

The Effects of the Covid-19 Pandemic and Covid-19 Measures on University Students Related to Levels of Anxiety and Depression

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Abstract

Introduction: Epidemics are infectious diseases. Pandemic is defined as epidemic diseases that spread to many continents and cause fatal cases on humans and animals. Although most infectious diseases can be transmitted to humans or animals in one or more ways, the priority in the fight against Covid-19 is to avoid contact and contamination routes, to protect the areas of the body that are open to contamination, and to effectively disinfect. The quarantine environment, which is taken as a precautionary measure to protect against Covid-19, affects human psychology and leads to the emergence of some situations. It is aimed to examine the relationship between the depression and anxiety levels seen in university students and the measures taken with the Covid-19 pandemic, taking into account the demographic variables.

Materials and Methods: It was conducted as a descriptive study at a foundation university in Ankara between July-December 2020. "Sociodemographic Data Collection Form", "Covid-19 Isolation Process Examining Questionnaire" and "Hospital Anxiety and Depression Scale" were used to collect data. Due to the Covid-19 street restrictions and to reduce contact, data were collected by using "Google Forms" and sharing links to students via mail and WhatsApp groups. Data analysis was done using SPSS 25.0 package program, $p < 0.05$ was considered significant.

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Received Date: 02-21-2022

Accepted Date: 03-04-2022

Published Date: 03-24-2022

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Results: In the results of the study, it was observed that the anxiety levels of the students were 15.45 ± 4.50 , and the depression levels were 10.85 ± 3.06 . The level of being affected by Covid-19 was found to be 68.43 ± 11.91 . It was determined that there was a weak and negative significant relationship between the level of being affected by Covid-19 and anxiety levels ($p=0.01$). It was determined that there was a weak and negative significant relationship between the students' level of being affected by Covid-19 and their depression levels ($p=0.01$).

Conclusion: It can be stated that students who are less affected by Covid-19 will have higher levels of anxiety and depression. Due to the uncertainty when the Covid-19 pandemic first emerged, it was thought that there was a weak negative significant relationship between Covid-19 and anxiety and depression levels. It is recommended that the study be conducted with more students in similar sample groups.

Keywords: Covid-19; Pandemic; University students; Anxiety; Depression; HADS.

Introduction

Although communicable diseases have emerged at various times in history, globalization has facilitated the spread of pathological agents in recent years and caused pandemics worldwide [1]. Pandemics affect individuals' society at many levels by causing disruption, panic, and stress. As concerns about perceived threat increase, people may begin to collect (and hoard) masks and other medical supplies. This is followed by behaviors related to anxiety and sleep disorders [2]. Various types of isolation are used to prevent the spread of these dangerous diseases. Self-isolation or measures set by governments include banning public gatherings, closing restaurants, cafes, bars, nightclubs, shopping malls, sports centers, museums, cinemas, theaters, places of worship, hairdressers, beauty salons, and similar services where close human contact may occur [3]. Because of these situations, most of the studies on the psychological effect of quarantine have been reported as post-traumatic stress symptoms and tantrums. The issues that cause individuals to experience stress include the prolongation of the quarantine period, fear of

infection, disappointment, boredom, insufficient material, insufficient information, and financial losses [4]. In late December 2019, an unexplained case of pneumonia was reported in Wuhan, China. A few days later, the causative agent of this pneumonia was identified as a new coronavirus (SARS-CoV-2). This disease has been named 2019 coronavirus disease (COVID-19) by the World [5,6]. Named after the outer edges of their envelope proteins resembling the crown (Latin for 'corona'), coronaviruses belong to the family of enveloped RNA viruses. Coronaviruses cause diseases ranging from enteritis in mammals, birds, cows, pigs, and upper respiratory tract diseases in chickens to potentially fatal respiratory infections [7]. Regarding COVID-19, the World Health Organization (WHO) raised the threat of the CoV outbreak to "very high" on 28 February 2020. On 11 March, WHO declared COVID-19 a pandemic as the number of COVID-19 cases outside of China increased 13-fold, and the number of countries concerned tripled, with more than 118,000 cases and more than 4,000 deaths in 114 countries [8,9]. At the same time, many

scientists have started studies and studies for both treatment and medications like ivermectin or vaccine [10-15]. As the work on the pandemic gained momentum, the areas of damage began to become clear, and of course, the attitude towards COVID-19 in these studies showed the willingness of the people to implement the government guidelines on quarantine and social distance. It is noteworthy that the anxiety levels determined in the study were high. More than 80% of people were preoccupied with thoughts of COVID-19, and 72% reported the need to use gloves and disinfectants. In this study, 36.4% of the participants reported difficulty sleeping and paranoia related to Covid-19 posts on social media. Perceived need for mental health care was seen in more than 80% of the participants [6]. People around the world are avoiding social interaction in self-isolation due to the COVID-19 pandemic. From the perspectives of public health and preventive care, there is an urgent need to provide information and interventions to individuals, communities, and healthcare organizations to maintain the healthiest lifestyle possible while in quarantine [16].

It is aimed to examine the relationship between the depression and anxiety levels seen in university students and the measures taken with the Covid-19 pandemic, taking into account the demographic variables.

Materials and Methods

Hospital anxiety and depression scale

The Hospital Anxiety and Depression Scale (HADS) was a reliable and practical assessment scale developed to determine the

risk in terms of anxiety and depression and to measure its level and change in severity [17]. It was translated into Turkish by 1997 and its validity and reliability study were conducted [18]. The scale was limited to easy-to-manage items and did not include severe psychopathological symptoms [19]. It included a total of fourteen questions including anxiety (HAD-A) and depression (HAD-D) subscales. Seven of these (odd numbers) measured anxiety and the other seven (even numbers) measured depression. The lowest score that patients can get from both subscales was 0, while the highest score was 21. The fact of existing physical illness on the scale results, none of the physical symptoms such as headache and weight loss were questioned. It had been proven that HADS was a useful assessment tool and gave score ranges in a way that minimizes false positive and false negative results [17]. It was easy to implement because it was short and clear, and one could fill it out on their own. Participants were asked to mark the item that best suited their situation. The scale was completed in 2 to 6 minutes and evaluated within 1 minute. Each item was scored differently; Items 1,3,5,6,8,10,11, and 13 show decreasing the severity and the scoring was 3,2,1,0. However, the 2nd,4th,7th,9th,12th, and 14th items were scored as 0,1,2,3. For the anxiety subscale, the 1st,3rd,5th,7th,9th,11th, and 13th items were added, for the depression subscale, the 2nd,4th,6th,8th,10th,12th, and 14th items were added up. There was no single generally accepted cut-off score for HADS. Zigmond and Snaith in their original study recommended two cut-off scores for both scales. It was 7/8 for probable anxiety and depression and 10/11 for probable

anxiety and depression [19]. In each sub-dimension, scores between 0-7 are considered “normal”, scores 8-10 were considered

“borderline”, while scores of 11 and above indicate significant psychological morbidity (Table 1).

Covid-19 HADS Survey			
Anxiety Depression Form			
This survey will help us understand you better. Read each item and tick the box next to the answer that best expresses how you've been feeling, considering your past few days. Remember that the first answer that comes to your mind will be the best.			
1	I feel tense, like I'm going to explode	Most of the time	
		Many times	
		Sometimes	
		Never	
2	I still enjoy the things I used to enjoy	Same as before	
		Not as much as before	
		Same as before	
		Almost nothing like before	
3	I have a fear that something bad is going to happen	It sure is, and its pretty intense	
		Yes, but not too severe	
		A little, but it worries me	
		No, it's not like that at all	
4	I can laugh and see the funny side of things	As always	
		No so much now	
		Definitely not that much now	
		Not at all anymore	
5	Worrying thoughts run through my mind	Most of the time	
		Many times	
		Occasionally, but not very often	
		Most of the time	
6	I feel joyful	Never	
		Sometimes	
		Many times	
		Most of the time	
7	I can sit comfortably and feel relaxed	Definitely	
		Definitely	
		Definitely	
		Never	
8	I feel like I've stagnated	Always	
		Often	
		Sometimes	
		Never	
9	I feel uneasy as if my insides are whirring	Never	
		Sometimes	
		Quite Often	

		Always	
10	I lost interest in my appearance	Definitely	
		I'm not paying as much attention as I	
		I can't be that careful	
		I take care always	
11	I feel uneasy as if I always have to do something	Really too much	
		Rather than	
		Not much	
		Not at all	
12	I look forward to what will happen	As always	
		A little less than usual	
		Definitely less than usual	
		Hardly ever	
13	I suddenly feel panic	Indeed very often	
		Quite Often	
		Not very often	
		Never	
14	I can enjoy a good book, television, or radio show	Always	
		Sometimes	
		Not very often	
		Rarely	

Table 1: Covid-19 HADS Survey.

Covid-19 isolation process investigation survey

Likert attitude scales were frequently used because they were relatively easy to construct, were largely reliable, and were successful in measuring many affective qualities [20]. The Likert scale started with a large number of expression choices. While determining the expressions, it was useful to have free interviews with the group members whose attitudes were to be measured. Thus, both the dimensions of attitude became clear, and it became easier to be expressed in the way it was felt [21]. Two types of Expressions were used in Likert scales. Statements of the first type were Statements that show positive or desired attitudes. The second type of

expression was expressions that show negative or undesirable attitudes, it was necessary not to write the expressions in the same direction. Because the sentences are always written in the same direction did not allow us to control the tendency of people to say "yes." For this reason, half of the scales were written positively and half negatively [22]. Each answer option had a numerical value on the scale. If you had marked the "Strongly agree" option for a positive Statement, these numerical statements on the 5ii scale were as follows. "Strongly agree-5, Agree-4, Undecided-3, Disagree-2, Strongly disagree-1". The most negative option "Strongly disagree" got 5 points. As noted, there w reverse scoring. In Likert-type scales, the prepared statements were applied to a

group whose attitude was similar to the one to be measured. In this way, Expressions that did not have distinctive features, that were not well understood, and that did not belong to any group together with other expressions were extracted. For this purpose, the correlation coefficients between the response to each statement and the scores showing the total one to all of the other statements were calculated. This process was repeated for each expression [21]. It was useful and sometimes necessary to check whether the written attitude statements were collected in one dimension or not. In this case, item scores were subjected to factor analysis and the expressions with the highest factor load were selected [23].

After this process, the obtained substances were subjected to another selection according to their discrimination. The independent t-test was used because the discriminatory powers were applied to scale-independent groups. The answer sheets were arranged in order of total points, and the "upper group" was formed by leaving 27% of the upper half of the row, and the "lower group" was formed by leaving 27% from the lower end. The difference between the means in this lower and upper group was tested by applying the "t" test. The larger the T value, the greater the discrimination of the expression. Of the expressions with a high T value, enough expressions were selected, approximately half of which was positive, and the other half was negative. These statements form the attitude scale. While creating the scale, the selected statements were arranged in a random order, and the scale was made ready for use by writing the answer options in the appropriate places [24].

Data analysis methods

On the analysis of data, descriptive statistics frequency, percentage, mean, and standard deviation values were calculated. For reliability analyzes of the scales, Co. Alpha test had been done. Compliance levels of scale and sub-dimension scores with normal distribution were determined by the Kolmogorov-Smirnov degree test. It was seen that the normality assumption of the Anxiety, Depression, and Affected by Covid-19-dimension scores were provided ($p>0.05$). T-test analysis and analysis of variance (ANOVA) test were used to examine the dimensions according to the demographic and familial characteristics of the participants. Correlation analysis was performed to examine the relationships between Anxiety, Depression, and Affected by Covid-19. Analysis of variance was used to examine the levels of Affected by Covid-19 according to Had Anxiety and Depression groups. P values less than 0.05 were considered significant in the study. Analyzes were made with the SPSS 25.0 package program. Our study; was conducted as a descriptive study at a foundation university in Ankara between July and December 2020. Our study was carried out at Yuksek Ihtisas University in Ankara. 24 students from the Faculty of Medicine, 29 from the Faculty of Health Sciences, and 108 from the Vocational School of Health Services participated. "Sociodemographic Data Collection Form", "Covid-19 Isolation Process Examining Questionnaire" (Table 2), and "Hospital Anxiety and Depression Scale" (Table 1) were used to collect data. Street restrictions due to the Covid-19 process and to reduce contact, data were collected by using "Google Forms"

and sharing links to students via e-mail and WhatsApp groups. Data analysis was done

using SPSS 25.0 package program, $p < 0.05$ was considered significant.

Survey to Review the Covid-19 Isolation Process

This questionnaire includes a total of 25 questions defines using a Likert scale about the gender, age, personality traits, life and emotional state of the person.

	Please Mark Gender					I totally agree	I agree	No Idea	I disagree	I totally disagree
	Female	Male								
Sr. No	Please tick the Age range you are in									
	18-24	25-30	30-35	35-45	45 +					
1	Covid-19 isolation process did not affect me									
2	Covid-19 isolation process has worried me									
3	It pisses me off that people don't care about the Covid-19 isolation process									
4	Covid-19 isolation process pissed me off									
5	Covid-19 isolation process mad e me a touchy person									
6	Covid-19 isolation process made me an aggressive person									
7	Covid-19 isolation process had made me a cheerful person									
8	Covid-19 isolation process allowed me to be alone with myself									
9	Covid-19 isolation process caused problems with me and my family									
10	Covid-19 isolation process caused problems with me and my friends									
11	Covid-19 isolation process has caused problems in my relationship status									
12	Covid-19 isolation process made me feel bad mentally									
13	Covid-19 isolation process made me feel lonely									
14	Covid-19 isolation process made me feel useless									
15	Covid-19 isolation process got me obsessed									
16	Covid-19 isolation process made me read a book									
17	Covid-19 isolation process helped my personal growth									
18	Covid-19 isolation process affected my time on social media									
19	Covid-19 isolation process has negatively affected my health									
20	Covid-19 isolation process has positively affected my health									
21	Covid-19 isolation process made me pay more attention to my health									
22	Covid-19 isolation process has changed my eating habits positively									
23	Covid-19 isolation process allowed me to take up new hobbies									
24	The Covid-19 isolation process allowed me to do research									
25	Covid-19 isolation process made me do sports									

Table 2: Covid-19 isolation process review questionnaire. This questionnaire includes a total of 25 questions defined using a Likert scale about the gender, age, personality traits, life, and emotional state of the person.

Results

Review of dimension scores

In the study, the reliability level of the Had scale was found to be 0.96. It was determined

that the internal consistency levels of the anxiety dimension of the Had scale were 0.90 and the Had depression level was 0.88. The scale was found to be reliable. It can be stated that the reliability of the scale of being

affected by Covid-19 is high at the level of 0.92. It was observed that the anxiety levels of the participants were 15.45 ± 4.50 , and the

depression levels were 10.85 ± 3.06 . The level of being affected by Covid-19 was found to be 68.43 ± 11.91 (Table 3).

Dimensions	$\bar{X} \pm s.s.$	Min-Max
Anxiety	15.45 ± 4.50	5-24
Depression	10.85 ± 3.06	2-16
Level of Affected by Covid-19	68.43 ± 11.91	48-91

Table 3: Review of dimension scores.

Examination of participants' demographic characteristics

In the study, it was determined that 81.4% of the participants were female and 18.6% were male. It was determined that 62.1% of the participants were between the ages of 18-24 and 37.9% were between the ages of 25-30. It was observed that 44.1% of the participants were 1st Class, 37.3% 2nd Class, and 6.2% 3rd Class. It was determined that the participants

were educated at the faculty of medicine with 14.9%, the faculty of health sciences with 18%, and the health vocational school with 67.1%. Participants stated that it is not difficult with 18.6% to pay the school fees, it is difficult with 53.4%, quite difficult with 15.5%, and very difficult with 12.4%. It was determined that the average grade points of the participants were 2.00-2.49% with 19.3%, 2.50-2.99% with 54.7%, and 3 and above with 26.1% (Table 4).

		n	%
Gender	Female	131	81.4%
	Male	30	18.6%
Age	18-24	100	62.1%
	25-30	61	37.9%
Grade	1. grade	71	44.1%
	2. grade	60	37.3%
	3. grade	10	6.2%
	4. grade	20	12.4%
Department	Medical School	24	14.9%
	Faculty of Health Sciences	29	18.0%
	Vocational School of Health Services	108	67.1%
Tuition Fee Payment	Not hard	30	18.6%
	Hard	86	53.4%
	Pretty hard	25	15.5%
	So hard	20	12.4%
Grade average	2.00-2.49	31	19.3%
	2.50-2.99	88	54.7%
	3.00 ±	42	26.1%

Table 4: Examination of Participants Demographic Characteristics.

Examining the familial characteristics of the participants

It was determined that the mothers of the participants had high school education with 28.6%, associate degree education with 28%, and undergraduate education with 43.5%. It was determined that 35.4% of the participants' fathers had an associate, 55.3% undergraduate, and 9.3% postgraduate education. It was determined that the mothers of the participants were civil servants with 15.5% workers with 23.6% private sector with 18.6% and not working with 42.2%. It was determined that the fathers of the

participants were civil servants with 36.6%, workers with 6.2% private sector with 43.5% and self-employed with 13.7%. It was determined that the number of siblings of the participants was one with 64%, two with 11.2%, and 24.8% did not have a sibling. It was seen that the place where the participants lived for the longest time was the metropolitan city with 37.3% the city with 33.5% and the district with 29.2%. It was seen that the place where the families of the participants lived was the metropolitan city with 41.6%, the city with 32.3% and the district with 26.1% (Table 5).

		n	%
Mother's Education Status	High school	46	28.6%
	Associate degree	45	28.0%
	University	70	43.5%
Father's Education Status	Associate degree	57	35.4%
	University	89	55.3%
	Postgraduate education	15	9.3%
Mother Occupation	Civil servant	25	15.5%
	Employee	38	23.6%
	Private sector	30	18.6%
	Not working	68	42.2%
Father Occupation	Civil servant	59	36.6%
	Employee	10	6.2%
	Private sector	70	43.5%
	Self-employment	22	13.7%
Number of siblings	0	40	24.8%
	1	103	64.0%
	2	18	11.2%
Where You Live Longest	Big city	60	37.3%
	City	54	33.5%
	District	47	29.2%
Where Your Family Lives	Big city	67	41.6%
	City	52	32.3%
	District	42	26.1%

Table 5: Examination of the Familial Characteristics of the Participants.

Examining the levels of being affected by depression, anxiety and Covid-19 according to demographic characteristics

It was determined that the levels of being affected by Depression, Anxiety, and Covid-19 were not at different levels according to the gender of the participants. It can be stated that the levels of being affected by Depression, Anxiety, and Covid-19 of male and female participants in the study were

similar ($p>0.05$) (Table 6). It was observed that the levels of being affected by Depression, Anxiety, and Covid-19 were at different levels according to the ages of the participants. In the study, it was determined that the Depression and Anxiety levels of the students between the ages of 18-24 were higher ($p=0.01$). It can be stated that the level of being affected by Covid-19 is higher in the group between the ages of 25-30 ($p=0.01$).

Demographic features		Anxiety Level	p	Depression	p	Level of being affected by Covid-19	p
		$\bar{X} \pm s.s.$		$\bar{X} \pm s.s.$		$\bar{X} \pm s.s.$	
Gender	Kadın	15.21 ± 4.47	0.25	10.73 ± 3.12	0.18	68.24 ± 12.26	0.67
	Erkek	16.47 ± 4.58		11.4 ± 2.77		69.27 ± 10.36	
Age	18-24	16.35 ± 3.64	0.01*	11.57 ± 2.58	0.01*	66.33 ± 11.47	0.01*
	25-30	13.97 ± 5.35		9.67 ± 3.44		71.89 ± 11.89	
Grade	1. Sınıf	16.28 ± 3.61	0.01*	11.61 ± 2.17	0.01*	67.37 ± 12.82	0.03*
	2. Sınıf	15.67 ± 4.38		11.42 ± 2.85		66.33 ± 10.43	
	3. Sınıf	12.5 ± 6.36		6.5 ± 4.74		76.00 ± 4.22	
	4. Sınıf	13.3 ± 5.64		8.65 ± 2.78		74.75 ± 12.3	
Department	Medical school	15.54 ± 4.8	0.23	10.38 ± 4.01	0.29	72.46 ± 10.77	0.06
	Faculty of Health Sciences	16.41 ± 4.95		11.45 ± 2.92		71.9 ± 8.29	
	Vocational School of Health Services	15.17 ± 4.31		10.8 ± 2.86		66.61 ± 12.6	
Tuition Fee Payment	Not hard	12.17 ± 5.42	0.01*	9.00 ± 4.62	0.01*	71.17 ± 10.67	0.01*
	Hard	15.15 ± 4.27		10.85 ± 2.2		69.51 ± 13.19	
	Pretty hard	18.32 ± 2.38		12.32 ± 3.28		60.56 ± 4.48	
	So hard	18.05 ± 1.39		12.8 ± 1.40		69.55 ± 10.79	
Grade average	2.00-2.49	17.58 ± 3.78	0.01*	12.06 ± 2.42	0.01*	73.42 ± 8.31	0.01*
	2.50-2.99	15.81 ± 4.25		11 ± 2.87		70.78 ± 12.84	
	3.00 ±	13.12 ± 4.60		9.64 ± 3.5		60.62 ± 11.85	

Table 6: Examining the levels of being affected by Depression, Anxiety and Covid-19 according to Demographic Characteristics. **t-test and analysis of variance were used, *significant difference at the 0.05 level.

It was observed that the levels of being affected by Depression, Anxiety, and Covid-19 were at different levels according to the classes of the participants. In the study, it was determined that the Depression and Anxiety

levels of 1st and 2nd-grade students were higher ($p=0.01$). It can be stated that the level of being affected by Covid-19 is higher in the 3rd and 4th grades ($p=0.01$). It was determined that the levels of being affected by

Depression, Anxiety, and Covid-19 were not at different levels according to the departments of the participants. It can be stated that the levels of being affected by Depression, Anxiety, and Covid-19 of medical, health sciences, and health vocational school students are similar ($p>0.05$). It has been observed that the levels of being affected by Depression, Anxiety, and Covid-19 are at different levels according to the payment status of the participants. In the study, it was determined that the Depression and Anxiety levels of the students who expressed their payment status as difficult and very difficult were higher ($p=0.01$). It can be stated that the level of being affected by Covid-19 is higher in students who have difficulty paying fees ($p=0.01$). According to the grade averages of the participants, it was observed that the levels of depression, anxiety, and exposure to Covid-19 were at different levels. In the study, it can be stated that the level of being affected by Covid-19 and the levels of Depression and Anxiety are lower for the students whose grades are 3 and above ($p=0.01$).

Examining the levels of being affected by depression, anxiety and covid-19 according to familial characteristics

It was observed that the levels of being affected by Depression, Anxiety, and Covid-19 were at different levels according to the education levels of the mothers of the participants. It was determined that the depression and anxiety levels of the students whose mothers were undergraduate graduates were lower ($p=0.01$). It can be stated that the level of being affected by Covid-19 is lower in the group whose mother's education is associate degree compared to the

other groups ($p=0.01$). It was observed that the levels of being affected by Depression, Anxiety, and Covid-19 were at different levels according to the education levels of the fathers of the participants. It was determined that the reason for the difference was that the Depression and Anxiety levels of the students whose fathers were associate degree graduates were higher ($p=0.03$).

It can be stated that the level of being affected by Covid-19 is higher in the group with postgraduate father education compared to the other groups ($p=0.01$). It was observed that the levels of being affected by Depression, Anxiety, and Covid-19 were at different levels according to the professions of the mothers of the participants. It was determined that the depression and anxiety levels of the students whose mothers were workers were higher than those whose mothers were civil servants ($p=0.01$). It can be stated that the level of being affected by Covid-19 is lower in the group whose mothers are workers compared to other groups ($p=0.01$). It was observed that the levels of being affected by Depression, Anxiety, and Covid-19 were at different levels according to the occupations of the fathers of the participants. Depression and Anxiety levels of students whose fathers were workers were found to be higher than the other groups ($p=0.01$). It can be stated that the level of being affected by Covid-19 is lower in the group whose fathers are workers compared to other groups ($p=0.01$).

According to the number of siblings of the participants, it was determined that the levels of being affected by Depression, Anxiety, and Covid-19 were not at different levels. It can be

stated that the levels of being affected by Depression, Anxiety, and Covid-19 of the participants who have only one sibling and who have two siblings in the study are similar ($p>0.05$). It was determined that the levels of being affected by Depression, Anxiety, and Covid-19 were not at different levels according to the region where the participants lived the longest. It can be stated that the levels of being affected by Depression, Anxiety, and Covid-19 of the

participants who lived in metropolitan, city, and districts in the study were similar ($p>0.05$). It has been determined that the levels of being affected by Depression, Anxiety, and Covid-19 are not at different levels according to the region where the participants' families live. It can be stated that the participants of the study family living in metropolitan, city, and districts have similar levels of being affected by Depression, Anxiety, and Covid-19 ($p>0.05$) (Table 7).

Familial Features		Anxiety Level	p	Depression	p	Level of being affected by Covid-19	p
		$X \pm s.s.$		$X \pm s.s.$		$X \pm s.s.$	
Mother's Education Status	High school	15.59 ± 3.73	0.01*	11.39 ± 1.77	0.01*	69.89 ± 13.05	0.01*
	Associate degree	18.69 ± 2.91		13.69 ± 1.58		61.4 ± 8.83	
	University	13.27 ± 4.57		8.67 ± 2.81		72 ± 11.01	
Father's Education Status	Associate degree	17.32 ± 4.39	0.03*	12.42 ± 2.28	0.03*	68.53 ± 11.09	0.01*
	University	14.33 ± 4.14		10.04 ± 3.21		66.76 ± 12.08	
	Postgraduate education	15 ± 4.94		9.67 ± 2.44		78 ± 9.75	
Mother Occupation	Civil servant	13.92 ± 3.13	0.01*	9.52 ± 1.73	0.01*	71.80 ± 13.55	0.01*
	Employee	17.87 ± 1.99		12.61 ± 1.81		64.79 ± 11.83	
	Private sector	15.07 ± 6.19		10.67 ± 4.94		70.83 ± 7.73	
	Not working	14.82 ± 4.63		10.44 ± 2.53		70.18 ± 12.45	
Father Occupation	Civil servant	15.15 ± 4.30	0.01*	10.49 ± 2.86	0.01*	68.08 ± 12.69	0.01*
	Employee	18.70 ± 1.49		15.00 ± 1.05		60.00 ± 4.22	
	Private sector	15.69 ± 4.60		10.80 ± 3.17		68.21 ± 11.37	
	Self-employment	14.00 ± 5.00		10.09 ± 2.51		73.91 ± 11.69	
Number of siblings	0	15.6 ± 4.56	0.28	10.33 ± 2.9	0.16	68.8 ± 10.76	0.33
	1	15.14 ± 4.41		10.95 ± 3.07		68.05 ± 12.55	
	2	16.89 ± 4.86		11.44 ± 3.36		69.83 ± 10.92	
Where You Live Longest	Big city	15.12 ± 4.29	0.08	9.77 ± 3.61	0.06	68.17 ± 9.95	0.08

Table 7: Examining the levels of being affected by Depression, Anxiety and Covid-19 according to Familial Characteristics. **Analysis of variance was used, *Significant difference at the 0.05 level.

Examination of the levels of being affected by covid-19 according to the depression and anxiety groups

In the study, it was determined that the level of being affected by Covid-19 differs according to the anxiety groups. It was determined that the reason for the difference was that the group with an anxiety level of 11 and above was less affected by Covid-19 than the normal

and borderline group ($p=0.01$). In the study, it was determined that the level of being affected by Covid-19 differs according to the depression groups. It was determined that the reason for the difference was that the group with a Depression level of 11 and above had lower levels of exposure to Covid-19 than the normal and borderline group ($p=0.01$) (Table 8).

Scale	Groups	Level of being affected by Covid-19	p	Difference
		$X \pm s.s.$		
HADS Anxiety	0-7 Normal (1)	76.91 ± 8.06	0.01^*	$1.2 > 3$
	8-10 at the border (2)	82.57 ± 7.95		
	11 Anxiety And Over (3)	65.41 ± 10.68		
HADS Depression	0-7 Normal (1)	72.42 ± 12.55	0.01^*	$1.2 > 3$
	8-10 at the border (2)	76.74 ± 9.96		
	11 Depression And Over (3)	64.96 ± 10.77		

Table 8: Examination of the levels of being affected by Covid-19 according to the Depression and Anxiety groups. *Analysis of variance was used, *Significant difference at 0.05 level.

Relationship between level of affected by covid-19 and level of depression and anxiety

In the study, it was determined that there was a weak and negative significant relationship between the level of being affected by Covid-19 and their anxiety levels ($r=-0.37$, $p=0.01$). In the study, it was determined that there was a

weak and negative significant relationship between the level of participants' exposure to Covid-19 and their depression levels ($r=-0.39$, $p=0.01$). In the study, it was determined that there was a strong and positive significant relationship between the anxiety and depression levels of the participants ($r=0.76$, $p=0.01$) (Table 9).

Scales		Anxiety Level	Depression	Level of being affected by Covid-19
Anxiety Level	r	1		
	p			
Depression Level	r	0.76^*	1	
	p	0.01		
Level of being affected by Covid-19	r	-0.37^*	-0.39^*	1
	p	0.01	0.01	

Table 9: Relationship between Level of Affected by Covid-19 and Level of Depression and Anxiety.

**Correlation analysis was performed. *Significant difference at the level of 0.05.

Discussion

In the literature review, it is seen that the anxiety levels of individuals during the pandemic differ from country to country [25]. In the study conducted by Kwok et al. in Hong Kong, almost all of the participants stated that they were worried about COVID-19 and their daily routines were disrupted [26]. According to the study of Li et al., in the study conducted with social network users in China, it was observed that individuals' perception of social risk increased after COVID-19, while life satisfaction decreased [27]. According to the study of Ekiz et al., it was determined that the level of health anxiety affects the perception of control of the COVID-19 pandemic negatively.

It has caused high levels of worry and fear in individuals as a result of anxiety [25]. In the study conducted by Wang et al. in China, it was observed that giving detailed and accurate information about the pandemic and taking precautions led to a decrease in the level of psychological effects, stress, depression, and anxiety on individuals [28]. In our study, university students have psychological states against themselves, their families, and the difficulties caused by this pandemic. According to a study, it was determined that approximately 24.9% of

students experienced anxiety due to the COVID-19 outbreak [29]. Negative emotions such as anxiety, and fear experienced during this pandemic process can cause students to stay away from the university courses and prepare the ground for many undesirable situations [30]. For this reason, it is thought that it is important for universities to provide high-quality and crisis-oriented psychological services to their students in this process [31].

In the study conducted by Okuyan et al., it was concluded that the health anxiety levels of nursing students were high, students were negatively affected by staying at home due to the pandemic, they felt overwhelmed and nervous, and their health concerns were increased due to situations such as virus infection and fear of death [32].

Conclusion

According to the results of our study, it is necessary to systematically examine the psychological and behavioral reactions of students and their families due to this pandemic. Social impacts should be considered when deciding and applying restrictions on pandemics. The change of all these routines of individuals due to restrictions; affects not only physically but also psychologically. Psychological support is also recommended as a solution.

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