

Original Article

Determination of University Students' Attitudes towards Distance Education and their Social Anxiety Levels and their Opinions on Clinical Practice

Canan Birimoglu Okuyan, PhD

Assistant Professor, Sakarya University of Applied Sciences, Nursing, Turkey

Esma Akgul

Research Assistant, Sakarya University of Applied Sciences, Nursing, Turkey

Mujde Kerkez

Lecturer, Sinak University, Health Services Vocational School, Turkey

Correspondence: Canan Birimoglu Okuyan, Assistant Professor, Sakarya University of Applied Sciences, Nursing, Turkey E-mail:cananbirimoglu@gmail.com, cananbirimoglu@subu.edu.tr

Abstract

Aim: It was conducted to determine university students' attitudes towards distance health education, social anxiety levels and opinions on clinical practice.

Methods: The universe population consisted of students studying at a university. Data of the study were collected with Socio-demographic Diagnosis Form, Attitude Scale Applied towards Distance Education during the Pandemic and Social Anxiety Scale for E-Learning Environments.

Results: The mean age of the students is 19.54 ± 1.80 and the social anxiety scale mean score for e-learning environments is 139.21 ± 87.02 . The students' distance education and face-to-face education comparison attitudes increases, their social anxiety in e-learning environments increases. A statistically significant positive correlation was found between the attitude scale towards distance education and the attitude towards faculty members in distance education, attitude towards online exams, communication and access in distance education (respectively; $r=0.932$, $p<0.001$; $r=0.919$, $p<0.001$; $r=0.819$, $p<0.001$; $r=0.905$, $p<0.001$).

Conclusions: Students' satisfaction with distance education was not at a high level as in the literature, and they experienced social anxiety, which was examined differently from the studies in the literature. In this case, factors such as technological and technical problems, instructors and their approach to online exams, their efficiency in distance education, and their satisfaction with distance education are efficient. Planning the content of distance health education in this regard in a way that will ensure active participation of students and clinical practice; it is thought that it will be beneficial to create more case reports and to include visual materials such as videos.

Keywords: Social Anxiety Levels, Clinical Practice, Distance Health Education, Nursing.

Introduction

The Covid-19 disease, which appeared in China in the last days of 2019, was proclaimed a pandemic by the World Health Organization (WHO) due to the high rate of transmission and the increasing number of cases occurring worldwide. Due to the infection of the disease through droplets, it has made it necessary to take measures such as suspending education at all levels, imposing various restrictions and curfew by health authorities from the moment of the first case in our country as in many countries. These precautions have directly

affected education, as in many other fields, and enabled a rapid transition from the traditional to the distance learning model (Eren et al., 2021; Yagan, 2021). Distance learning: Defined as an interactive or non-interactive teaching method that provides flexibility in terms of time and place, the materials to be used are shared, and communication between the learner and the teacher is carried out using technology; It has emerged to meet the increasing need for education at low cost and has gained importance all over the world with the pandemic (Yagan, 2021). Distance learning, which was widely used in several universities before the

pandemic in order to continue the teaching process without interruption, has also started to be used within the scope of the crisis in our country (Ozkan, Taylan & Ilaslan, 2021).

Distance learning; in addition to its advantages as place limitations, providing the learner with a flexible working opportunity, no transportation and nutrition costs associated with face-to-face education, easier updating and accessing to information, and providing education opportunities after graduation; there are also disadvantages such as the lack of face-to-face communication between the learner-teacher and the learner-learner, the necessity of technological infrastructure, the teacher having more difficulty in controlling the education process, the technical problems disrupting education, the learner's inability to adapt, and the inability to establish self-discipline in the home environment (Celik Eren et al., 2021; Yagan, 2021; Kozan, Çolak & Demirhan, 2021; Sabancı, 2021).

Distance learning, which has been practiced for many years and whose importance has increased with the Covid-19 pandemic, has gained an important place in health sciences as in many other fields (Kozan, Colak & Demirhan, 2021). In addition to the substantial advantages and disadvantages of distance education, it has positive aspects such as providing guidance to practice skills in health sciences, which require practicality, where theoretical knowledge and practical training are provided, and increasing self-confidence in care by reducing anxiety about learning (Celik Eren et al., 2021; Yagan, 2021; Kozan, Colak & Demirhan, 2021; Sabancı, 2021). However, education in health sciences is diverse; it includes theoretical, clinical and laboratory applications (Abbasi et al., 2020) and practical training with distance education was suspended due to the pandemic (Puljak et al., 2020) and could not go beyond the virtual environment. This situation has caused deficiencies and disruptions in practical applications blended with theoretical knowledge, especially for students studying in health-related departments (Celik Eren et al., 2021; Yagan, 2021; Kozan, Colak & Demirhan, 2021; Sabancı, 2021). It is known that the revocation of clinical practices due to the pandemic and the distance education of students cause anxiety by causing students to stay away from clinics and the university environment (Asaad et al., 2022). It is thought that distance education, which enables educational activities to be carried out during the Covid-19 pandemic, will continue to be used as an education method in the coming years with the development of technology (Yagan, 2021). Suppose the deficiencies in distance education given in health sciences are not

eliminated. In that case, the professional development of the students will be adversely affected, which will reduce the quality of patient care (Puljak et al., 2020). For this reason, it is essential to determine the attitudes of university students of the faculty of health sciences towards distance education and to plan initiatives to get more productive results from distance education (Abbasi et al., 2020). This study was conducted to determine the attitudes and social anxiety levels of university students studying at the faculty of health sciences towards distance education and their opinions on clinical practice.

Research Questions:

1. What are the attitudes of university students studying health sciences towards distance health education during the Covid-19 pandemic?
2. What are the social anxiety levels of university students studying health sciences towards distance health education during the Covid-19 pandemic?
3. What are the opinions of university students studying health sciences regarding clinical practice during the Covid-19 pandemic?

Methods

Type of the Research: The study is descriptive research.

Population, Time, and Sample of the Research: The study population consists of students studying at a university's nursing, physiotherapy and health management department between January and March 2022 (N= 415). Sample selection was not made in the study, and the study was carried out with 327 students who were at school at the time of the research.

Inclusion criteria for research;

- Volunteering to participate in the research
- To be studying at the faculty of health sciences
- To have received distance education
- Exclusion criteria from the study;
- Not volunteering to participate in the research
- To be studying in other departments other than the faculty of health sciences
- Not having received distance education

Collection of Research Data: Data of the study were collected with Socio-demographic Diagnosis Form, Attitude Scale Applied towards Distance Education during the Pandemic and Social Anxiety Scale for E-Learning Environments.

Socio-demographic Diagnosis Form: The Socio-demographic Diagnosis Form, created by the researchers by scanning the literature, consists of a

total of 23 structured and unstructured questions. Questions: age, gender, place where most of life was spent, class grade, income status, pre-pandemic distance education status, number of courses taken with distance education during the pandemic, a technological device used in distance learning, technical problems experienced during distance education, whether distance education is sufficient or not, satisfaction with distance education, thought about continuing distance education, advantages and disadvantages of distance education, and the effect of distance education on clinical practice.

Attitude Scale Applied towards Distance Education during the Pandemic: The scale developed by Arslan in 2021 consists of 21 items and 5 sub-dimensions (Arslan, 2021). The Cronbach's alpha value of the scale was calculated as 0.88, and the Cronbach's Alpha value of the sub-factors was calculated in the range of 0.884-0.658. The reliability coefficient of the scale in our study was 0.940, and the sub-factors were calculated in the range of 0.932-0.687. **Social Anxiety Scale for E-Learning Environments:** The self-report scale developed by Keskin et al. in 2020 consists of 46 items, 2 sub-dimensions and 3 factors (Keskin et al.,2020). The Cronbach Alpha values of the scale were found to be higher than 0.70. As the total score obtained from the scale increases, the social anxiety level also increases. The reliability coefficient of the scale in our study was 0.908, and the sub-factors were calculated in the range of 0.908-0.843.

Ethics of the Research: Ethics committee permission from a state university (2021/16), institutional permission from the university where the study was conducted, and written consent from the participants was obtained to conduct the research. Utilization Permits of the Attitude Scale Applied towards Distance Education during the Pandemic and the Social Anxiety Scale for E-Learning Environments, which are data collection tools in the study, were obtained.

Data Analysis: The descriptor features of the data, which were evaluated with the SPSS 24.0 package program, were shown by using the number, mean and percentage distributions. The Kolmogorov-Smirnov Z test was used to determine its suitability for normal distribution. In the evaluation of normally distributed data, t-test, analysis of variance, Bonferroni test and correlation analysis were used in further analysis. 0.05 was accepted as the significance level.

Results

Students' informative characteristics, their views on distance health education, their opinions on clinical

practice in the distance education process, the average scores of the Attitude Scale Applied towards distance health education during the Pandemic and the Social Anxiety Scale for E-Learning Environments, as well as findings regarding the average scores of the Students' Attitude Scale Applied towards distance health education during the Pandemic and Social Anxiety Scale for E-Learning Environments according to their status regarding distance health education are presented. The students' opinions on clinical practice in the distance education process are given in Table 3. The average score of the students' attitude scale towards distance education is 65.10 ± 19.6 in Table 4. Attitude scale towards distance education sub-dimension mean score, respectively; satisfaction with the opportunities offered by the university is 18.71 ± 6.76 ; attitude towards faculty members in distance education is 13.25 ± 4.67 ; attitude towards online exams is 11.02 ± 3.53 ; communication and access in distance education are 12.87 ± 4.77 ; the comparison between distance education and face-to-face education was determined as 9.27 ± 3.72 (Table 4). The students' social anxiety scale mean score for e-learning environments is 139.21 ± 87.02 . Sub-dimension mean scores of the social anxiety scale for e-learning environments, respectively; learner-instructor interaction is 72.24 ± 44.22 ; learner-learner interaction was determined as 66.97 ± 45.34 (Table 4).

When Table 5 is examined: A statistically significant, positive and weak correlation was found between the sub-dimension of the scale of students' attitude towards distance education, the comparison of distance education and face-to-face education, and the total score of the social anxiety scale for e-learning environments ($r=0.328$, $p<0.001$). In other words, as students' distance education and face-to-face education comparison attitudes increases, their social anxiety in e-learning environments increases. A statistically significant positive correlation was found between the attitude scale towards distance education and the attitude towards faculty members in distance education, attitude towards online exams, communication and access in distance education (respectively; $r=0.932$, $p<0.001$; $r=0.919$, $p<0.001$; $r=0.819$, $p<0.001$; $r=0.905$, $p<0.001$).

A statistically significant, positive and weak correlation was found between the attitude scale towards distance education and the sub-dimension of comparing distance education and face-to-face education ($r=0.487$, $p<0.001$). A statistically significant positive correlation was found between the social anxiety scale for students' e-learning

environments and the sub-dimensions of the learner-instructor interaction and learner-learner interaction scale (respectively; $r=0.971$, $p<0.001$; $r=0.972$, $p<0.001$) (Table 5). Positive correlation was found between the attitude scale towards distance education and the attitude towards faculty members in distance education, attitude towards online exams, communication and access in distance education (respectively; $r=0.932$, $p<0.001$; $r=0.919$, $p<0.001$; $r=0.819$, $p<0.001$; $r=0.905$, $p<0.001$).

According to Table 6: those who have no technical problems in distance education ($p=0.000$), who are satisfied with distance education ($p=0.000$), who think that distance education should continue ($p=0.007$), who desire to continue distance education in the future ($p=0.001$), who did not experience stress in clinical practice and did not have difficulties in clinical practice ($p=0.000$); had a higher mean score of the attitude scale towards distance education, and the difference between the groups was statistically significant. Those who have technical problems in distance education ($p=0.002$), who are not satisfied with distance education

($p=0.000$), who think that distance education should not continue ($p=0.000$), who desire the lessons to continue face-to-face in the future ($p=0.000$). Students' social anxiety scale average score for e-learning environments was found to be higher, and the difference between the groups was statistically significant.

When the social anxiety attitudes of the students towards e-learning environments according to the departments they study were compared with the Bonferroni test, it was determined that there was a difference between nursing students and other groups.

Also, it was determined that there was a difference between the nursing students and other groups, and the average score of the nursing students was significantly higher than those who studied in other departments.

Table 1: Demographic Characteristics of Students

	N	%
Age	X±SD 19.54±1.80	
Gender		
Female	228	69.7
Male	99	30.3
Livingplace		
Metropolis	158	48.3
City	63	19.3
District	86	26.3
Village	20	6.1
Department		
Nursing	158	48.3
PhysicalMedicineandRehabilitation	94	28.7
Healthcare Management	75	23.0
Class		
First grade	203	62.1
Second grade	124	37.9
Income		
Incomelessthanexpenses	112	34.3
Incomeequalsexpense	186	56.9
Income morethanexpenses	29	8.8
Total	327	100.0

Table 2: Students' opinions on distance education

	Number	Percentage
Distance education situation before the pandemic		
Yes	162	49.5
No	165	50.5
Number of courses taken with distance education during the pandemic		
1-5 lessons	117	35.8
6-10 lessons	97	29.7
over 10 lessons	113	34.5
The technological device used for distance education		
Computer	175	53.5
Tablet	10	3.1
Smart phone	142	43.4
The situation of experiencing technical problems while receiving distance education		
Yes	247	75.5
No	80	24.5
Defining the technical problem experienced while receiving distance education		
Internet disconnection	219	67.0
Difficulty joining the lesson	25	7.6
The difficulty of the teacher when joining the lesson	25	7.6
Freezing and disconnection of the internet during the live broadcast	42	12.8
Having trouble downloading the course materials	7	2.3
I didn't have any problems	5	1.5
Other*	4	1.2
The situation of being sufficient for the homework given while receiving distance education		
Sufficient	244	74.6
Insufficient	83	25.4
The situation of being sufficient of the knowledge you have learned with the education you have received during the internship		
Sufficient	111	33.9
Insufficient	216	66.1
Satisfaction with the distance education you have received		
Satisfied	133	40.7
Not Satisfied	194	59.3
The situation of thinking that distance education should continue		
Yes	138	42.2
No	189	57.8

Request status regarding the conduct of applied lessons in the upcoming period		
Distance	102	31.2
Face to face	225	68.8
Advantageous status of distance education		
Cost effective	51	15.6
Playback	28	8.6
Effective time	30	9.2
More comfortable /more convenient /healthier /very beneficial	63	19.3
Prevents the spread of pandemic /family environment	56	17.1
No advantage	99	32.7
The disadvantageous status of distance education		
Internet issue	61	18.7
Social Isolation	21	6.4
Inefficiency /inability to focus /difficulty in implementation	133	40.7
Rapid transfer of teaching /time crunch	11	3.4
No disadvantage	57	17.4
Other**	43	13.1
Recommendation status regarding distance education		
Improvement of infrastructure	130	39.8
Distance learning should continue	38	11.6
There should be face-to-face learning	61	18.6
There is too much lacking	22	6.7
I have no suggestions	30	9.2
Other***	46	14.1
TOTAL	327	100.0

*I have experienced all the problems described;**everything/family environment/injustice/failure in the profession;***government computer support/hybrid education/student and teacher must be active.

Table 3: Students' opinions on clinical practice in the distance education process (n=198)*

	n	%
Difficulty in clinical practice		
Yes	142	71.1
No	56	28.9
The state of experiencing stress in ClinicalPractices		
Yes	151	46.3
No	47	23.7
Causes of Professional difficulties in clinical practice		
Lack of information	74	37.7

Stress excitement/fear	25	12.3
No idea/noreponse	12	6.0
I was not forced	56	28.3
Other**	31	15.7
Suggestions for solutions to Professional difficulties in clinical practice		
Morepracticalapplications	50	25.3
More supportive/calm/face-to-face training	49	24.8
No idea	75	37.9
No solution	8	4.0
Other***	16	8.0
TOTAL	198	100.0

* 129 students did not attend the clinic;**adherence problem/lack of trust/communication;
***communication seminar/infrastructure/less students/everything

Table 4: Distribution of the total scores of the students' attitude scale applied towards distance education during the pandemic and the social anxiety scale for e-learning environments

	X ± SD	Min	Max
The average score of the students' attitude scale towards distance education	65.10±19.61	21	105
satisfaction with the opportunities offered by the university	18.71±6.76	6	30
attitude towards faculty members in distance education	13.25±4.67	4	20
attitude towards online exams	11.02±3.53	4	20
communication and access in distance education	12.87±4.77	4	20
the comparison between distance education and face-to-face education	9.27±3.72	3	15
The students' social anxiety scale mean score for e-learning environments	139.21±87.02	46	322
Learner-instructor interaction	72.24±44.22	23	161
Negative Evaluation	29.13±17.63	9	63
SomaticSymptoms	12.05±8.02	4	28
Avoidance of Interaction	31.06±19.98	10	70
Learner-learner interaction	66.97±45.34	23	161
Negative Evaluation	26.68±18.19	9	63
SomaticSymptoms	11.37±8.13	4	28
Avoidance of Interaction	28.92±20.00	10	70

Table 5: The relationship distribution between the students' attitude scale applied towards distance education during the pandemic and the total scores of the social anxiety scale for e-learning environments

	X± SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 The total score of attitudescaleappliedtowardsdistancededucation	65.10±19.61	1														
2 Satisfaction with the opportunities offered by the university	18.71±6.76	0.932**	1													
3 Attitude toward faculty members in distance education	13.25±4.67	0.919**	0.875*	1												
4 Attitude towards online exams	11.02±3.53	0.819**	0.668*	0.643**	1											
5 Communication and access in distance education	12.87±4.77	0.905**	0.857*	0.841**	0.695**	1										
6 The comparison between distance education and face-to-face education	9.27±3.72	0.487**	0.263*	0.308**	0.455**	0.213**	1									
7 the total scores of the social anxiety scale for e-learning environments	139.21±87.02	0.66	-0.002	0.021	0.081	-0.062	0.328*	1								
8 Learner-instructor interaction	72.24±44.22	0.075	0.010	0.022	0.090	-0.052	0.331*	0.971*	1							
9 Negative Evaluation	29.13±17.63	0.060	0.013	0.014	0.065	-0.067	0.300*	0.930*	0.969*	1						
10 SomaticSymptoms	12.05±8.02	0.066	-0.010	0.011	0.117*	-0.056	0.313*	0.927*	0.949*	0.894**	1					
11 Avoidance of Interaction	31.06±19.98	0.087	0.015	0.032	0.096	-0.032	0.341*	0.956*	0.977*	0.904**	0.911**	1				
12 Learner-learner interaction	66.97±45.34	0.053	-0.013	0.018	0.067	-0.068	0.307*	0.972*	0.888*	0.841**	0.854**	0.881**	1			
13 Negative Evaluation	26.68±18.19	0.069	0.009	0.036	0.060	-0.048	0.306*	0.960*	0.882*	0.846**	0.837**	0.870**	0.982**	1		
14 SomaticSymptoms	11.37±8.13	0.030	-0.038	0.001	0.065	-0.090	0.282*	0.926*	0.843*	0.794**	0.847**	0.825**	0.956**	0.917**	1	
15 Avoidance of Interaction	28.92±20.00	0.046	-0.022	0.008	0.071	-0.074	0.302*	0.955*	0.868*	0.813**	0.831**	0.871**	0.985**	0.943**	0.925**	1

** . Correlation is significant at the 0.01 level (2-tailed)
 * . Correlation is significant at the 0.05 level (2-tailed).

Table 6: Comparison of students' attitude scale applied towards distance education during pandemic and social anxiety scale for e-learning environments and some opinion variables

		n	X±SD	Test	significance	X±SS	Test	significance
Distance education situation	Yes	162	66.31±20.68	1.101 *	0.272	138.16±83.65	-0.217	0.829
	No	165	63.92±18.48			140.25±90.44		
The situation of experiencing technical problems	Yes	247	62.02±18.78	- 5.192 *	0.000	147.83±86.79	3.190	0.002
	No	80	74.63±19.15			112.61±82.70		
Satisfaction with the distance education	Satisfied	133	70.82±21.43	4.490 *	0.000	113.65±74.78	-4.693	0.000
	Not Satisfied	194	61.19±17.25			156.74±90.59		
Distance learning should continue	Yes	138	68.67±21.92	2.743 *	0.007	110.72±72.35	-5.451	0.000
	No	189	62.50±17.34			160.02±91.02		
the lessons to continue in the future	distance	102	70.84±22.73	3.292 *	0.001	103.02±69.89	-5.766	0.000
	Face to face	225	62.50±17.46			155.62±89.16		
Experience stress in clinical practice	Yes	151	62.11±18.61	- 2.577 *	0.010	147.40±90.84	1.570	0.118
	No	176	67.67±20.13			132.19±83.22		
have difficulties in clinical practice	Yes	142	60.31±18.58	- 3.959 *	0.000	155.87±89.84	3.038	0.003
	No	185	68.78±19.63			126.43±82.78		
Department	Nursing	158	63.15±21.67	2.861 **	0.059	163.36±91.97	12.664	0.000
	physical medicine and Rehabilitation	94	64.74±18.57			118.49±74.67		

Health care Management	75	69.67±15.33	139.21±87.02
------------------------	----	-------------	--------------

*t test, **=OneWayAnova ; Bonferroni analysis

Discussion

It is known that it was significant to determine the students' attitudes towards distance education in the planning of attempts to get more efficient results from distance education, which was thought to continue with the development of technology after the pandemic (Abbasi et al., 2020). To determine the improvement interventions to be made in distance education for health sciences, the attitudes and social anxiety levels of university students studying at the faculty of health sciences towards distance education and their thoughts on clinical practice are discussed in this section in the light of the limited study in the literature.

When examining the technology used by the students participating in the research in distance education, it was determined that 53.5% used computers. In the study of Afsar and Buyukdogan (2020), most of the students participated in distance education with their computers (Afsar & Buyukdogan; 2020). In similar studies, students mostly used computers during the distance education process (Celik Eren et al., 2021; Gurler et al., 2020; Yilmaz; 2020). In line with the results and literature, it is estimated that the participation of distance education students who do not have a computer will be affected, and thus, educational efficiency will be affected.

It is known that technology-related components are important factors affecting the distance education process (Almaih et al., 2020). In this study conducted with the faculty of health sciences, 75.5% of the students reported technical problems in distance education, 67% stated that they had internet problems while connecting to distance education, and 39.8% suggested improving the infrastructure in distance education. In the literature, there are studies in which students have stated that they have difficulty following the lessons due to inadequacies such as the distance education system, internet, electricity and technical equipment (Celik Eren et al., 2021; Kurtuncu & Kurt, 2020; Subedi et al., 2020). It is thought that the technical problems experienced will adversely affect the distance education process and the quality of the education directly. In the study of Kurtuncu and Kurt (2020), students suggested improving distance

education infrastructure as a solution (Kurtuncu&Kurt, 2020).

More than half of the students are in the distance education process: They think that received information is insufficient in the fields of application, they are not satisfied with distance education, that distance education should not continue, that applied lessons should be conducted face-to-face in the upcoming period, and 40.7% said that distance education has various disadvantages such as inefficiency/inability to focus/difficulty in implementation. In the study of Kurtuncu and Kurt (2020) with nursing students, it was found that the majority of the students were worried about the efficiency of the lessons they took with distance education, and the majority of them thought that it was not enough to give theory and practice lessons through distance education (Kurtuncu&Kurt, 2020). In a similar study, nursing students found face-to-face learning more efficient on behalf of the nursing department, where applied education takes place, and found distance education insufficient. In international studies, it has been reached that students do not find distance education sufficient (Subedi et al., 2020; Owusu-Fordjour, Koomson & Hanson, 2020). Furthermore, in the research that was conducted by Yilmaz (2020) with the students of the physiotherapy and rehabilitation department, it was determined that the majority of the students thought that both theory and practice lessons were inefficient with distance education and that 90.3% of them preferred face-to-face learning after the pandemic (Yilmaz, 2020). Another study conducted with sports science students found that distance education's disadvantages include the practice course's deficiencies (Uluöz, 2020). Whereas, in the research conducted by Afsar and Buyukdogan (2020) with the students of economics and administrative sciences and social sciences and humanities, it was found that 50.7% of the students wanted to attend classes via distance education and 46.3% of them wanted to take part of their department lessons through distance education after the pandemic (Afsar & Buyukdogan, 2020). In our research and studies with similar results, students' wishes for face-to-face education; can be explained by the disadvantages of distance education in

practice-oriented departments such as medicine, health and sports sciences.

71.1% of the students participating in the study stated that they had difficulties when they went to clinical practice during the distance education process, 37.7% emphasized that it was due to lack of knowledge, 46.3% experienced stress in clinical practice, 37.9% did not offer any solution to their professional difficulties in clinical practice. In the study conducted by Kurtuncuand Kurt (2020) with nursing students, it was observed that they complained about not being able to practice one-on-one, stating that their inability to practice affects learning (Kurtuncu & Kurt, 2020). In another study conducted with nursing students, it was determined that the students usually mentioned the lack of practice as the negative aspect of distance education (Celik Eren, 2021). In the study of Atilgan (2020), medical students reported that they were deficient in practice in distance education and that they readily forgot the information about the application because they could not go to the clinic. As a solution proposal, they stated that solutions for hands-on training should be brought (Atilgan, 2020). Taking advantage of scenarios and case studies in the planned educational content, providing video support where necessary, and including students in the learning process with active participation, not just listening, can provide more effective and permanent knowledge about the application.

In the study, the average score of the students studying at the faculty of health sciences towards distance education was 65.10 ± 19.6 . In studies conducted with physiotherapy and rehabilitation (Yilmaz, 2020), nursing (Durgun & Can, 2021) using different scales on the same subject, it was determined those students' attitudes towards distance education were not at a high rate. It was found that students who did not have any technical problems in distance education, who were satisfied with distance education, who considered the continuation of distance education, who desired the lessons to continue with distance education in the future, who did not experience stress in clinical practice and did not have difficulties in clinical practice; had a higher mean score of the attitude scale towards distance education. When the literature is analyzed, it is seen that university students who have a high level of internet connection problems have more down attitudes towards distance learning, while students who believe that the distance education environment is appropriate and state that distance education is effective have high attitudes (Uzun, Es & Evram, 2020). In the study of Celik-Eren et al. (2021), it

was found that as the positive attitudes of nursing students toward distance education increased, their satisfaction with distance education increased too (Celik Eren, 2021). While universities are planning their distance education processes, it is recommended that their students determine their level of access to the internet and technical equipment and provide the necessary support.

Unlike the literature, in our study, the social anxiety experienced in e-learning environments during the distance education process was examined, and the average score of the students' social anxiety scale for the e-learning environments was found to be 139.21 ± 87.02 . Social anxiety scale sub-dimension mean scores for e-learning environments are respectively; learner-instructor interaction was determined as 72.24 ± 44.22 ; learner-learner interaction was determined as 66.97 ± 45.34 . No study was found that examined the social anxiety experienced in the e-learning environment, and when the studies in which general anxiety and worry were examined, the study of Durgun et al. (2021) found that the anxiety levels of nursing students were at a medium level (Durgun et al., 2021). In the study of Subedi et al., students stated that they were worried about the internet and power cuts that may occur during distance education because of not fully understanding the lesson (Subedi et al., 2020). In this study, it was seen that the social anxiety levels of the students who had technical problems in distance education, who were not satisfied with distance education, who said that distance education should not continue, and who desired to continue the lessons face-to-face in the future, were high. Considering the studies that found that students experienced anxiety during the Covid-19 pandemic (Wang et al., 2020), it is possible to say that students are worried about the covid-19 pandemic, and one of the reasons for this anxiety is distance education. Because it was seen that nursing students experienced moderate anxiety about distance education in a study conducted before the Covid-19 pandemic when the literature was examined (Tasocak et al., 2014). Considering that distance education will continue after the pandemic, it is necessary to organize distance education in a way that does not cause anxiety in students and to strengthen students' coping mechanisms with stress. In a study, students also asked for psychosocial support in their suggestions to improve distance education (Atilgan, 2020).

It has been observed that; as students' attitudes toward lecturers and online exams increase during distance education, their attitudes toward distance education also increase. It was determined that the students could not communicate effectively with

the faculty members in the studies conducted with medical students (Atılgan, 2020). In the study by Subedi et al. (2020), half of the students reported that they could not communicate well with their teachers during distance education (Subedi et al., 2020). Students stated that the safety of the exams and the technical problems experienced during the exam were the negative aspects of distance education (Atılgan, 2020). It has been found that nursing students who think that the midterm exams and homework is given by distance education are sufficient have a more positive attitude than those who do not, and those who can communicate more comfortably with the instructors than those who cannot (Celik Eren et al., 2021). In order to achieve optimal efficiency in the distance education process, these problems must be resolved. In the study of Atılgan (2020), students said that contact with instructors should be increased to improve distance education (Atılgan, 2020). Institutions should organize necessary activities to support the instructors in this regard and improve their deficiencies (Coşkun et al., 2018). The fact that the students in the nursing department experience higher anxiety can be explained by the fact that clinical and laboratory practice training is more in the nursing department than in the other health departments, and students participate in this training from a distance during the pandemic.

Finally, in our study, it was seen that approximately half of the students had previously received distance education, but this did not affect their attitudes and social anxiety toward distance education. Regardless of whether students have previous experience in distance education programs to be organized in light of this, each education program should be structured by considering the factors affecting students' attitudes.

Conclusion: Our study examined the faculty of health sciences students' attitudes towards distance education, their social anxiety levels and their opinions on clinical practice during the pandemic. Also, it was found that students' satisfaction with distance education was not at a high level as in the literature, and they experienced social anxiety, which was examined differently from the studies in the literature. In this case, factors such as technological and technical problems, instructors and their approach to online exams, their efficiency in distance education, and their satisfaction with distance education are efficient. It is known that the efficiency of the education received by the students will affect the quality of patient care in the future. Despite this, it was observed that the students had difficulties during the application, lacked knowledge and experienced stress. Considering that

distance education, which is currently used in the education process but has become widespread with the Covid-19 pandemic, will continue after the pandemic, it is known that it is significant to consider these factors in the distance education process to be planned for the faculty of health sciences and to determine the initiatives that will lead to a solution. Planning the content of distance education in this regard in a way that will ensure the active participation of students and clinical practice; it is thought that it will be beneficial to create more case reports and to include visual materials such as videos. Since there are only first and second-year students in the university where the research was conducted, it is recommended to repeat the results by including the third and fourth-year students to generalize the results.

Acknowledgments: The authors would like to thank all student nurses who participated in the study.

References

- Abbasi, S., Ayoob, T., Malik, A., & Memon, S. I. (2020). Perceptions of students regarding E-learning during Covid-19 at a private medical college. *Pakistan Journal Of Medical Sciences*, 36(4), 57-61.
- Afsar, B., & Buyukdogan, B. (2020). Evaluations of iibf and sbbf students about distance education during the COVID-19 pandemic period. *Karatay Journal of Social Research*, (5), 161-182.
- Agir, F. (2008). Validity and reliability study for developing attitude scale towards distance education. *Education Sciences*, 3(2), 128-139.
- Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. *Education and information technologies*, 25(6), 5261-5280.
- Journal of Continuous Medical Education, 29(6), 396-406.
- Arslan, R. (2021). Developing an attitude scale towards distance education applied during the epidemic period. *Kafkas University Faculty of Economics and Administrative Sciences Journal*, 12(23), 369-393.
- Atılgan, B. (2020). Evaluation of the emergency distance education process from the perspective of medical faculty students. *STED*
- Coskun, O., Ozeke, V., Budakoglu, I. I., & Kula, S. (2018). Level Of Readiness For E-Learning Of Faculty Of Medicine: The Case Of Gazi University. *Ankara Medical Journal*, 18(2), 175-185.
- Celik-Eren, D., Korkmaz, M., Öz-Yildirim, O., & Aydin-Avci, I. (2021). Attitudes and satisfaction levels of nursing students towards distance education during the Covid-19 pandemic process. *Anatolian Journal of Nursing and Health Sciences*, 24(2), 246-254.

- Durgun, H., Can, T., Avcı, A. B., & Kalyoncuoglu, B. (2021). Nursing students' views and anxiety levels about distance education in the covid-19 process. *Dokuz Eylul University Faculty of Nursing Electronic Journal*, 14(2), 141-147.
- Gurler, C., Uslu, T., & Dastan, I. (2020). Evaluation of distance learning from student perspective in Covid-19 pandemic. *Ataturk University Social Sciences Institute Journal*, 24(4), 1895-1904.
- Hamza Sheerah, H. A., Yadav, M. S., Elzein Fadl Allah, M. A., & Abdin, G. J. (2022). Exploring Teachers and Students' Perceptions towards Emergency Online Learning Intensive English Writing Course during COVID-19 Pandemic. *Arab World English Journal*, 2:64-84.
- Keskin, S.; Şahin, M.; Uluc, S., & Yurdagül, H. (2020). Online learners' interactions and social anxiety: the social anxiety scale for e-learning environments (SASE). *Interactive Learning Environments*, 1, 1-13.
- Kozan, E. H., Colak, M., & Demirhan, B. S. (2021). Distance Education in the COVID-19 Pandemic: Reflections on Nursing Education/COVID-19 Pandemisinde
- Uzaktan Eğitim: Distance Education: Reflections on Nursing Education. *Journal of Education and Research in Nursing*, 18(S1), 60-65.
- KurtuncuM, Kurt A.(2020). Problems of nursing students in distance education in the Covid-19 pandemia period. *Eur J Res Soci Economics*, 7:66-77.
- Owusu-Fordjour, C., Koomson, C. K., & Hanson, D. (2020). The impact of Covid-19 on learning-the perspective of the Ghanaian student. *European Journal of Education Studies*, 7(3): 88-101.
- Ozkan, II, Taylan, S., & Iaslan, E. (2021). The Experiences of Nursing Students towards Distance Education during the COVID-19 Pandemic. *International e-Journal of Educational Studies*, 5(10), 106-117.
- Puljak, L., Čivljak, M., Haramina, A., Mališa, S., Čavić, D., Klinec, D., ... & Mikšić, Š. (2020). Attitudes and concerns of undergraduate university health sciences students in Croatia regarding complete switch to e-learning during COVID-19 pandemic: a survey. *BMC medical education*, 20(1), 1-11.
- Sabancı, B. The effect of distance education system on student motivation: Compilation of survey studies conducted in Turkey. *Turkish Journal of Vocational and Social Sciences*, (6), 148-162.
- Subedi, S., Nayaju, S., Subedi, S., Shah, S. K., & Shah, J. M. (2020). Impact of E-learning during COVID-19 pandemic among nursing students and teachers of Nepal. *International Journal of Science and Healthcare Research*, 5(3), 68-76.
- Tasocak, G., Kaya, H., Senyuva, E., Burcin, I. S. I. K., & Bodur, G. (2014). Relationship between nursing students' views about web-based patient education course and anxiety in Turkey. *Turkish Online Journal of Distance Education*, 15(3), 197-214.
- Uluoz, E. (2020). Opinions of the Faculty of Sport Sciences Students on the Changes in Education System during COVID-19 Pandemic: A Qualitative Research. *African Educational Research Journal*, 8(3), 481-490.
- Uzun, G. O., Es, A. C., & Evram, G. (2020). Examination of attitudes of university students in distance education according to some variables. *Near East University Online Journal of Education*, 3(2), 104-115..
- Wang, C., Horby, P. W., Hayden, F. G., & Gao, G. F. (2020). A novel coronavirus outbreak of global health concern. *The lancet*, 395(10223), 470-473.
- Yagan, S. A. (2021). Attitudes and Opinions of University Students towards Distance Education During the COVID-19 Epidemic. *Academic Platform Journal of Education and Change*, 4(1), 147-174.
- Yılmaz, N. A. (2020). Investigation of students' attitudes about the situation of distance education applied during the covid-19 pandemic in higher education institutions: An example of physiotherapy and rehabilitation department. *Necmettin Erbakan University Faculty of Health Sciences Journal*, 3(1), 15-20.