachers in 33 activities.

In the second sub-problem, no significant difference was observed when views on creativity and barriers to creativity were compared according to the seniority year variable. It was observed that teachers with 11 years or

more of professional seniority and teachers in the first five years of their profession differed slightly from teachers with 6-10 years of seniority in supporting students' individual learning processes.

Recommendations

Apart from the gender and seniority variable, independent variables such as the number of course hours in the school, the grade level, the source of creative activities, etc. can be discussed. In addition, the questionnaire can be supported by semi-structured interview data with Turkish teachers. Apart from this, students can be asked about the frequency of application of creativity activities. Creativity-oriented practices can be determined with in-class observations. Lecture notes or student notebooks can be examined so that teachers can obtain evidence of creativity. A comparison can be made by applying a questionnaire to fourth-grade Turkish language teaching students within the scope of the teaching practice course. Providing easy access to activities aimed at developing creativity and sharing experiences on creativity in provincial and district groups can be considered as another important issue.

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