



## AN EXAMINATION OF THE SELF-EFFICACY IN PLAY INSTRUCTION AMONG TEACHERS IN PRESCHOOL SPECIAL EDUCATION INSTITUTIONS

OKUL ÖNCESİ ÖZEL EĞİTİM KURUMLARINDA ÇALIŞAN ÖĞRETMENLERİN OYUN ÖĞRETİMİ ÖZ  
YETERLİKLERİNİN İNCELENMESİ

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Geliş Tarihi / Date Applied  
**05.07.2024**

Kabul Tarihi / Date Accepted  
**29.10.2024**

### ABSTRACT

This study aims to understand the level of teacher's play instruction self-efficacy and the relationship between the level of self-efficacy and different variables. The study is descriptive and uses the 'scanning model'. 100 teachers in preschool special education facilities connected to Istanbul's Ministry of National Education participated in the study. The "Personal Information Form" and the "Preschool Play Teaching Self-Efficacy Questionnaire" are used to gather research data. The data was analysed using statistical analysis. Based on the survey results, it was determined that play instruction self-efficacy is highly valued among teachers working in preschool special education institutions. In addition, while the sub-dimension in which teachers' self-efficacy is at the highest level is planning, the lowest is implementation.

**Keywords:** Preschool special education, Play, Self-efficacy.

### ÖZET

Bu araştırma, okul öncesi özel eğitim kurumlarında çalışan öğretmenlerin oyun öğretimi öz yeterliklerinin ne düzeyde olduğunu ve bunların farklı değişkenlere göre nasıl farklılaştığını ortaya koymayı amaçlamaktadır. Araştırma betimsel tarama modeline dayalı olarak düzenlenmiştir. Araştırmanın katılımcıları İstanbul Milli Eğitim Müdürlüğü'ne bağlı okul öncesi özel eğitim kurumlarında çalışan 100 öğretmenden oluşmaktadır. Araştırmanın verileri "Kişisel Bilgi Formu" ve "Okul Öncesi Dönemde Oyun Öğretimi Öz Yeterlik" anketi ile toplanmıştır. Araştırmanın sonucunda öğretmenlerin öz yeterliğinin yüksek düzeyde olduğu görülmektedir. Ayrıca öğretmenlerin yeterliklerinin en yüksek olduğu alanın planlama ve en düşük olduğu alanın ise uygulama olduğu elde edilen diğer sonuçlardır.

**Anahtar Kelimeler:** Okul öncesi özel eğitim, Oyun, Öz yeterlik.

## **1. INTRODUCTION**

Play is the activity that contributes to the progress of humanity, and it has been going on in different cultures from the beginning to this time. Play starts with life and always maintains its importance, although it varies according to the period in line with additional needs. It also develops children, enables them to learn, and ensures healthy growth (Ramazan, 2015). The Committee on the Rights of the Child (CRC) defines play as a children's right and an activity controlled by children: "play is a vital dimension of the pleasure of childhood, as well as an essential component of physical, social, cognitive, emotional and spiritual development." (CRC, 2013, p.6). During play, children learn to test their strengths, agility, decisions, cooperative and competitive capacity, speed, cognitive and physical skills, memories, and creativity (Barnes, 2006). Moreover, different types of play offer significant opportunities for children to develop personally, socially, and academically (Pyle & Danniels, 2016).

Play has an essential effect on the development of children, as well as reflecting their development. The child's behaviours during play constitute critical clues about their development process. Play is a way for children to explore, learn and express themselves (Pehlivan, 2016). The child develops language skills through play and is prepared for future situations. In addition, through the play the child learns to use objects differently and develops problem-solving skills (Manwaring, 2011).

The play used for children with special needs differs from their peers in frequency, variety, and complexity. Generally, their plays are more straightforward, repetitive, and less diverse than their peers. A limited and direct play repertoire negatively affects the communication and social skills established with adults and their peers during play-based activities. For this reason, children with special needs need a systematic intervention to gain play skills (Frey & Kaiser, 2011). The United Nations Convention on the Rights of Persons with Disabilities stipulates that "to ensure that children with disabilities have equal access with other children to participation in play, recreation and leisure and sporting activities, including those activities in the school system," with regard to the rights of play for children with disabilities. (UNCRC) (Article 30&d).

When it comes to the question of what the role of adults is in children's play, rather than forcing children to play, parents and teachers have the primary duty of facilitating their play. In this situation, the teacher's job is to ensure the kids are in a safe and secure environment. However, in setting these boundaries, the instructor should do so without restricting the children's independence and inventiveness. In this way, play gives an opportunity for teachers and kids to establish communication between them (Singer, 2015).

Therefore, teachers working with children with special needs should know the student's cognitive, emotional, and physical characteristics and be equipped with teaching methods and techniques. In addition, because students have individual characteristics, the teacher should determine appropriate strategies for each student and prepare activities and materials in line with these methods.

The achievement of kids is impacted by teachers' efficacy beliefs, which also affect their motivation and performance. Self-efficacy, according to Bandura (1994), is the conviction that one can plan tasks to carry out successfully at a level that impacts one's life. Self-efficacy governs an individual's thoughts, emotions, behaviours, and self-motivation. The perception of teachers regarding their own effectiveness significantly influences their attitudes, behaviours, and instructional resources (Koç, 2013). The self-efficacy belief of a teacher is their conviction that

they can motivate difficult or uninterested pupils to participate in class and accomplish the intended learning outcomes (Tschannen-Moran & Woolfolk-Hoy, 2001). Therefore, teachers' perceptions of their effectiveness in teaching play are fundamental in using play as an effective teaching tool for the learning process.

Upon reviewing the literature, it becomes evident that numerous studies highlight the significance of play for kids (Bergen, 2002; Gilmore, 2011; Karayol & Temel, 2018; Koçkaya & Siyez, 2017; Moore & Russ, 2008; Türkoğlu & Uslu, 2016). In terms of children with special needs, studies have revealed the importance of play and its contribution to the social, cognitive, physical, and emotional development of individuals with special needs (Lifter et al., 2011; Wong, 2012). The preschool period is the period in which the child shows rapid development. The behaviours acquired by the child during this period affect the personality structure, attitudes, and behaviours of the child in adulthood (Kandır & Alpan, 2008). Although many studies examine teacher self-efficacy and play-teaching, a few studies examine teachers' play-teaching self-efficacy (Kadim, 2012; Pistav-Akmese & Kayhan, 2015; 2017). The competencies of teachers working in special education settings in teaching play are considered crucial, given the significance of play in the educational process. The study's primary goal is to examine the self-efficacy of teachers working in preschool special education institutions in terms of their ability to teach through play. In line with the background, the research seeks to provide answers to these questions:

- 1) What is the level of play teaching self-efficacy of teachers working in preschool special education institutions?
- 2) Does the play teaching self-efficacy of teachers working in preschool special education institutions differ according to different variables?

## **2. METHOD**

### **2.1. Research Design**

The study that investigates teachers' play teaching self-efficacy with respect to different variables is designed according to the descriptive scanning model. The scanning model is a research approach that aims to describe a situation as it exists. It tries to describe the person or object to be investigated in its conditions and as it is without trying to change or affect it (Karasar, 2016). Since this study aims to reveal the play teaching self-efficacy levels of teachers working in preschool special education institutions and how these differ according to different variables, the descriptive scanning method is considered suitable for the research.

### **2.2. Population and Sample**

This study's target group comprises teachers employed in preschool special education institutions under the Ministry of National Education in Istanbul for the 2019-2020 academic year. The research sample consists of 100 teachers selected using the purposeful sampling method. These teachers work at preschool special education facilities affiliated with the Ministry of National Education during the 2019-2020 academic year.

**Table 1. The Demographic Characteristics of the Teachers**

Variables		<i>f</i>	%
Gender	Female	89	89,0
	Male	7	7,0
	Prefer not to say	4	4,0
Age	25 years and under	28	28,0
	26-30 years	29	29,0
	31-35 years	19	19,0
	36-40 years	12	12,0
	41 years and older	12	12,0
Branch	Special education teacher	35	35,0
	Pre-school teacher	54	54,0
	Others	11	11,0
Bachelor's Degree	Special education teacher	11	11,0
	Pre-school teacher	42	42,0
	Child Development	28	28,0
	Others	19	19,0
Education level	Associate Degree	30	30,0
	Bachelor's Degree	65	65,0
	Master Degree	5	5,0
Professional experience years	0-5 years	56	56,0
	6-10 years	25	25,0
	11-15 years	11	11,0
	16 years and above	8	8,0
Staff Status	Substitute Teachers	62	62,0
	Permanent Teachers	38	38,0
Class population	1-5 Students	67	67,0
	6-10 Students	8	8,0
	11-14 Students	25	25,0
Working Group	MID*	12	12,0
	MSID**	22	22,0
	Autism	37	37,0
	Multiple	29	29,0
Teaching Assistant	Yes	89	89,0
	No	11	11,0
Typical Children in the Classroom	Yes	31	31,0
	No	69	69,0
Attending Course About a Play at university	Yes	82	82,0
	No	18	18,0
Play related Teaching	Yes	36	36,0
	No	64	64,0
Following the Publications About Play	Yes	29	29,0
	No	71	71,0

Creativity related Teaching	Yes	38	38,0
	No	62	62,0
Hobbies	Yes	85	85,0
	No	15	15,0

*\*Mild intellectual disabilities*

*\*\*Moderate and Severe intellectual disabilities*

### **2.3. Data Collection Tools**

The study utilised the "Personal Information Form" developed by the researcher and the "Preschool Play Teaching Self-Efficacy Questionnaire" designed by Kadim (2012) as assessment instruments.

#### **2.3.1. Personal Information Form**

In the Personal Information Form, there are a total of 16 questions about gender, age, branch, field of graduation, educational status, professional seniority, staff status, class size, disability group, having an assistant in the class, being a typically developing student in the class, taking a play-related course at university, having a play-related experience, having training on creativity, following books about play, and whether or not having a hobby.

#### **2.3.2. Play Teaching Self-Efficacy Questionnaire**

Teachers' self-efficacy levels regarding play teaching consist of four sub-dimensions: self-efficacy for planning play activities (14 items), self-efficacy for implementing play activities (10 items), self-efficacy for evaluating play activities (7 items) and professional self-efficacy for play teaching (7 items). The reliability (internal consistency) coefficient (Cronbach Alpha) for the entire survey was calculated as 0.90, and the correlation coefficient in the test-retest application was calculated as 0.94.

### **2.4. Data Analysis**

The study used a statistical software package to analyse the data collected from the Personal Information Form and Preschool Play Teaching Self-Efficacy Questionnaire. First, it checked whether the data collected with the questionnaire form had errors and deficiencies and whether they were within the specified limits. Second, the normality distributions of the data groups were assessed in the second step using the Kolmogorov-Smirnov (K-S) and Shapiro-Wilk tests. This was done to establish whether the statistical techniques would be parametric or non-parametric.

Following the normality analysis, the parametric test approaches were utilised to investigate potential variations in questionnaire/scale levels/scores based on the teachers' staff status, the presence of students with typical development in their courses, and the provision of play-related training. Other variables were analysed using nonparametric test techniques. The significance threshold of 0.05 was used in all statistical calculations.

Based on the assumption that the intervals between the options for the items/statements in the Preschool Play Teaching Self-Efficacy Survey are equal, the value between the two intervals was calculated as 0.80 (4 intervals / 5 options = 0.80). The score ranges and options determined for the sub-dimensions and overall of the Pre-School Play Teaching Self-Efficacy Survey are as follows:

Options	Intervals	Self-efficacy level
Never	1,00 – 1,80	Very low
Rarely	1,81 – 2,60	Low
Sometimes	2,61 – 3,4	Moderate
Often	3,41 – 4,20	High
Always	4,21 – 5,00	Very high

### 3. FINDINGS

#### 3.1. Findings About the Teachers' Play Teaching Self-Efficacy Levels

**Table 2. The Ordered Average Scores of Teachers Regarding Play Teaching Self-Efficacy Levels**

Dimension/Criterion	$\bar{X}$	SS
Self-efficacy regarding planning	4,38	0,47
Self-efficacy regarding applying	3,18	0,57
Self-efficacy regarding evaluation	4,14	0,51
Self- efficacy of professional	3,74	0,59
Play Teaching Self-efficacy (General)	3,86	0,36

When Table 2 is examined, arithmetic averages related to scores of a preschool play teaching self-efficacy consist of self-efficacy regarding planning, self-efficacy regarding applying, self-efficacy of evaluation and self-efficacy of a professional. Arithmetic averages of teachers for planning self-efficacy are ( $\bar{X} = 4,38 \pm 0,47$ ; "Very High" level), professional self-efficacy is ( $\bar{X} = 3,74 \pm 0,59$ ; "High" level) and applying self-efficacy is ( $\bar{X} = 3,18 \pm 0,57$ ; "Mid" level), respectively. General play teaching self-efficacy scores were found at a "High" level with a  $\bar{X} = 3,86 \pm 0,36$ .

#### 3.2. Findings Regarding the Comparison of Teachers' Play Teaching Self-Efficacy Levels According to their Demographic Features

**Table 3. Mann-Whitney U Test for Comparison of Teachers' Play Teaching Self-efficacy Levels Regarding Gender**

Dimension/Criterion	Gender	Descriptive Statistics			Mann-Whitney U			Effect (d)
		n	Mean Rank	Rank Sum	U	Z	p	
Play Teaching Self-Efficacy	Female	89	49,12	4372,00	176,00	-	0,034*	0,39
	Male	7	40,57	284,00				

\* $p < .05$

After examining Table 3, it is clear that there is a notable discrepancy between gender and the play self-efficacy of preschool teachers, with females demonstrating a higher level of self-efficacy ( $U=176,00$ ;  $p=0,034$ ). The play self-efficacy of female teachers is higher than that of male instructors. As for effect level, the effect of the teachers' gender on the play teaching self-efficacy level is significant and at a 'moderate' level ( $d \text{ Cohen}=0,39$ ).

The study's sample group of 100 teachers consists of 89 females, seven males, and four teachers who did not specify their gender. Therefore, statistical data on the teachers' self-efficacy in teaching play depending on the gender variable was calculated for 89 female and seven male teachers.

**Table 4. Kruskal-Wallis H Test for Comparison Of Teachers' Play Teaching Self-Efficacy Levels Regarding Age**

Dimension/Criterion	Age	Descriptive Statistics		Kruskal-Wallis H			M-W	Effect (d)
		n	Mean Rank	X <sup>2</sup>	sd	p		
Play Teaching Self-Efficacy	25 ≤ (1)	28	69,89	9,72	4	0,045*	1, 2 > 4	0,51
	26-30 years (2)	29	66,19					
	31-35 years (3)	19	54,97					
	36-40 years(4)	12	52,88					
	41 ≥ (5)	12	36,88					

\*p<.05

Upon analysing Table 4, it becomes apparent that a significant disparity exists between the age of preschool teachers and their self-efficacy (X<sup>2</sup>(4)=9,72; p=0,045). According to the Post-hoc Mann-Whitney U test, play teaching self-efficacy levels of teachers aged 25 and under and aged 26-30 are higher than teachers aged 41 and over. As for the level effect, the teachers' age on the play teaching self-efficacy level is significant and at a 'high' level ((d Cohen=0,51).

**Table 5. Kruskal-Wallis H Test for Comparison of Teachers' Play Teaching Self-Efficacy Levels According to the Branch**

Dimension/Criterion	Branch	Descriptive Statistics		Kruskal-Wallis H			M-W	Effect (d)
		n	Mean Rank	X <sup>2</sup>	sd	p		
Play teaching Self-Efficacy	Special education. (1)	35	47,79	0,74	2	0,690	-	-
	Pre-school (2)	54	52,81					
	Others (3)	11	47,82					

\*p<.05

Upon analysing Table 5, it is evident that there is no significant disparity in preschool teacher's self-efficacy levels based on their teaching disciplines.

**Table 6. Kruskal-Wallis H Test for Comparison of Teachers' Self-Efficacy Levels in Play Teaching According to Their Graduation**

Dimension /criterion	Bachelor's degree	Descriptive Statistics		Kruskal-Wallis H			M-W	Effect (d)
		n	Mean Rank	X <sup>2</sup>	sd	p		
Play Teaching Self-Efficacy	Special Education(1)	11	53,45	1,60	3	0,660	-	-
	Pre-school (2)	42	51,26					
	Child development(3)	28	53,18					
	Others(4)	19	43,16					

Upon analysing Table 6, it becomes evident that there is no significant disparity in the self-efficacy of preschool instructors based on their educational attainment.

**Table 7. Kruskal-Wallis H Test for the Comparison of Teachers' Play Teaching Self-Efficacy Levels According to Educational Level**

Dimension/Criterion	Education level	Descriptive Statistics		Kruskal-Wallis H			M-W	Effect (d)
		n	Mean Rank	X <sup>2</sup>	sd	p		
Play Teaching Self-Efficacy	Associate degree(1)	30	51,92	0,19	2	0,907	-	-
	Bachelor's degree(2)	65	50,18					
	Master's degree (3)	5	46,10					

\* $p < .05$

After analysing Table 7, it is clear that there is no notable discrepancy between educational attainment and the level of self-efficacy among preschool teachers.



**Table 8. Kruskal-Wallis H Test for Comparison of Teachers' Play Teaching Self-Efficacy Levels by Professional Experience**

Dimension/Criterion	Professional experience	Descriptive Statistics		Kruskal-Wallis H			M-W	Effect (d)
		n	Mean Rank	X <sup>2</sup>	sd	p		
Play teaching Self-efficacy	0-5 years (1)	56	60,46	7,96	3	0,022*	1,2 > 4	0,47
	6-10 years (2)	25	59,18					
	11-15 years (3)	11	52,77					
	16 ≥ (4)	8	41,81					

\*p<.05

Table 8 reveals that while analysing the arithmetic average of points obtained by teachers from the Preschool Teachers' Self-efficacy scale, it is evident that teachers with professional experience ranging from 0-5 and 6-10 years had better scores (Mean Rank 0-5 years=60,46; Mean Rank 6-10 years=59,18) than those of 16 years and over. In terms of the impact level, the influence of teachers' professional experience on the degree of self-efficacy in teaching drama is statistically significant and at a 'moderate' level (d Cohen=0,47).

**Table 9. T Test for Comparison of Teachers' Play Teaching Self-Efficacy Levels According to Staff Status**

Dimension	Staff Status	Descriptive Statistics			t test			Effect (d)
		n	X̄	ss	t	sd	p	
Play Teaching Self-Efficacy	Substitute T.	62	3,89	0,38	1,04	98	0,301	-
	Permanent T.	38	3,81	0,32				

\*p<.05

Upon examination of Table 9, it is evident that there is no significant disparity in the levels of self-efficacy among preschool teachers based on their staff status (p>.05).

**Table 10. Kruskal-Wallis H Test for Comparison of Teachers' Play Teaching Self-Efficacy Levels According to Class Population**

Dimension/Criterion	Class Population	Descriptive Statistics		Kruskal-Wallis H			M-W	Effect (d)
		n	Mean Rank	X <sup>2</sup>	sd	p		
Play Teaching Self-Efficacy	0-5 students(1)	67	57,08	7,33	2	0,019*	1 > 3	0,48
	6-10	8	42,98					

students(2)  
11-14 25 36,00  
students (3)

\* $p < .05$

According to Table 10, when the arithmetic average of points, which teachers take from the Preschool Teachers' Self-efficacy scale, are examined in terms of class population, it is seen that teachers who work with five and under students got the higher scores (Mean Rank 0-5=57,08) than that of 11-14 students (Mean Rank 11-14=36,00). As for effect level, the effect of the class population on the play teaching self-efficacy level is significant and at a 'moderate' level (d Cohen=0,48).

**Table 11. Kruskal-Wallis H Test for Comparison of Teachers Play Teaching Self-Efficacy Levels According to Working Group**

Dimension/Criterion	Working Group	Descriptive Statistics		Kruskal-Wallis H			M-W	Effect (d)
		n	Mean Rank	X <sup>2</sup>	sd	p		
Play Teaching Self-Efficacy	MID (1)	12	54,21	0,51	3	0,917	-	-
	MSID(2)	22	47,39					
	Autism(3)	37	50,16					
	Multiple (4)	29	51,76					

\* $p < .05$

MID: Mild Intellectual Disabilities

OADZY: Moderate and Severe Intellectual Disabilities

Upon examining Table 11, it is evident that no significant disparity is observed in the self-efficacy levels among preschool teachers across different working groups ( $p > .05$ ).

**Table 12. Mann-Whitney U Test for Comparison of Teachers' Self-Efficacy Levels Regarding Play Teaching According to Having an Assistant in the Class**

Dimension/Criterion	Teaching Assistant	Descriptive Statistics			Mann-Whitney U			Effect (d)
		n	Mean Rank	Rank Sum	U	Z	p	
Play Teaching Self-Efficacy	Yes	89	52,71	4691,50	292,50	-2,17	0,030*	0,45
	No	11	32,59	358,50				

\* $p < .05$

Upon examination of Table 12, a significant disparity is observed between the self-efficacy of assistants in the class and preschool teachers ( $U=292,50$ ;  $p=0,030$ ). Upon analysing the average

rank scores of the groups, it becomes evident that the teaching self-efficacy levels of the teaching assistants in the classroom are higher. (Mean Rank Yes=52,71) than the teachers who have no assistant in the classroom (Mean Rank No=32,59). As for the level effect, having an assistant in the class on the play teaching self-efficacy level is significant and at a 'moderate' level (d Cohen=0,45).

**Table 13. T Test for the Comparison of Teachers' Play Teaching Self-Efficacy Levels to Typical Children in the Classroom**

Dimension	Typical Children	Descriptive Statistics			t test			Effect (d)
		n	$\bar{X}$	ss	t	sd	p	
Play Teaching Self-Efficacy	Yes	31	3,81	0,45	0,81	98	0,423	-
	No	69	3,88	0,32				

\*\*p<.01

Upon analysing Table 13, it is evident that there is no significant disparity in the levels of self-efficacy among preschool teachers when it comes to average children in the classroom.

**Table 14. Mann-Whitney U Test for the Comparison of Teachers' Self-Efficacy Levels in Play Teaching According to Attending Course about Play at University**

Dimension/Criterion	Attending course about play in the university	n	Descriptive Statistics		Mann-Whitney U			Effect (d)
			Mean Rank	Rank Sum	U	Z	p	
Play Teaching Self-Efficacy	Yes	82	52,37	4294,50	484,50	-2,38	0,013*	0,47
	No	18	41,97	755,50				

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

Upon examining Table 14, it becomes apparent that there is a notable disparity between the attendance of university courses on play and the self-efficacy of preschool teachers (U=484,50; p=0,013). Upon analysing the average rank scores of the groups, it becomes evident that the teachers who participated in a university course on play exhibit better levels of play-teaching self-efficacy (Mean Rank Yes=52,37) than the teachers who did not attend a course about play at university (Mean Rank No=41,97). As for the level effect, taking lessons about play at university on the play teaching self-efficacy level is significant and at a 'moderate' level (d Cohen=0,47).

**Table 15. T Test for Comparison of Teachers' Self-Efficacy Levels in Play Teaching According to Taking Lessons About Play**

Dimension	Education about play	Descriptive Statistics			t test			Effect (d)
		n	$\bar{X}$	ss	t	sd	p	
Play teaching	Yes	36	4,04	0,40	2,74	98	0,000***	0,93
Self-Efficacy	No	64	3,71	0,33				

\*\* $p < .01$ , \*\*\* $p < .001$

Upon examining Table 15, it becomes evident that there exists a significant disparity between the enrollment in play-related courses and the self-efficacy of preschool teachers [ $t(98)=2,74$ ;  $p < .001$ ]. When analysing the average rank scores of the groups, it becomes evident that instructors who have taken courses on play exhibit higher levels of play-teaching self-efficacy ( $\bar{X}$  Yes=4,04) compared to teachers who have not taken such courses ( $\bar{X}$  No=3,71). As for the level effect, taking a course about play on the play teaching self-efficacy level is significant and at a 'moderate' level (d Cohen=0,93).

**Table 16. Mann-Whitney U Test for Comparison of Teachers' Play Teaching Self-Efficacy Levels According to Following the Publications About the Play**

Dimension/Criterion	Following the publications about play	n	Descriptive Statistics		Mann-Whitney U			Effect (d)
			Mean Rank	Rank Sum	U	Z	p	
Play Teaching Self-Efficacy	Yes	29	59,21	1630,00	764,00	-	0,029*	0,41
	No	71	45,17	3420,00				

\* $p < .05$

Upon examining Table 16, a significant disparity is observed between adherence to publications about the play and preschool teachers' self-efficacy ( $U=764,00$ ;  $p=0,029$ ). Upon analysing the average rank scores of the groups, it becomes evident that teachers who actively engage with publications about play exhibit better levels of teaching self-efficacy (Mean Rank Yes=59,21) than the teachers who do not follow the publications about the play (Mean Rank No=45,17). As for the level effect, following the publications related to play on the play teaching self-efficacy level, it is significant and at a 'moderate' level (Cohen=0,41).

**Table 17. T Test for Comparison of Teachers' Self-Efficacy Levels in Play Teaching According to Taking Lessons About Creativity**

Dimension	Education about creativity	Descriptive Statistics			t test			Effect (d)
		n	$\bar{X}$	ss	t	sd	p	
Play Teaching Self-Efficacy	Yes	38	3,99	0,38	2,69	98	0,003**	0,72
	No	62	3,73	0,35				

\*\* $p < .01$

Upon examining Table 17, it is evident that there is an important difference between the enrollment in creativity courses and preschool teachers' self-efficacy [ $t(98)=2,69$ ;  $p=0,003$ ]. By analysing the average rank scores of the groups, it becomes evident that teachers who have undergone creativity courses exhibit higher levels of play-teaching self-efficacy ( $\bar{X}$  Yes=3,99) than those who did not take courses about creativity ( $\bar{X}$  No=3,73). As for the level effect, taking a course about creativity on the play teaching self-efficacy level is significant and at a 'high' level (d Cohen=0,72).

**Table 18. Mann-Whitney U Test for Comparison of Teachers' Play Teaching Self-Efficacy Levels According to Their Hobbies**

Dimension/Criterion	Hobbies	Descriptive Statistics			Mann-Whitney U			Effect (d)
		n	Mean Rank	Rank Sum	U	Z	p	
Play Teaching Self-Efficacy	Yes	85	51,09	4343,00	587,00	-	0,626	-
	No	15	47,13	707,00				

Upon examining Table 18, it becomes apparent that there is no significant disparity in preschool teacher self-efficacy levels when considering the presence of hobbies.

### 3. DISCUSSION

This study investigated the level of self-efficacy in teaching through play among teachers working in preschool special education institutions. Based on the findings, it was noted that the teachers demonstrated high levels of self-efficacy in play-based education. Upon examining other studies on this subject, we find that the outcome of this study aligns closely with them (Kadim, 2012; Piştav-Akmeşe & Kayhan, 2017; Turak & Demir, 2019). The study found that teachers in preschool special education institutions possess a significant level of self-efficacy in teaching through play. Specifically, they feel most competent in the planning aspect, whereas they perceive the implementation aspect as their lowest subdimension.

Teachers working in preschool special education institutions with professional experience between 0-5 and 6-10 have better self-efficacy levels in teaching play than other teachers. While the results differ from those conducted by Atasoy & Abalı-Ozturk (2022), Trawick Smith &

Dziurgot (2010), similar results were obtained from the studies conducted by Arslan & Ozbey (2019), Klassen & Chiu (2010). On the other hand, Dickey (2017), Leuszler (2015), and TschannenMoran & Woolfolk Hoy (2007) concluded in their study that professional experience does not affect teachers' self-efficacy. Variables such as the age of the teachers participating in the study, the class sizes, the presence of more than one disability group, the update of the teacher's knowledge, the programs not being child-led programs such as Montessori, and being under teacher management may have been effective in this result.

Based on the research findings about the varying number of students in the classroom, it has been determined that teachers with five or fewer pupils exhibit higher levels of self-efficacy. While differing from the studies conducted by Arslan & Ozbey (2019), Bay (2020), Gonuldas & Gumuskaya (2022), Semerci & Uyanık-Balat, (2018) and Arslan (2016) found in his study that as the number of students in the classroom increased, their self-efficacy levels also increased. Upon analysing the class size of the teachers involved in the study, it is evident that 67% of the teachers teach in classes with five or fewer students. Having many students in classrooms can limit the activities that can be done in class. In addition, certain circumstances necessitate that teachers who specialise in teaching children with special needs engage in individualised instruction with kids. Hence, the limited student population will have a beneficial impact on educational activities. In this study, it is thought that having a small number of students in the classes of most of the teachers facilitates the implementation of the activities.

It was determined that teachers who have an assistant in their classes exhibit a better level of play-teaching self-efficacy. When the literature was examined Bay (2020), and Mayhew (2016) found a significant relationship between the self-efficacy of special education teachers and having an assistant in the classroom, while there was no meaningful relationship between them in the study conducted by Dickey, (2017), Piştav-Akmeşe & Kayhan (2015). Teachers in preschool settings who work with children with special needs may face a range of challenges in the classroom due to the unique developmental traits of these students. Having someone in the classroom to help them will enable the teachers to reduce their workload, be more interested in the students, and spend more time on the activity.

Considering the findings of the variables of taking play lessons at university and following the publications related to the play, it differs from the studies of Piştav Akmeşe and Kayhan (2015) & Koç (2015), while the similarities with the studies conducted by Leuszler (2015) and Arslan (2016) showed. There are courses on play in the pre-school teaching undergraduate programs, special education teaching undergraduate programs, and child development associate degree programs. Given that most of the teachers involved in the study had graduated from relevant departments, their self-efficacy levels for play teaching are likely high. Teachers who follow the literature about the play can practice current play activities in their classes and improve themselves. It is thought that this situation makes teachers feel competent in play activities.

#### **4.CONCLUSION and RECOMMENDATIONS**

This study found that teachers in preschool special education institutions exhibit a high level of self-efficacy in their ability to teach through play. Another result obtained is that the sub-dimension in which teachers feel most competent is planning, while implementation is the area in which they feel least competent. Moreover, it can be concluded that gender, age, professional experience year, class size, presence of an assistant in the classroom, taking a play lesson at the university, following a book about play, and being trained about play and creativity affect teachers' self-efficacy in play teaching.

In the light of the findings of the study, the following suggestions can be made:

Considering that teachers' play teaching application self-efficacy levels are generally low in implementation compared to the other subdimensions in the research, it can be recommended to make arrangements in the physical environment of the classroom and school to eliminate the lack of materials and equipment and to provide flexibility in the teaching programs.

Considering the positive effects of having assistants in the classroom and having a small number of students at the school on teachers' play-teaching self-efficacy, necessary arrangements can be made in the classroom and teacher training.

Considering that teachers' training in play and creativity positively affects their self-efficacy levels in play teaching, practice-oriented courses on play and creativity should be included in universities.

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**Conflict of Interest:** The authors have no financial relationships with any person, institution or organisation that may be a party to this study, and there is no conflict of interest

**Support and Acknowledgments:** The study received no support from any institution or organisation.

**Ethics Committee Permission:** Since this research was conducted in 2019, it is not among the articles requiring an Ethics Committee Decision.

**Declaration:** The authors contributed equally to the paper.