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Assessment of the Educational Needs of Preschool Teacher Candidates as regards Teaching Practice

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Abstract: The purpose of this study is to determine the educational needs of preschool teacher candidates for teaching practice. In this descriptive study, a quantitative and qualitative blended method was preferred. 928 pre-service teachers who were enrolled at the Pre-School Teaching departments of Education Faculties of 3 different Universities in the 2018-2019 Spring Term attended the study. Findings obtained from quantitative and qualitative data revealed that pre-service teachers need training for the application of communication skills, classroom management, material use and evaluation methods. In this context, it is recommended to increase the number of practical courses in teacher training programs to improve the professional knowledge and skills of pre-service teachers. In addition, it should be ensured that pre-service teachers gain experience in teaching practices by extending their internship duration in preschool institutions.

Keywords: *Pre-service Teacher Education, Teacher Education Curriculum, Teacher Education Programs, Educational Needs, Preschool Education.*

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Introduction

Teaching practice is a course that helps pre-service teachers gain professional experience and makes it easier for them to cope with professional problems in the teaching process (Ulubey, 2018). The teaching practice course plays an extremely important role in teacher training programs. In particular, determining the educational needs for this course is the basis of program development studies (Demirel, 2015). Each profession has different ways of training the individual who will perform the profession. While some professions can be performed with merely theoretical knowledge, some professions require application alongside theory. In this context, it can be said that training programs for the profession have multiple dimensions, one of which is the teaching profession. The knowledge, skills, attitudes and behaviors that teacher candidates should gain are provided by coordinating the vocational knowledge courses and course activities that are embedded in teacher training programs before starting the service. In teacher training programs where merely theoretical knowledge is not sufficient, there is a need for practical applications. According to Hacıoğlu and Alkan (1997), teaching practices provide education which provides sufficient status for the profession. The aim of this course is to ensure that teacher candidates transform the knowledge from theory to practice, be open to adaptation to ethnological developments, and be able to implement the competencies acquired effectively and efficiently.

Teaching practice is a course in which pre-service teachers gain teaching skills in the classroom and at the instructional level and are enabled to teach specific course/s in a planned way and discuss the application activities. Moreover, teaching practice is an application that preparations, works and rehearses of the pre-service teachers are directed towards the teaching profession. In addition, the process of teaching practice serves as a table and document that shows the level of general culture, general talent, field knowledge and proficiency levels of pre-service teachers and experienced trainers in terms of pedagogical formation. In this context, the aim of teaching practice course is to transform the theoretical knowledge, skills and attitudes that the pre-service teachers have learned about the teaching profession into practice while practicing and improving themselves. When evaluated from this perspective, it is seen that the importance of teaching practice course in preparing pre-service teachers for pedagogical formation courses has gained a serious dimension. The fact that the teaching practice course gained importance in teacher training programs was also

reflected in the class hours; by increasing the class hours, pre-service teachers were provided with the opportunity to gain teaching experience in real education and teaching environments (YÖK, 1998).

The effect of the teachers on human beings is of great importance at all levels of education. However, it is stated that this importance is more dominant in preschool period (Severcan, 2007). Preschool teacher is an important actor who supports families and children (Puccionia et al., 2020) and is effective in developing children's creativity by encouraging family participation and facilitating the transition from early care settings and formal education (Gucyeter & Erdogan, 2020). Also, the preschool teacher is the first adult the child knows outside the family (Oktay, 1993). Instead of his/her parents, the child accepts the teacher as a model and identifies with him / her. In particular, effective interaction between the teacher and the child contributes to his/her social-emotional, behavioral and cognitive development (Hu et al., 2020). Although the ideas and experiences of preschool teachers are extremely important in the development of children's learning processes, it is also vital to organize learning processes in line with children's interests and needs (Erkan & Akyol, 2017). Since the teacher is an individual who can directly affect the child's life, personality and character, the personality of the teacher is of considerable importance. A good teacher should be calm, diligent, self-confident, sincere and supportive to her students (Ben de Souza, 2017). Professional attitudes and skills have a major impact on the formation of the right personality by the trainee before the service. In this context, it is foreseen that these qualifications will be acquired within the scope of teaching practice course. The aim of the course is to enable the pre-service teachers to make observations and to gain experience by applying the information they have learned theoretically. Effective communication and cooperation between the institutions where the trainees go to practice and the faculty should be established and needs analysis should be performed about whether the trainees have the necessary qualifications for their professions. Through this mutual cooperation, master trainers have the opportunity to get to know the pre-service teachers more closely, analyze their teaching needs and determine the missing or problematic issues accurately. Teaching practice course for the pre-service teachers who have graduated from teacher training programs to have professional knowledge and skills has undeniable importance. A teacher should act in accordance with the needs of the students, effectively use different materials, methods and techniques in accordance with the content, possess time management skills, ensure student participation in the class, and evaluate the acquisitions of the students at the end of the process as well

as monitor their individual development (Çelikten et al., 2005). Pejchinovska et al. (2019) stated that teachers should put into practice methods and techniques that enable students to actively participate in the learning process in educational activities. The authors also state that teaching strategies, methods and approaches are effective in increasing learning achievement of students. From a different perspective, Ulla and Winitkun (2018) emphasize that teachers have an important role in the development of countries and underline that teachers should also receive a high-quality and well-designed education in order to raise successful students. Similarly, Torbeyns et al. (2020) address the importance of both the teaching process and knowledge of pedagogical content in the success of students. Teachers should be able to transfer their learning in teacher training programs to their students in their professional life. Teacher training programs should provide teachers with the information they will use in their daily classroom activities and improve their teaching skills (Kleinert-Altamirano & Pineda-Herrero, 2019). It is seen as an obligation that pre-service teachers who will train individuals to lay the foundations of social transformation receive a high-quality education (Gómez et al., 2019). In this context, courses that will develop skills such as field knowledge, teaching profession knowledge, general culture and general talent gain importance in teacher training programs (Özkan et al., 2005). Determining whether the teacher candidates have the necessary knowledge and skills in the field, in the teaching profession, and in general culture issues, and in particular defining the knowledge and skill deficiencies, will enable them to be more successful in the teaching profession. Successful teachers are needed for the teacher candidates to be academically successful. It is seen that it is important to determine and eliminate the deficiencies of the teacher candidates especially for the teaching practice in which they learn the teaching profession. Zsófia and Serfőző (2020), on the other hand, points out that the preschool period is an important key in education systems and mentions that teachers have a great role in the development and education of young children. Similarly, Phillips et al. (2019) states that preschool teachers have a critical role in supporting children in the process of getting ready for school. Noting that preschool teachers have a great role in children's developmental periods and effective learning, Hu et al. (2017) refers to the necessity of teacher and child interaction. According to Zsófia and Serfőző (2020), there is an increasing interest in preschool teacher training programs on the international platform, and there is a greater need to train preschool teachers equipped with theoretical and practical knowledge. Emphasizing that children and preschool teachers who will raise them should be qualified and qualified, the researchers emphasize the

importance of both pre-school education and the quality education of pre-school teacher candidates (Zsófia & Serfőző, 2020). The qualified training of both children and pre-school teacher candidates is only possible with qualified teacher training programs. Determining the training needs of teacher candidates in the process of developing programs is one of the most important steps to be taken. In this context, determining the educational needs of pre-school teacher candidates in this study will guide and shed light on the development of teacher training programs. Therefore, opinions were received from preschool teachers and academicians in order to determine the educational needs of teacher candidates for teaching practice. It is believed that using the opinions of different stakeholders in determining the teacher practice needs of pre-service teachers will strengthen the research.

In this study, it is aimed to determine the educational needs of preschool teacher candidates for teaching practice. In order to achieve the general purpose of the research, answers to the following questions were sought:

1. What are the educational needs of preschool teacher candidates according to their views?
2. What are the educational needs of pre-service teachers as regards the following dimensions?
    - Communication skills,
    - Using teaching methods and techniques,
    - Classroom management,
    - Material,
    - Teaching activities,
    - Setting-preparation and first-aid,
    - Assessment.
3. Do the educational needs of pre-service teachers differ according to their grade level?
4. According to the views of academicians and teachers, what are the training needs of pre-service teachers for teaching practice?

Method

This research is a descriptive study conducted to determine the educational needs of preschool teacher candidates for teaching practice. In the study, a mixed research model was used in which qualitative and quantitative research methods were applied together. In the research, the strengths of qualitative and quantitative data were brought together (Büyüköztürk et al., 2016) and reflected in the research findings. The study

group provided two different sets of data, namely, qualitative and quantitative data. The study group, in which quantitative data was collected, consisted of pre-service teachers studying at 3 private universities in the spring semester of 2018-2019 (n = 928). The demographic characteristics of the pre-service teachers are given in Table 1.

Data Collection Tools

In this study, semi-structured 'interview form' containing open-ended questions and 'needs analysis questionnaire' developed by the researcher as a data collection tool were used to determine the training needs of pre-service teachers for teaching practice. Quantitative data were obtained using the needs analysis questionnaire prepared by the researcher, and qualitative data were obtained through the interview form (Toklu, 2018).

Needs Analysis Questionnaire

Within the scope of the research, in order to determine the educational needs of pre-service teachers who are studying in Preschool Teaching Departments in the Faculties of Education, Teaching Practice Needs Analysis Questionnaire Form was prepared by the researcher (Toklu, 2018). The process of preparing the questionnaire forms was started by examining the gains in the teaching practice program. Afterwards, national and international literature related to problems in teaching practice was reviewed. In addition, face-to-face interviews (n = 25) were conducted with pre-service teachers who took the teaching practice course and they were asked to write essays reflecting their educational needs for teaching practice. At the end of this process, qualitative data and essays obtained from teacher trainees were analyzed by content analysis method, an item pool was created, and themes were determined by coding. As a result, a pool of 124 expressions was obtained. A questionnaire consisting of 124 items was examined by 10 faculty members who are experts in education programs and teaching field. As a result of this study, 12 items were excluded from the questionnaire form, 6 items were associated with other items, and a questionnaire consisting of 106 items of 5-point Likert-type rating questions and one open-ended question was attained. In order to ensure the content validity of the questionnaire, expert opinions were obtained from 12 faculty members at 5 different universities, 4 academicians working in educational programs and teaching departments, and 1 instructor working in the field of measurement and evaluation. The academicians were chosen among those who taught the teaching practice course. According to expert opinions, 7

items were excluded from the questionnaire and 15 items were amended. At the end of this process, 7 sub-dimensions, 99 items (communication skills in 18 items, using teaching methods and techniques in 19 items, classroom management in 14 items, material in 14 items, teaching activities in 20 items, evaluation in 11 items, which constitute seven sub-dimensions in total) and an open-ended question, which constitute a 5-Likert type (I need too much, I need much, I need moderately, I do not need much and I don't need any) questionnaire form was prepared. Some of the items in the survey are as follows:

1. Communicating effectively with children in the teaching process
2. Delivering concepts to the child through play
3. Effective use of time during activities
4. Choosing the appropriate color and material for the target or gains in the material
5. Preparing activities according to development levels
6. Taking measures to ensure the safety of children inside and outside the classroom
7. Portfolio File

The questionnaire was applied to 9 preschool teacher candidates who were randomly selected. Simplifications were made on the items that were not clearly understood in the questionnaire form and the teaching application needs analysis questionnaire was finalized. Teacher Application Needs Analysis Questionnaire was developed for the application in preschool teaching departments of 3 private universities. Application was filed to the ethics committees of the universities and, after approval, the researcher visited the universities and applied the questionnaire to 928 students studying in the preschool teaching department. At the end of the application, the scores were given from 5 (I do not need training) to 1 (I need training). As the scores obtained from the survey approach to 1, the educational needs of teacher candidates increase.

Interview Form

In the scope of the research, the interview form (Toklu, 2018) has been prepared by the researcher (Toklu, 2018) in order to determine the needs of preschool teacher candidates for teaching practice. In order to ensure the content validity of the semi-structured interview form, expert opinions were obtained from 6 academicians working in preschool teaching departments in 3 different universities and 13 teachers working in 8 different preschool education centers. Within the scope of the interview form, 5 semi-

structured interview questions were asked to different qualitative stakeholders (academicians and teachers) to collect qualitative data for the needs of pre-service teachers for teaching practice. These questions are listed below:

1. What do you think are the problems you observe in the teaching practice?
2. What are your suggestions for these issues?
3. How do you want the teaching content to be?
4. What are your suggestions to make the course more effective?
5. What qualifications should teacher candidates acquire in this course?

Table 1. Demographic characteristics of participants from whom quantitative data were collected

Demographic information	Number (n)	Percentage (%)
Gender		
Female	770	82,97
Male	158	17,03
Age		
18-22	671	72,31
23-27	231	24,89
28-32	14	1,51
33 and above	12	1,29
Nationality		
TRNC	127	13,69
Turkey	801	86,31
Grade		
1. Grade	156	16,81
2. Grade	167	18,00
3. Grade	303	32,65
4. Grade	302	32,54
Participation in any activity related to the profession		
Participating	837	90,19
Not participating	91	9,81
The participated activity		
Conference	232	27,72

Panel	56	6,69
Seminar	408	48,75
Exhibition	104	12,43
Others	37	4,42
General Total	928	100

As shown in Table 1, 928 preschool teacher candidates participated in the study from whom quantitative data were obtained. It was found out that 83% of the teacher candidates were female, 17% were male, 72% were between 18-22 years old, 86% were Turkish citizens, 65% were 3rd and 4th grade students, 90% participated in activities related to their professions and almost 50% participated in seminars.

In this research, the opinions of not only the pre-service teachers but also academicians and pre-school teachers were tried to be determined. The demographic characteristics of the stakeholders in which the educational needs of the teaching practice are questioned are given in Table 2.

Table 2. Demographic characteristics of preschool teachers and academicians from whom qualitative data were collected

Variables (Academicians)	Categories	N (Teachers)	N
Gender	Female	13	
5	Male		-
1			
	22-29	3	
1			
Age	30-37	8	
1			
	38-45	2	
4			
	46 and above	-	-
Institution worked	Private	13	
2			
	Public	-	-
	Foundation	-	
1			
	1-5 years	1	-
Professional seniority	6-10 years	2	
1			

		11-15 years	8
4			
		16 and above	2
1			

As can be seen in Table 2, it was emphasized that the stakeholders from whom qualitative data were collected represent the field. For this purpose, qualitative data were collected using the interview form from 13 teachers working in 8 different preschool education centers. It was stated that the teachers from whom qualitative data were collected consisted of teachers working in private institutions, mostly having 11-15 years of professional experience who are in the 30-37 age interval.

For this purpose, qualitative data were collected with the help of an interview form from 6 academicians who work at preschool teaching department of 3 universities and who deliver teaching practice course. It was stated that the qualitative data were collected from academicians of 38-45 years of age with 11-15 years of professional experience working at private institutions.

Analysis of Data

Statistical analysis methods were used in the analysis of the quantitative data obtained from the research. The quantitative data were analyzed by using percentage, frequency analysis and means. In order to determine whether the needs of pre-service teachers for teaching practice differ according to their grade levels, the data was examined for parametric tests first. For this purpose, normality and homogeneity tests were performed. In this process, the data set was prepared using loss of data and extreme value data analyzes. Then, central tendency criteria, deviation from the mean criteria, skewness and kurtosis coefficients were calculated and variance homogeneity test (Levene Test) was performed. As a result of the reliability analysis of the questionnaire, Cronbach's Alpha reliability coefficient was calculated as .96. Independent-Samples T-Test and One-Way ANOVA data analysis techniques were used to determine whether the differences in the needs of pre-service teachers in teaching practice were significant. The numerical data obtained are summarized with the help of tables.

Content analysis method was employed in the analysis of qualitative data. Qualitative data obtained from the semi-structured interview form were recorded with voice recorder so that data loss could be prevented. The qualitative data transferred to the manuscript by the researcher were coded

by the line-by-line reading technique, and then these codes were combined with the inductive approach to create themes and categories. After the themes and categories were created, the participants were brought together to confirm whether they reflect the expressions they want to express. The frequencies of the themes which are expressed as the need for teacher practice of teacher trainees and the percentages based on these frequencies were calculated. The qualitative data obtained were interpreted by tabulating. In the findings part of the study, since the identity information of the participants were not to be given explicitly, the analysis was coded as A1, A2, A3 for academicians and Ö1, Ö2, Ö3 for teachers.

Findings

3.1. Findings for Determining Preschool Teacher Candidates' Needs for Teaching Practice

Within the scope of the study, a mixed method was applied to determine the preschool teacher candidates' needs for teaching practice. The necessary data were collected and analyzed by using qualitative and quantitative data collection tools. Table 3 shows the scores obtained from the Teacher Practice Needs Analysis Questionnaire used to determine the needs of teacher candidates for teaching practice.

Table 3. Scores of teacher candidates from needs analysis questionnaire

Dimensions	N	M	Sd
Communication skills	928	3,18	1,11
Usage of teaching methods and techniques	928	3,21	1,11
Classroom management	928	3,28	1,14
Material	928	3,30	1,30
Teaching activities	928	3,29	1,18
Setting design and first-aid	928	3,32	1,30
Assessment	928	3,08	1,28
Needs analysis questionnaire in general	928	3,24	0,99

An examination of Table 3 shows that the pre-service teachers who participated in the study received (M=3,18) from communication skills, (M=3,21) from usage of teaching methods and techniques, (M= 3,28) from classroom management, (M=3,30) from material, (M=3,29) from teaching

activities, (M=3,32) from setting design-first aid, and (M=3,08) from assessment, which are dimensions of Needs Analysis Questionnaire. The score distribution of general educational needs of teacher trainees for teaching practice was calculated as (M=3.24). The obtained values revealed that teacher candidates needed a medium level of education for teaching practice. The qualitative data obtained as a result of face-to-face interviews conducted with preschool teachers and academicians in order to determine the teaching practice needs of teacher candidates are given in Table 4.

Table 4. Teacher training needs according to stakeholder views

Themes	f		Categories	
	Teacher	Academician		
Problems in teaching practice	13	6	Insufficient time	
	12	6	Inability to prepare plan	
	12	6	Inability to prepare activity-material	12
	12	5	Weak communication skills with children	
	12	5	Absence of communication and sharing	
	12	5	Deficiency in classroom management	
	10	4	Sloppy outfit	
	5	3	Low sense of responsibility	8
	3		Students skipping class	
	3		Institutions not asking for interns	5
			Insufficient number of institutions	5
			Intern period should be increased	13
	13	6	Plan should be prepared	
			Activity/material should be prepared	
			Communication skills with children should be	

			strengthened	
			12 4	
			Communication and sharing should be reinforced	12 4
			Preservice teacher should be given responsibility	11 4
			Observation should be increased	11 3
			Self-care abilities	8 3
Recommendations			Appearance	
7	3			
			Course should be supported with practices	7 3
			Institutions should be more conscious	
4	3			
			The number of institutions accepting interns should be increased	
			4 3	
			Teachers should be more conscious about the course	
			4 3	
			They should be directed towards group-work	4 3
			Preliminary conditions should be set	4 3
			Theoretical course should be more comprehensive	4 3
			Practice-oriented	16 6
Course content			Active-participation	
16	6			
			Plan preparation	
16	5			
			Activity-material preparation	
			15 5	
			Increase in practice hours	16 6
Course effectiveness			Increase in theoretical class hours	16 5
			Frequent observation of pre-service teacher	13 4
			Strengthened communication between stakeholders	11 3
			Course teacher being from the field	10 4
			Institutions receiving in-service training	
9	4			

		Honest	
14	6		
		Professionally qualified	
14	5		
		Good-humored	
		14	5
		Patient	
		13	5
		Responsible	
13	4		
		Creative	
13	5		
Characteristic		Classroom management	
13	5		
teachers and		Self-respect	
12	4		
academicians		Self-confidence	
12	4		
		Problem-solving	
		11	3
		Ethics	
		11	3
		Sociable	11
3			

According to Table 4, stakeholders stated that the most important problem experienced in teaching practice was the insufficient duration of internship (f=13/6), and recommended that the internship period should be extended (f=13/6) and classes should be more practice-oriented (f=13/6). For the course to be effective, they argued that the number of practical and theoretical class hours should be increased and the teacher candidates should be observed frequently (f=13/6). The most important characteristics that teacher candidates should possess were identified at the end of teaching practice as honesty, professional qualification, and being good-humored and patient (f=13/6). One Way Anova analysis technique was used to test whether the grade levels of pre-service teachers make a significant difference in their educational needs for teaching practice. Table 5 shows the results of Anova.

Table 5. Educational needs of teacher candidates according to grade levels

Dimension	Grade level	N	Mean	Sd
Communication skills	1.grade	156	2.76	1.11
	2.grade	167	3.04	1.17
	3.grade	303	2.86	1.05
	4.grade	302	2.67	1.08
	Total	928	2.82	1.10
Teaching methods and techniques	1.grade	156	2.71	1.06
	2.grade	167	2.96	1.19
	3.grade	303	2.83	1.03
	4.grade	302	2.70	1.13
	Total	928	2.79	1.10
Classroom management	1.grade	156	2.54	1.06
	2.grade	167	2.97	1.22
	3.grade	303	2.76	1.10
	4.grade	302	2.62	1.13
	Total	928	2.72	1.13
Material	1.grade	156	2.53	1.06
	2.grade	167	2.80	1.11
	3.grade	303	2.75	1.01
	4.grade	302	2.59	1.08
	Total	928	2.67	1.06

	1.grade	156	2.63		
1.11					
	2.grade	167	2.81		
1.26					
Teaching activities	3.grade	303	2.80		
1.15					
	4.grade	302	2.58		
1.20		Total		928	
2.70	1.18				
	1.grade	156	2.62		
1.27					
	2.grade	167	2.70		
1.36					
Setting design and	3.grade	303	2.71	1.29	
first-aid	4.grade	302	2.65		
1.27		Total		928	
2.67	1.29				
	1.grade	156	3.31		
1.32					
	2.grade	167	2.76		
1.30					
Assessment	3.grade	303	2.83		
1.25					
	4.grade	302	2.87		
1.21					
	Total	928	2.91		
1.27					
	1.grade	156	2.72		
.99					
General total	2.grade	167	2.89		
1.00					
	3.grade	303	2.81		
.95					
	4.grade	302	2.66		
1.00					
	Total	928	2.76		
.99					

The educational needs of teacher candidates who participated in the study are determined as (M=2.76, Sd=1.11) for 1st grade, (M=3.04, Sd=1.17) for 2nd grade, (M=2.86, Sd=1.05) for 3rd grade and (M=2.67 Sd=1.08) for 4th grade. According to the findings, it was determined that teacher candidates needed a medium level education for communication skills. In this context, it is seen that teacher candidates at different grade levels need similar

training in terms of communication skills. Similarly, it was determined that teacher candidates needed a medium level education in terms of teaching methods and techniques. As can be seen in Table 5, as regards the needs of teacher candidates for using teaching methods and techniques, the values were calculated as (M=2.71, Sd=1.06) for 1st grade, (M=2.96, Sd=1.19) for 2nd grade, (M=2.83, Sd=1.03) for 3rd grade and (M=2.70, Sd=1.13) for 4th grade. This finding reveals that teacher candidates need training in the use of teaching methods and techniques in the classroom within the scope of teaching practice. When the classroom management of teacher candidates is examined, the values were found as (M=2.54, Sd=1.06) for 1st grade, (M=2.97, Sd=1.22) for 2nd grade, (M=2.76, Sd=1.10) for 3rd grade and (M=2.62, Sd=1.13) for 4th grade. This finding shows that teacher candidates need medium level of education in classroom management. As regards material dimension, the values were determined as (M=2.53, Sd=1.06) for 1st grade, (M=2.80, Sd=1.11) for 2nd grade, (M=2.75, Sd=1.01) for 3rd grade and (M=2.59 SD=1.08) for 4th grade. Based on this finding, it shows that teacher candidates need secondary education in the material dimension. In "teaching techniques" dimension, the findings are (M=2.63, Sd=1.11) for 1st grade, (M=2.81, Sd=1.26) for 2nd grade, (M=2.80, Sd=1.15) for 3rd grade and (M=2.58, Sd=1.20) for 4th grade. Again, this finding shows that they need secondary education in the dimension of teaching activities. An examination of setting design and first-aid dimension shows that the figures are calculated as (M=2.62, Sd=1.27) for 1st grade, (M=2.70, Sd=1.36) for 2nd grade, (M=2.71, Sd=1.29) for 3rd grade and (M=2.65, Sd=1.27) for 4th grade. This finding shows that they need medium level of education in the setting design and first aid dimension. In terms of assessment dimension, the values are found as (M=3.31, Sd=1.32) for 1st grade, (M=2.76, Sd=1.30) for 2nd grade, (M=2.83, Sd=1.25) for 3rd grade and (M=2.87, Sd=1.21) for 4th grade. It was found that the pre-service teachers needed a medium level of education for the assessment dimension. When the findings obtained are evaluated, it is seen that preschool teacher candidates need a medium level of education according to their grade levels.

Results of One-way ANOVA which was conducted to determine whether there was a significant difference between the mean scores of the teacher candidates from the needs analysis questionnaire according to their grade level are presented in Table 6.

Table 6. Teacher candidates' mean score of needs analysis questionnaire by grade level

Dimension	Source of Variance	Sum of Squares	Sd	Mean Square	F	P	Explanation
Communication skills	Between Groups	16.252	3	5.417	4.474	.004*	2-4 Significant
	Within Groups	1118.885	924	1.211			
	Total	1135.137	927				
Using teaching methods and techniques	Between Groups	8.834	3	2945	2.415	.065	P>0.05 Insignificant
	Within Groups	1126.464	924	1.219			
	Total	1135.298	927				
Classroom management	Between Groups	19.254	3	6.418	5.010	.002*	1-2 2-4 Significant
	Within Groups	1183.573	924	1.281			
	Total	1202.827	927				
Material	Between Groups	9.750	3	3.250	2.858	.036*	3-4 Significant
	Between Groups	1050.735	924	1.137			
	Total	1060.486	927				
Teaching activities	Between Groups	10.312	3	3.437	2.440	.063	P>0.05 Insignificant
	Within Groups	1301.778	924	1.409			
	Total	1312.090	927				
Setting and First-aid	desigr Between Groups	1.180	3	.393	.233	.873	P>0.05 Insignificant
	Within Groups	1557.126	924	1.685			
	Total	1558.306	927				
Assessment	Between Groups	31.079	3	10.360	6.478	.000*	1-2 1-3 Significant
	Within Groups	1477.685	924	1.599			
		1508.764	924				

	Total	7				
General total	6.918	3	2.306		.071	P>0.05
	905.112	92	.980	2.354		Insignificant
	912.031	4				
		92				
		7				

As can be seen in Table 6, significant difference has been identified in communication skills $F_{(3;924)}$= 4.474, p<0.05), classroom management ($F_{(3;924)}$= 5.010, p<0.05), material ($F_{(3;924)}$=, 2.858 p<0.05) and assessment ($F_{(3;924)}$= 6.478, p<0.05) dimensions of pre-service teachers according to their grade levels.

When the findings are examined, it is seen that the results obtained are in favor of the pre-service teachers. It can be argued that pre-service teachers experienced deficiencies in the first years due to lack of well-based knowledge about communication skills, but their communication skills were strengthened because they took effective communication course when they reached the last grade and had the chance to do internship in various institutions. When the classroom management is taken into consideration, it is seen that the courses related to the subject were not studied in the first years and pre-service teachers had no chance to practice. However, it was observed that this deficiency decreased after they started taking the school experience course in the third grade and the problem of classroom management was observed in very few teacher candidates in the last grade. It is believed that the difference in the material dimension was due to the fact that the pre-service teachers had difficulty because they took the relevant course in the third year, and when they reached the fourth grade, their deficiencies decreased because they carried out both theoretical and practical studies on the material for an entire year. The difference in the assessment dimension can be explained as follows: pre-service teachers will be able to acquire this skill as long as they have the chance to make effective observations and practices related to their field of knowledge. In addition to the foregoing, significant difference has not been identified in the usage of teaching methods and techniques ($F_{(3;924)}$= 2.415, p>0.05), teaching activities ($F_{(3;924)}$= 2.440, p>0.05) and setting design and first aid ($F_{(3;924)}$=.233, p>0.05) dimensions. This finding suggests that pre-service teachers are adequately knowledgeable in relevant dimensions.

When the results of LSD test which was performed in order to determine the groups between which intra-group differences exists are examined, it is seen that the 2nd and 4th graders are different in terms of communication skills, 1st and 4th graders are different in terms of classroom management, 3rd and 4th graders are different in terms of material, and 1st and 3rd graders are different in terms of assessment, which is in favor of 4th grader pre-service teachers. As the grade levels increase, it can be said that they gain knowledge about communication skills, classroom management, material preparation and use and assessment. In addition, it can be argued that their practice helps them increase their awareness and gain teaching skills step-by-step.

Discussion and Conclusion

In this study, it is aimed to determine the educational needs of preschool teacher candidates teachers for teaching practice. The results obtained from the quantitative data revealed that pre-service teachers generally need a medium level education for teaching practice. Similarly, it has been found that pre-service teachers need a medium level education for communication skills, application of teaching methods and techniques, classroom management, usage of materials, planning teaching activities, design of teaching environment, first aid skills, and evaluation skills. The mentioned skills form the basis of the teaching practice course. What is expected of pre-service teachers is that they graduate from teacher education programs having acquired these skills. In this context, meeting the training needs of pre-service teachers for these skills is seen as a necessity in terms of their success and that of their students in their professional lives. Teachers, who are the main determinants of education, have a significant impact on a quality education (Unal & Kurt, 2018). Especially preschool teachers and teacher candidates should know children well and have the ability to gather information about children. Preschool teachers have a critical role in determining the needs of children and meeting their needs during their developmental stages (Laletas et al., 2020). In addition, it is seen as a necessity for preschool teachers to know children well and to prepare environments that will support children's learning. In this context, activities should be adapted to the needs of children and cooperation should be established with relevant persons and organizations. Sharing experiences in this process is considered extremely important (Yazici et al., 2020; Erdiller-Yatmaz et al., 2018). Fischer et al. (2020) emphasize the importance of teaching practices in student learning and underline that teachers should

have the skills to support and guide their learning processes. Teachers are expected to plan classroom activities, create learning environments taking into account the individual needs of students, and develop communication and collaboration skills of students (Fischer et al., 2020). Tok (2010) emphasizes the importance of teaching practice by underlining that teacher competencies play an important role in the learning of students. Expressing that pre-service teachers experience teaching with teaching practice, Tok (2010) states that pre-service teachers have problems in planning, using teaching materials, motivating students, communicating with students, and providing classroom management. The results obtained by Tok in 2010 are similar to the results of this study. In this context, it can be argued that the problems experienced in the past regarding teaching practice continue today. Teaching practice, which is one of the leading vocational education practices, contributes to the personal and professional development of pre-service teachers (Özdaş & Çakmak, 2018). Therefore, eliminating the detected problems is considered as a necessity.

Katitia (2015) states that 21st century teachers should be able to use technology to integrate into classroom teachings which he expresses as an important component of education. In addition, the author explains that the most important activity of teacher training programs is teacher quality. Similarly, Kayange and Msiska (2016), who define teachers as the backbone of the education system, emphasize the need to expand teacher education in order for teachers who determine the quality of the education system to be effective in the 21st century. Research supports the findings obtained from this research, and reveals the importance of needs of pre-service teachers to be met through regulations in teacher training programs.

In the study, the opinions of pre-school teachers and academicians were also consulted in order to determine the training needs of pre-service teachers for teaching practice. The qualitative data obtained revealed that pre-service teachers need education in terms of plan, activity and material preparation, classroom management, and communication skills with children. This finding supports the findings obtained from quantitative data. In their study, Öner and Aydın (2016) stated that pre-service teachers expect support from teachers to communicate with students, use teaching methods and techniques, and practice in classroom management. This finding reveals that pre-service teachers need support in performing the teaching profession and the current deficiency.

Pre-school teachers and academics who participated in the study label as the most fundamental problem experienced in teaching application the reluctance of institutions to accept pre-service teachers as interns and the

quantitative inadequacy of institutions. Participants who offered suggestions for the solution of the current problems mentioned especially that the lecturers teaching the teaching practice course should be selected from the field and their internship duration should be increased. In his study, Tosun (2019) concluded that the internship period was insufficient. Similarly, Aslan and Sağlam (2018) stated that pre-service teachers found the class hours for teaching practice insufficient, and because of the inadequacy of the internship period, the pre-service teachers were unable to adequately familiarize with and experience the practices in the school. Teaching practice offers pre-service teachers opportunities to recognize their strengths and weaknesses during the internship and provides opportunities to develop their weaknesses (Bektaş & Can, 2019). In this context, increasing teaching practice class hours and the extending duration of internship is seen extremely important in terms of compensating for the knowledge and skill deficiencies of pre-service teachers and equipping them with the experience in the profession of teaching.

Another result obtained from the study is that grade levels of pre-service teachers are effective in determining their educational needs. As the grade levels of teacher candidates increase, their educational needs decrease and their knowledge and skills levels for the teaching profession improve. In this context, it is recommended to increase the number of courses such as teaching practice in teacher training programs and to include these courses in the program as of 1st grade. Finally, increasing the number of preschool institutions accepting trainees, raising awareness of the institutions on this issue, strengthening the communication among the stakeholders, supporting the pre-service teachers in terms of communication skills, classroom management, evaluation, daily plan and preparing materials suitable for the activity, and selecting the teaching staff who give the lecture on teaching practice from the field is recommended.

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