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Araştırma Makalesi Original Article

### Perceptions of Nursing Instructors towards Distance Education in the Pandemic Process Merve KIRŞAN BÜYÜKTARAKÇI<sup>\*1</sup>, Ebru CİRBAN EKREM<sup>1</sup>, Sevim ÇELİK<sup>1</sup> <sup>1</sup>Bartın Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Bölümü, 74100, Bartı, Türkiye

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MAKALE BILGISI	ABSTRACT
Received : 22.04.2024 Accepted :02.12.2024	The study aims to identify the distance education perceptions of the faculty members of the department of nursing and the factors affecting these perceptions. In the cross-sectional and correlational study in which the online survey was used, 327 faculty member who were selected with the sampling method for a known population were included. Data were collected online by using the Personal Information Form and
<b>Kewywords</b> Distance education Faculty member Nursing Pandemic process Perception	the "Distance Education Perception Scale". In the evaluation of research data, descriptive statistical analysis and non-parametric tests were used. It was found that the nursing faculty members had medium-level distance education perceptions. It is thought that improving the competencies of the faculty members of the nursing department can increase their perceptions of distance education, reduce their stress levels and adapt to distance education more easily.
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#### Pandemi Sürecinde Hemşirelik Öğretim Elemanlarının Uzaktan Eğitime Yönelik Algıları

ARTICLE INFO	ÖZ
Geliş: 22.04.2024 Kabul:02.12.2024 Anahtar Kelimeler Algı Hemşirelik Öğretim elemanı, Pandemi süreci Uzaktan eğitim * Sorumlu Yazar	Araştırma, hemşirelik bölümü öğretim elemanlarının uzaktan eğitim algılarını ve bu algıları etkileyen faktörleri belirlemeyi amaçlamaktadır. Çevrimiçi anketin kullanıldığı kesitsel ve korelasyonel çalışmaya, evreni bilinen örnekleme yöntemiyle seçilen 327 öğretim elemanı dahil edilmiştir. Veriler, Kişisel Bilgi Formu ve "Uzaktan Eğitim Algı Ölçeği" kullanılarak çevrimiçi olarak toplanmıştır. Araştırma verilerinin değerlendirilmesinde tanımlayıcı istatistiksel analiz ve parametrik olmayan testler kullanılmıştır. Hemşirelik öğretim elemanlarının uzaktan eğitim algıları orta düzeydedir. Hemşirelik bölümü öğretim elemanlarının yeterliliklerinin arttırılmasının, onların uzaktan eğitim algılarını artırabileceği, stres düzeylerini azaltabileceği ve uzaktan eğitime daha kolay uyum sağlayabilecekleri düşünülmektedir.

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#### **INTRODUCTION**

Caused by the new coronavirus that was called the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the COVID-19 disease spread quickly across the entire world following the identification of the first case in Wuhan city of China toward the end of 2019. In Turkey, on 11 March 2020, it was announced that the first COVID-19 case was identified. Transmitted via droplets from or contact with infected individuals, the coronavirus infected more than 141 million people in the world and 4.27 million people in Turkey up to the present (1,2).

In the context of the COVID-19 pandemic, in an attempt to stop the spread of the virus, numerous countries issued regulations for preventing people from going outdoors except for emergencies. One of these regulations is the adoption of online education/distance education methods in education institutions (3.4). In accordance with the decision of the Council of Higher Education in Turkey, all universities have switched to distance education as of March 18, 2020. In this context, some universities in Turkey apply a model consisting of synchronous, some asynchronous, and some combination of these two (5,6).

Distance education is a student-oriented method of education offered independently of time and space and by using information technologies (7). Just as in the case of every education method, distance education also has advantages and disadvantages. The advantages of distance education are that it offers flexibility in terms of time and space, can be configured depending on the individual's learning speed, allows the use of multimedia devices, supports life-long learning, and has low system installation costs (8.9). The disadvantages of distance education are that the instructors spend a very long time and make efforts to select technological education materials and present them to the students, the targeted learning outcomes and educational technology do not completely support each other and are not fully integrated, and the faculty members are obliged to have perspectives, perceptions, and qualifications conducive to the use of technological methods (10,11).

In fact, distance education in the field of nursing in our country has not been implemented for the first time with the pandemic process. This method, which started to be used in 1991, ended in 1999. Nowadays, it is preferred more frequently in conducting non-thesis master's programs in Turkey (12,13). Distance education may not have effectiveness and efficiency at the desired level as in the case of undergraduate-level nursing programs and other practice-oriented disciplines where theory and practice complement each other and skills on topics such as critical thinking, professional competence, and teamwork are developed (14,15). The qualifications of the instructors who will lecture the course and their perceptions toward online learning and teaching platforms are also of utmost importance to the effective and efficient use of the distance education method (11,16).

The distance education applications, which the instructors started unprepared and compulsorily during the pandemic period, together with the isolation applications during the pandemic process, caused the instructors to experience stress due to the insufficient knowledge and experience of distance education. The stress experienced made it difficult for the faculty members to adapt to distance education (17,18). In a study, it was reported that teachers experience stress in the distance education process due to the lack of knowledge about preparing distance education content, technical difficulties and the difficulties created by the intertwining of private and business life (17). Again, in some studies, it has been determined that anxiety, depression and sleep disorders are seen in teachers who teach with distance education during the pandemic process (18-20). Ballova Mikuškova, and Verešova (2020) also reported in their studies that teachers' perceptions of distance education are effective in increasing their negative feelings (21). In a metaanalysis study examining the stress, anxiety and depression levels of faculty members and high school teachers during the pandemic process, it was reported that university students had higher stress levels than schools (22).

In this context, it is important to determine the perceptions of faculty members towards distance education in order to increase the functionality of distance education, to help students learn, to determine effective methods that will reduce the stress and anxiety levels of faculty members in the distance education process, and to ensure an efficient distance education process (23). However, in the relevant literature, it was discerned that the studies about distance education during the COVID-19 pandemic were often performed on students, and there are fewer studies on determining the perceptions of nursing faculty members towards distance education (24-26). In this study, it was aimed to determine the perceptions of the nursing department faculty members towards distance education and the factors affecting their perceptions during the pandemic process.

#### **MATERYAL VE METOT**

#### Type of research

This study is a descriptive and correlational study using cross-sectional online survey.

#### Aim of study

The study aims to identify the distance education perceptions of the faculty members of the department of nursing and the factors affecting these perceptions.

#### **Research population and sample**

The research population is comprised of 1728 faculty members lecturing at the department of nursing of universities in Turkey according to the Higher Education Information Management System of Turkey (27). The sample size of the study was 315, using sampling method for a known population method, with 5% acceptable error and 95% confidence interval, with p=q=0.5 was calculated and completed with 327 faculty members who agreed to participate in the study. The faculty members who worked for the departments of nursing in the faculties of health sciences and faculties of nursing or colleges of nursing, colleges of health, and colleges of health sciences at public and foundation universities in Turkey, lectured during the distance education process, and volunteered to participate in the study were included in the study.

#### **Data collection**

Research data were collected via an online survey form that contained the personal information form prepared by the researchers and the "Distance Education Perception Scale".

#### Personal information form

The form prepared by the researchers in light of the relevant literature had 23 questions designed to retrieve participants' demographic and academic data In the personal information form prepared by the researchers in light of the relevant literature, 23 questions were included in order to obtain the demographic and academic information of the participants (age, gender, marital status, type of university, unit of study, field of specialization, working year, etc.) (28,29).

#### **Distance education perception scale**

The scale developed by Gök (2011) has 21 items and three sub-scales, that is, perception of basic view, access to resources, and education and training planning. As a result of the factor analysis, 7 factors were found to reveal the perceptions of the faculty members. Factor analysis was performed again by removing items with low factor loading values or items with high load values in more than one factor from the items constituting these 7 factors. Thus, a 21-item scale with a 3-factor structure was created. The scale items are rated as per a five-point Likert scale ("I absolutely disagree: 1", "I absolutely agree: 5"). The minimum and maximum scores to be obtained from the scale are respectively 21 and 105 points. The score ranges for the sub-scale of



perception of basic view', 10-23.33, 23.34-36.77, and 36.78-50, successively indicate low, medium, and high perception levels. The score ranges for the sub-scale of 'access to resources', 6-14, 14.01-22, and 22,01-30, consecutively refer to low, medium, and high perception levels. The score ranges for the sub-scale of 'education and training planning', 5-11.66, 11.67-18.32, and 18.33-25, respectively denote low, medium, and high perception levels. The score ranges for the score ranges for the score ranges for the score ranges for the score ranges for the score ranges for the score range for the scale (30). In this current study, the Cronbach's Alpha coefficient was calculated as 0.849 for the scale.

#### **RESULTS AND DISCUSSION**

In the study, it was determined that the mean age of the minimum age is 26 and maximum age is 63 faculty members was  $41.48\pm8.45$  years, nearly half (47.1%) were between the ages of 35-43, almost all of them were women (94.8%) and 71.3% were married. Moreover, 77.1% of the faculty members worked at public universities, 74.3% were staffs of the faculty of health sciences, they were mostly in the department of public health nursing (14.7%), 44.3% were assistant professor, and 60.2% worked as academicians for more than 11 years (Table 2).

Characteristics	n	%	
Age group			
26-34	64	19,6	
35-43	154	47,1	
44-52	72	22,0	
53-61	29	8,9	
62-70	8	2,4	
Gender			
Female	310	94,8	
Male	17	5,2	
Marital status			
Married	233	71,3	
Single	94	28,7	
University type			
Public university	252	77,1	
Foundation university	75	22,9	
School			
Faculty of health sciences	243	74,3	
Faculty of nursing	59	18,0	
College of nursing	5	1,5	
College of health	15	4,6	
College of health sciences	5	1,5	
Department of nursing program			
Essentials of nursing	46	14,1	
Internal medicine nursing	43	13,1	
Surgical diseases nursing	46	14,1	
Obstetric and gynecological nursing	46	14,1	
Pediatric nursing	40	12,2	
Public health nursing	48	14,7	
Psychiatric and mental health nursing	40	12,2	
Management in nursing	17	5,2	
Instruction in nursing	1	0,3	
Academic title			
Professor	37	11,3	
Associate Professor	64	19,6	
Assistant Professor	145	44,3	
Lecturer	81	24,8	

Table 2. Faculty Members' Demographic and Academic Features



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Tablo.2 (Devamı) Work duration in years 1 1-5 6-10 ≥11	10 62 58 197	3,1 19,0 17,7 60,2	
	X±	SD Min - M	Max
Age	41,	48±8,45 26-70	

Characteristics	n	%
Number of courses lectured		
1	24	7,3
2	46	14,1
3	61	18,7
4	58	17,7
5	53	16,2
6 or above	85	26,0
Course area*		
Office	154	47,0
Home	243	74,1
Others	15	4,6
Course device*		
Telephone	17	5,2
Tablet	9	2,8
Computer	325	99,4
Education method		
Synchronous	214	65,4
Asynchronous	7	2,1
Both together	106	32,4
Presence of another faculty members in the course area		,
Yes	178	54.4
No	149	45.6
Whether the faculty member received training about distance	,	.0,0
education methods		
Yes	227	69.4
No	100	30.6
The faculty members feel competent in software and hardware	100	20,0
Yes	246	75.2
No	81	24.8
Institution where training about distance education methods was	01	24,0
received*		
Associations	35	10.7
University where the faculty member worked	203	62.1
Private institution	203	7.0
Others	19	58
Use of interactive methods in distance advection	17	5,0
	282	86.2
No	202 45	13.8
INU Interactive methods used in distance education*	<del>4</del> J	15,0
Audiovisual games	112	313
Videos	2/1	73 7
riucus Group studios	241 206	63.0
Others	200	10.7
Ouicis	33 V   CD	10,/ Min Mar
Course house non-moch	$\frac{\mathbf{A} \pm \mathbf{S} \mathbf{J}}{14.09 \pm 9.97}$	1 40
Course nours per week	14,98±8,86	1-48
Time spent on internet outside the course	$5,25\pm3,16$	0-20

N: Number, %: Percent, X: Mean, SD: Standard Deviation, Min: Minimum, Max: Maximum

\*Multiple answers were given, percentages were calculated based on the number of participants (N=327).

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The faculty members' 26% lectured six or more courses by using distance education methods, the mean of the hours of courses lectured by them was  $14,98\pm8,86$  hours per week, the faculty members lectured courses mostly from home (74,1%), and nearly all of them used computers for online courses (99,4%). The faculty members mostly used synchronous methods for lecturing (65,4%) and 54,4% said that someone else lectured by using a distance education method in the same setting while they lectured a course. About 69,4% of the faculty members who received training about distance education methods and 62,1% of the faculty members who received this training obtained it from the university where they served. It was discerned that 75,2% of the faculty members felt qualified for using software and hardware designed for distance education (86,2%) and they mostly preferred video display (73,7%) and group studies (63%) in this respect (Table 3).

Table 4. Problems Experienced by Instructors Regarding Distance Education

Problems	n*	%**
Lack of communication and interaction between instructor and students	241	73,7
Measurement and evaluation problems	209	63,9
Trouble in accessing the internet	136	41,6
Insufficient infrastructure	119	36,4
Insufficient knowledge of technology	62	19,0
Other	21	6,4

\*Multiple answers were given. \*\*Percentages were calculated based on the number of participants (N=327).

The faculty members mostly suffered from the lack of communication and interaction between instructor and students in distance education (73,7%), and this problem was followed by measurement and evaluation problems (63,9%) and the trouble in accessing the internet (41,6%) (Table 4).

	Score	Minimum and n	novimum cooros	Dorcontion
Factors	X±SD	obtained from	n scale items	level
Perception of basic view	26,12±7,82	10	50	Medium
Access to resources	20,14±4,53	8	30	Medium
Education and training planning	18,48±3,37	5	25	Medium
Overall distance education perception	64,75±12,13	33	103	Medium

#### **Table 5. Faculty Members' Distance Education Perceptions**

When the distance education scale sub-dimensions and total score averages of the faculty members included in the study were examined, it was determined that their perceptions were moderate (Table 5).

Table 6. Comparison of Faculty Members' Distance Education Perception Scores as Per Their Descriptive Characteristics

Characteristics	Perception of basic view X±SD	Access to resources X±SD	Education and training planning X±SD	Overall distance education perception X±SD
Gender				
Female	25,85±7,74	20,14±4,49	18,44±3,39	64,45±12,00
Male	31,00±7,83	$20,11\pm 5,40$	19,17±2,96	70,29±13,49
Z p	1639; <b>0,009</b>	2610; 0,948	2238; 0,294	1887; <b>0,049</b>
Marital status				
Married	$26,\!68{\pm}7,\!79$	20,26±4,59	18,61±3,22	65,56±12,16
Single	24,73±7,76	19,83±4,40	18,15±3,72	62,75±11,88
Z p	9420; <b>0,048</b>	10452; 0,518	10105; 0,272	9714; 0,110

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Table 6. (Devamı)					
Age (41,48±8,45)	26,12±7,82	20,14±4,53	18,48±3,37	64,75±12,13	
r p	-0,115; <b>0,038</b>	-0,140; 0, <b>011</b>	-0.137; <b>0,013</b>	-0.154; <b>0,005</b>	
University type					
Foundation	$25,38{\pm}7,00$	$20,60\pm4,48$	19,46±2,67	$65,45{\pm}10,54$	
University Public University	26,34±8,04	20,01±4,55	18,19±3,50	64,54±12,57	
Z p	8904; 0,447	8639; 0,258	7435; <b>0,005</b>	8882; 0,429	
Work duration in					
years					
1 (1)	27,60±9,70	24,80±3,39	21,00±3,23	73,40±12,14	
1-5 (2)	27,11±7,72	$20,06\pm4,87$	$18,80\pm 2,83$	65,98±11,08	
6-10 (3)	26,12±7,28	20,13±4,03	18,86±3,39	65,12±11,34	
≥11 (4)	25,73±7,93	19,93±4,51	$18,14\pm3,47$	63,82±12,53	
$\chi^2 p$	2,653; 0,448	10,139; <b>0,017</b>	7.528; 0,057	6,932; 0,074	
Academic title					
Professor	25,91±7,77	$19,78{\pm}4,45$	17,59±4,12	63,29±13,84	
Associate Professor	25,57±8,84	20,51±4,65	18,31±3,35	64,40±13,49	
Assistant Proffesor	$25,50{\pm}7,78$	19,82±4,46	18,53±3,24	63,85±11,47	
Lecturer	27,75±6,92	20,60±4,63	18,91±3,21	67,30±11,13	
$\gamma 2 p$	8,495; 0,037	2,196; 0,533	2,316; 0,510	6,659; 0,084	

 $\chi$ 2= Kruskal-Wallis H Test, U= Mann-Whitney U test, r= Spearman correlation coefficient Work duration in years; Bonferroni-corrected Z Mann-Whitney U test *p*=0,0083

In the study, as per the gender, there were statistically significant differences in the means of scores obtained by the faculty members from the overall Distance Education Perception Scale and its sub-scale of 'perception of basic view'. The male faculty members had a higher mean of distance education perception scores and this difference was statistically significant (p=0.009). Likewise, the age had a statistically significant weak negative relationship with scores obtained by the faculty members from the overall scale and its sub-scales (p<0.05), and the younger faculty members had higher levels of distance education perception. It was determined that married people (p=0.048) had a higher perception level of basic gaze than singles. In the same table, a statistically significant difference was found between the academic titles of the faculty members and their perceptions of the basic point of view (p=0.037). It was determined that the perception level of the faculty members working as a lecturer was statistically significantly higher than the assistant proffesor and associate professors (Table 6; p=0.0083).

It was discerned that, as per the work duration in years, there was a statistically significant difference in the means of scores obtained by the faculty members from the sub-scale of 'access to resources' (p=0.017). As a result of the Bonferroni-corrected pairwise comparisons made to determine which group the difference originated from, it was found that the scores of the access to resources scale subgroup were statistically significantly higher than those who worked for less than 1 year compared to those who worked between 1-5 years and 6-10 years (Table 6, p=0.0083). In this study, the faculty members working for foundation universities obtained a higher mean of scores from the sub-scale of 'education and training planning' than the faculty members working for public universities (p=0.005) (Table 6).

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Table 7. Comparison of Faculty Members' Distance Education Perception Levels as Per Their **Characteristics Related to Distance Education Processes** 

Characteristics	Perception of basic view X±SD	Access to resources X±SD	Education and training planning X±SD	Overall distance education perception X±SD
Whether the faculty member received training about distance education mathede				
Noc.	26,81±7,71	$20,78\pm4,36$	18,85±3,43	66,44±12,22
No	24,56±7,87	18,69±4,61	$17,66\pm3,09$	60,91±11,05
Z p	-2,592; <b>0,010</b>	-3,697; <b>0,000</b>	-3,533; <b>0,000</b>	-4,204; <b>0,000</b>
The faculty members				
feel competent in				
software and				
hardware				
Yes	26,69±8,11	20,41±4,61	18,67±3,48	65,77±12,54
No	24,39±6,62	19,34±4,21	$17,92\pm2,97$	61,66±10,24
Z p	-1,920; 0,055	-1,782; 0,075	-2,064; <b>0,039</b>	-2,4;31 <b>0,015</b>
Education method				
Synchronous (1)	$26,48\pm8,04$	$20,29\pm4,53$	18,34±3,32	65,12±12,28
Asynchronous (2)	22,00±7,34	17,57±4,42	15,42±3,59	55,00±13,26
Both together (3)	25,66±7,34	20,01±4,53	18,97±3,36	64,66±11,59
$\chi^2 p$	2,606; 0,272	2,540; 0,281	7,141; <b>0,028</b>	3,931; 0,140

 $\chi^2$  = Kruskal-Wallis H test, U = Mann-Whitney U test, 2-3: Bonferroni-corrected Mann-Whitney U test, p=0.0167

The faculty members who received training about distance education methods obtained a higher mean of scores from the Distance Education Perception Scale and this difference was statistically significant (p < 0.05). Likewise, the faculty members who felt qualified for using software and hardware in the distance education process obtained higher means of scores from the overall Distance Education Perception Scale (p=0.015) and its sub-scale of 'education and training planning' (p=0.039) and these differences were statistically significant. It was identified that, as per the education method used in the distance education process, there was a statistically significant difference in the means of scores obtained by the faculty members from the sub-scale of 'education and training planning' (p=0.028). In the statistical analysis, it was found that the perception of education and training planning sub-dimension of the scale was found to be significantly higher among the faculty members using the synchronous method than those using the asynchronous method and those using the asynchronous+ synchronous method compared to those using the asynchronous method (p=0.0167) (Table 7).

There was no statistically significant difference in the faculty members' distance education perceptions as per their other descriptive characteristics, the number of courses lectured by them during distance education, the mean weekly course hours, time spent by them on the internet outside the courses, whether someone else used distance education method in the same setting when the faculty members lectured a course, and whether the faculty members used interactive methods in distance education (p>0.05) (Table 7).

Upon the examination of the mean scores obtained by the nursing faculty members from the Distance Education Perception Scale and its sub-scales, it was discerned that the faculty members had medium-level distance education perceptions. In the study performed by Gök and Kılıç Cakmak (2020) to analyze distance education perceptions of the faculty members who worked for university programs other than nursing, it was identified that the faculty members obtained the

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highest scores from the sub-scale of 'education and training planning' while they obtained medium-level scores from the overall Distance Education Perception Scale and its other sub-scales (28). In the study conducted by Pektekin (2013) to evaluate technological knowledge and skill levels of the faculty members at academic units of a university, it was discerned that the follow-up of technological innovations and the adoption of positive sides of technology were less common in the area of health sciences than in the area of social sciences and humanities (31). It is considered that the faculty members had medium-level education planning perceptions in this study since they experienced the processes of receiving training about distance education and practicing distance education both together. Moreover, it is a pleasing finding that the nursing faculty members participated in training courses about distance education and enhanced their qualifications along with the urgent adoption of distance education methods during the period of the pandemic.

In this current study, the male faculty members had a higher mean of Distance Education Perception Scale scores than female faculty members, and this difference was statistically significant. There are studies that obtained findings in parallel to this finding of the current study (28,32). Besides, in the relevant literature, it was stated that the men had better skills in using technological devices and used the internet more frequently and longer than the women, and these factors might have affected the men's distance education perceptions positively (33,34). Moreover, there are also studies emphasizing that men had more positive views about the adoption of technology than women (35,36). Departing from these results, it is considered that the gender factor might have also affected the faculty members' distance education perceptions.

It was found that the older faculty members had lower levels of distance education perception. This result might have been obtained due to several factors affecting faculty members such as using a system different from the familiar system in place in formal nursing education, having difficulty in adopting technology and adapting to it, and having no training about the use of distance education methods. In the study by Jena and Mahanti (2014), the use of technology in education was evaluated, and it was found that the academicians at an advanced age experienced more technostress than the young academicians (37). In Akgün (2019)'s study, it was determined that the acceptance of the faculty members towards information and communication technologies decreased as their age increased (38), while their perception of technostress increased as the age increased. In the study performed by Akdemir and Kılıç (2020) to identify the higher education students' views about the distance education process, the students characterized young faculty members as more successful in using the system actively than faculty members at an advanced age (39). In this context, it is considered that, to enhance the faculty members' levels of distance education perception, the faculty members should not only be open to and eager for innovations in education and instruction activities but also the factors facilitating the adoption of technology should be identified and the faculty members should be supported in this respect.

In the current study, the faculty members who worked for foundation universities obtained a higher mean of scores from the sub-scale of "education and training planning" than the faculty members who worked for public universities and this difference was statistically significant. It is considered that this difference might have arisen from the fact that the foundation universities had a smaller number of students than public universities and/or foundation universities had adequate technological infrastructure. In the study by K1sa and Kaya (2006), it was ascertained that the faculty members who worked for foundation universities found the technological equipment in the relevant institution more satisfactory than the faculty members who worked for public universities (40). In the study by Karadağ et al. (2021), it was put forward that there was no difference in the qualities of distance education centers of both public and foundation universities, and all universities had medium-level or low-level qualities (41). Upon the review of the relevant

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literature, it is discerned that there was no common result indicating that the foundation and public universities had differences in terms of technological equipment.

It was found that the faculty members who had a longer work duration in years obtained a lower mean of scores from the sub-scale of 'access to resources' and this difference was statistically significant. Upon the examination of this finding by each item under the sub-scale of 'access to resources', it is discerned that the faculty members who had a longer work duration had trouble in using electronic materials and learning management systems in the distance education process. Likewise, in the study by Pektekin (2013) showed that the faculty members who had a relatively short work duration in years had positive perceptions toward technology and distance education infrastructure (31). Alongside this result, it is thought that, independently of the work duration in years, the infrastructure facilities of universities in the distance education process and their state of preparedness for distance education affected the perception toward access to resources. In the relevant literature, it was asserted that technical and instructional support offered by universities to the faculty members positively affected the faculty members' satisfaction with online learning (42,43). Departing from this point, it is considered that faculty members' distance education perceptions might have been affected also by the increase in the need for technical support for using learning management systems and whether these needs were met.

The faculty members who were lecturers obtained a higher mean of scores from the subscale of 'perception of basic view' in this study, and this difference was statistically significant. Likewise, in the study by Pektekin (2013), it was ascertained that the academic group that used technology mostly was the lecturers (31). Nearly all faculty members lectured courses through computer and the most widely used interactive method was the video display in the current study. This result is in parallel to the studies identifying that the instruction technique used most widely by the faculty members in the distance education system was the display of course videos (29,31).

In the study, the most common problem encountered by the members in distance education was the lack of communication and interaction between instructor and students. Also, in the studies performed at the national and international levels, it was identified that the faculty members frequently suffered from the lack of communication and interaction between instructor and students (32,43). When this problem was viewed from the student perspective, it is discerned that the students also had trouble in the communication and interaction with the instructors (26,44). It is considered that obtaining this result was not astonishing because problems such as trouble in accessing the internet, malfunctions in internet connection, failure of students to participate in courses actively, and the impossibility for faculty members to establish eye contact with students were experienced.

#### CONCLUSION AND SUGGESTIONS

This study demonstrated that the faculty members who served at the department of nursing had medium-level distance education perceptions. And also, it showed that the distance education perceptions of the faculty members who are male and young, working as a lecturer and working at a foundation university are higher. In order to increase the positive perceptions of faculty members about distance education, they should be supported from various angles. As much as ensuring the competence of academics for distance education are also important. For this regard and the opportunities they provide for distance education are also important. For this reason, developing infrastructures that can be preferred for both the teacher and the learner in distance education will increase the quality of education, the satisfaction and preference levels of students and academics, and reduce time losses and negativities that may be experienced in the process. In addition, practical courses are of great importance in nursing education. The literature on this subject needs to be developed.



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