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The Psychological Impact of the COVID-19 Epidemic on University Students in Turkey: A Foundation University Case

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ABSTRACT

The Problem of the Research: What are the university students' anxiety levels caused by COVID-19 and what are the effects of this anxiety on the psychology of the students and their opinions about COVID-19?

The Aim of the Study: The aim of the study is to reveal the anxiety levels and impact of COVID-19 on the students who have to continue their university education far away from their campuses through online education. Moreover, it also sheds light on the practices intended for the students to be applied for university education after the pandemic.

Method: 471 students studying in a foundation university were included in the research. Online surveys were made to the students who were determined with convenience sampling method. The data collection tool consists of two parts. The first part includes questions directed to the demographic features of the participants and their opinions about COVID-19. Generalized Anxiety Disorder-7 (GAD-7) Scale developed by Spitzer et al. in 2006 and adopted to Turkish by Konkan et al. in 2003 was used in the second part.

SPSS 25 programs is used for the analysis of the data. Frequency, mean, standard deviation, independent samples t-test, and variance analysis were used among the descriptive statistical methods. Analyses were made at 95% confidence interval ($p < 0.05$).

Findings: The anxiety levels of the university students were determined to be high as a result of the research. This means there is a significant relation between COVID-19 and the anxiety levels of the university students. It is also determined that the average scores of the Generalized Anxiety Disorder Scale differ according to the gender variable. It is found that the Generalized Anxiety Disorder Scale scores of the female participants are higher than male participants. As a result, it is determined that the anxiety levels of university students have increased with COVID-19.

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INTRODUCTION

Coronaviruses were first defined in the mid-1960s. It is known that they infect humans and various animals (including birds and mammals). Epithelial cells in the respiratory and gastrointestinal tract are primary target cells. For this reason, the virus is spread through these systems and it can occur in several ways: respiratory droplets, through air, fomites, or mouth. The infections of the people who have coronavirus are mostly mild and asymptomatic; however, serious and deadly infections have also been observed. Sometimes these viruses may cause lower respiratory infections and pneumonia, but this is more probable for individuals with low immunity levels, elder people, and young children (Ahmad et al., 2020).

The new coronavirus (COVID-19) was first seen in a patient with lung inflammation due to a cluster of acute respiratory diseases from Wuhan, China. COVID-19 has quickly spread through China and many other countries and caused a pandemic of acute infectious lung inflammation (Bao et al., 2020). The warning of "The COVID-19 virus is spread primarily through saliva droplets or nasal discharge when an infected person coughs or sneezes, so it is important to follow respiratory etiquette (for example, by coughing into a bent elbow) and yet, there is no specific vaccine or treatment for COVID-19" about COVID-19 is given on the website of the World Health Organization (WHO, 2020a).

The WHO announced COVID-19 as a global epidemic, so a pandemic, on 11 March 2020. The first case in Europe was seen on 24 January in France, and after a short time many cases were seen in other European countries. The first case in Turkey was seen on 11 March 2020 (WHO, 2020b; Kebudi, 2020). And the total number of cases in Turkey are 164.769 as of 1 June (Ministry of Health, 2020).

The Higher Education Institution (YOK) stopped education in the universities on 16 Mart 2020 against the risk of the spread of the virus in Turkey (YOK, 2020a). In the announcement made on March 23, it was decided that the education to be given by the universities would be made with distance education. Although 123 universities have online education systems, YOK provided the opportunity to continue education by creating an "open course materials portal" for all of the universities including the universities that don't have these systems. From this date, all of our universities continued their education as much as possible (YOK, 2020b).

The pandemic not only caused the risk of death by viral infections, but it also led to unbearable psychological pressure for the people in China and the rest of the world (Duan, 2020). The epidemic brought people in China and the rest of the world the

risk of death from virus infection, and also created unbearable psychological pressures. The quarantine applied due to COVID-19 increases the possibility of having psychological and mental problems. The reason for this is the fact that quarantine slowly drives people apart. When there is no interpersonal communication, the formation and worsening of depression and anxiety are more probable (Xiao, 2020).

It is expected for the mental health of the students to be affected because of the continuing spread of the epidemic diseases in schools and universities in the whole country, and the delay of strict isolation measures. There are many studies regarding the psychological effect of the pandemic on the general public, patients, healthcare professionals, children, and the elderly (Yang et al., 2020; Li et al., 2020). Public health can affect emergency cases, both the individual and public health, security, and wellness. These effects may cause a series of emotional reactions (such as distress or psychiatric cases), unhealthy behaviors (such as drug overuse), and not obeying the directives of public health (such as quarantine or vaccine) for the individuals who have the disease (Pfefferbaum and North, 2020).

Anxiety is a common situation that affects the mental health of individuals, and it might also have short-term and long-term effects on the body (Craske et al., 2009). Pervasive anxiety disorder is a condition of feeling extreme tension because of the events that happen nearly every day, the difficulty of controlling sadness, and in addition to these, it is a condition that may include findings such as getting easily tired, restlessness, and muscle tension. Moreover, depressive feelings and behavior can also be seen frequently (Köroğlu, 2000). Among the significant negative consequences of the COVID-19 pandemic are likely to be lifelong anxiety, depression, self-harm, and suicide attempts which are strongly associated with the increased social isolation and loneliness (Holmes et al., 2020).

Considering the pandemic among the general public individually, it might precipitate new psychiatric syndromes for the individuals without any mental illnesses, worsen the condition of the individuals with mental illnesses, and cause distress for the caretakers of the individuals who are affected. This situation, regardless of exposure, can trigger anxiety of getting sick or dying, desperation or blaming other people who are sick, and potentially a mental breakdown (Ho et al., 2020; Hall et al., 2008). In their study on the university students' anxiety due to the COVID-19 pandemic, Cao et al., (2020) found that 24,9% of them had anxiety. 0.9% of these students had severe anxiety, 21.3% had mild anxiety. The results of this study showed that the anxiety of

the university students' about the pandemic are related to their residence area, income resource of their parents, the fact that they live with their parents or not, and if one of their relatives or acquaintances are infected with COVID-19.

The pandemic is also directly proportional to increased mental problems during childhood and adolescence. Since the schools are the places where the information is directly requested, many problems can occur when these places are closed. Detecting and solving these problems is urgent (Fazel et al., 2014). The current situation of the pandemic causes mental problems such as stress, anxiety, depressive symptoms, sleeplessness, denial, anger, and fear (Jones et al., 2017). Negative and stressful life events are related to the increase in mental health problems such as depressions and anxiety (Bifulco et al., 2000). In the study conducted by Beasley et al. (2003) on 187 university students, it was found that a stressful life is a factor that affects the status of mental health.

The pandemics of common infectious diseases such as COVID-19 are directly related to psychological distress and the symptoms of mental diseases (Bao et al., 2020). Long term negative

emotions during a pandemic or similar situation can decrease the immunity function of individuals, and disrupt the balance of normal physiological mechanisms (Kiecolt-Glaser et al., 2002). Determination of these is significantly important both in terms of public health and the management of health care systems.

In light of the above explanations, it is seen that COVID-19 not only caused many physical damages to people during this period but also affected people psychologically. It is predicted that these effects are especially seen on the university students who are the young segment of the population and who are included in many parts of social life. For this reason, this study aims to reveal the psychological effects of coronavirus which has deeply affected our lives in the last few months on university students who had to continue their education far away from their campus life through online education. To achieve this, students will be administered the Generalized Anxiety Disorder Test-7 (GAD-7) to determine their anxiety levels and shed light on the practices or policies to be implemented after the epidemic.

METHOD

The Generalized Anxiety Disorders of the students during the COVID-19 pandemic are aimed to be evaluated with some demographic characteristics. The data were collected from students studying at a foundation university in the spring semester 2019-2020, when the distance education system was first started at universities in Turkey due to the pandemic. The 471 university students participated in the study. Gender, age, income, class of study, whether or not choosing their department of study willingly, living with family, region of residence (urban and rural), city of residence, department of study, distance education participation materials are the demographic data collected from the participants.

4 questions were asked to the participants. These are:

1. Have you been diagnosed with COVID-19?
2. Has a relative of you been diagnosed with COVID-19?
3. Are you worried about the delay in the academic calendar due to COVID-19?
4. How COVID-19 affected your daily life?

The Generalized Anxiety Disorder Test-7 (GAD-7) developed by Spitzer et al. (2006) is used for the evaluation of the frequency of the exposure of the students to these emotions in the last 2 weeks during

the COVID-19 pandemic. There are 7 questions in the GAD-7 test and it asks the exposure frequency to the seven basic GAD symptoms in the last two weeks. The answers are like this: 1=never, 2=several days, 3=more than seven days, 4= nearly every day in the last two weeks. When compared in terms of total scores in the original article named GAD-7; a score of 0-4 was evaluated as mild, 5-9 as moderate, 10-14 as high, and 15-21 as severe anxiety.

An online questionnaire was made to the students who were detected via the convenience sampling method. The first part includes questions directed to the demographic features of the participants and their opinions about COVID-19. Generalized Anxiety Disorder-7 (GAD-7) Scale developed by Spitzer et al. in 2006 and adopted to Turkish by Konkan et al. in 2003 was used in the second part. SPSS 25 program was used in the analysis of the data. For the reliability of the scale, the Cronbach Alpha value was checked. Independent Samples T-test and One-Way ANOVA analysis were used in independent tests to evaluate the significance of differences between variables using descriptive statistical methods such as frequency, mean, and standard deviation in independent samples. Post-Hoc. analysis was made to reveal the reason for the difference in Anova Analysis. The analysis was made at a 0.05 significance level.

FINDINGS

Table 1. The Demographic Characteristics of the Participants

Variable	Groups	N	%
Gender	Female	315	66.9
	Male	156	33.1
	Total	471	100.0
Age	18-21	262	55.6
	22-25	174	32.7
	26 and over	35	11.7
	Total	471	100.0
Total Monthly Family Income	0-2500	111	24.7
	2501-5000	230	51.1
	5001-10000	89	19.8
	10001 and over	20	4.4
	Total	450	100.0
Preference of the Department	Willingly	412	87.5
	Unwillingly	59	12.5
	Total	471	100.0
Years of Study	Freshmen	110	23.4
	Sophomore	246	52.2
	Junior	41	8.7
	Senior	74	15.7
	Total	471	100.0
Materials Used During Online Education	Smart Phone	133	28.4
	Computer	330	70.4
	Tablet	6	1.3
	Total	469	100.0
Region of Residence	Rural	70	14.9
	Urban	401	85.1
	Total	471	100.0
Living with Parents	Living with Parents	428	91.3
	Not Living with Parents	41	8.7
	Total	469	100.0
COVID-19 Diagnose	Diagnosed with COVID	4	.8
	Not Diagnosed with COVID	467	99.2
	Total	471	100.0
The Presence of a Relative Diagnosed with COVID	Present	94	20.0
	Not Present	377	80.0
	Total	471	100.0
Feeling Worried About the Delay in the Academic Calendar Due to COVID	Worried	270	57.3
	Not Worried	201	42.7
	Total	471	100.0
Feeling Worried About the effect of COVID on Daily Life	Worried	391	83.0
	Not Worried	80	17.0
	Total	471	100.0

The findings related to the demographic characteristics of the participants are given in Table 1. 315 (66.9%) of the participants are female and 156 (33.1%) are male. 262 (55.6%) participants are between the ages of 18-21, 174 (32.7%) are between 22-25 years old, and 35 (11.7%) participants are 26 and over. 111 (24.7%) participants have a monthly total household income in the range of 0-2500 TL, 230 (51.1%) participants have 2501-5000 TL, 89 participants (19.8%) have 5001-1000 TL and 20 have (4.4%) 10001 TL and above. While 412 (87.5%) participants choose the department they would study willingly, 59 (12.5%) participants did not choose with their own will. 110 (23.4%) participants are freshmen, 246 (52.2%) participants sophomore, 41

(8.7%) participants junior and 74 (15.7%) participants are seniors.

During the distance education period, 133 (28.4%) participants attend distance education classes with smartphones, 330 (70.4%) participants with computers, and 6 (1.3%) of them with tablets. 70 participants (14.9%) live in rural areas, and 401 (85.1%) of them live in urban areas. While 428 (91.3%) participants live with their parents, 41 (8.7%) don't live with their parents. One relative of 94 (20.0%) participants were diagnosed with COVID, and one relative of 377 (80.0%) participants were not diagnosed with COVID-19. While 270 (57.3%) participants were concerned about the delay in the academic calendar due to COVID-19, 201 (42.7%) participants were not concerned about this issue. 391 (83.0%) participants were concerned that COVID-19 would affect daily life, but 80 (17.0%) participants were not concerned about this.

Table 2. Descriptive Statistics for Generalized Anxiety Disorder Scale

Scale	Min	Max	Skewness	Kurtosis	\bar{x}	ss
Generalized Anxiety Disorder Scale	0	20	.379	-.745	7.08	4.91

The minimum and maximum values, skewness-kurtosis values, and median and standard deviation values were given for the Generalized Anxiety Disorder Scale scores in Table 2. For the Generalized Anxiety Disorder Scale, the range was calculated as 0-20, skewness = .379, and kurtosis = -.745, mean = 7.08 and standard deviation = 4.91.

Table 3. Median and Standard Deviation Values for the

Statements	\bar{x}	ss
I felt nervous, anxious, or reached the limit.	1.10	.918
I couldn't stop worrying or control myself.	.71	.858
I was worried a lot about various subjects.	1.07	.925
I had problems relaxing.	.98	.912
I couldn't sit still and felt restless.	.98	.965
I got quickly angry, and I was angry and uneasy at most things.	1.13	.956
I felt like something bad would happen.	1.11	.920

Table 3 shows the mean and standard deviation values for the items of the Generalized Anxiety Disorder Scale. For the statement "I felt angry, anxious, or reached the limit," the mean was calculated as 1.10 and the standard deviation as .918. For the statement "I couldn't stop worrying or control myself", the mean was calculated as .71 and the standard deviation as .858. For the statement "I was worried a lot about various subjects", the mean was calculated as 1.07 and the standard deviation as 0.925. The mean for the statement "I had problems in relaxing" was calculated as 0.98 and the standard deviation as .912. The mean for the statement "I

couldn't sit still and felt restless" was calculated as .98 and the standard deviation as 0.965. For the statement "I got angry quickly and I was angry and annoyed at most things", the mean was calculated as 1.13 and the standard deviation as 0.956. The Mean for the statement "I felt like something bad was going to happen" was calculated as 1.11 and the standard deviation as 0.920.

Table 4. Cronbach's Alpha Reliability Analysis Results for Generalized Anxiety Disorder Scale

Scales	N	Cronbach's Alfa
Generalized Anxiety Disorder Scale	7	0.879

Table 4 shows the results of Cronbach's Alpha reliability analysis for the Generalized Anxiety Disorder Scale. Cronbach's alpha reliability coefficient for the Generalized Anxiety Disorder Scale was calculated as 0.879.

Table 5. Independent Samples t-Test Results for the Analysis of Generalized Anxiety Disorder Scale Scores by Gender

Scales	Groups	N	\bar{x}	Ss	t	sd	p
Generalized Anxiety Disorder Scale	Female	315	7.51	4.88	2.672	469	0.008**
	Male	156	6.23	4.88			

In Table 5, Independent Samples t-Test results are given for the comparison of the mean scores of the Generalized Anxiety Disorder Scale according to the gender variable. It was determined that the mean scores of the statistically Generalized Anxiety

Disorder Scale differed significantly according to the gender variable ($t(469) = 2.672$; $p < 0.05$). Generalized Anxiety Disorder Scale scores of female participants were found to be higher than male participants.

Table 6. Independent Samples t-Test Results for the Analysis of the Scores of the Generalized Anxiety Disorder Scale According to the Preference of the Department

Scales	Groups	N	\bar{x}	Ss	t	sd	p
Generalized Anxiety Disorder Scale	Willingly	412	6.94	4.79	-1.532	70.509	0.130
	Unwillingly	59	8.12	5.64			

In Table 6, the results of the Independent Samples t-Test are given to compare the mean scores of the Generalized Anxiety Disorder Scale according to the variable of preference. It was determined that the

mean scores of the statistically Generalized Anxiety Disorder Scale did not significantly differ according to the variable of preference of the department studied ($p > 0.05$).

Table 7. Independent Samples t-Test Results for the Analysis of the Scores of the Generalized Anxiety Disorder Scale According to the Region of Residence

Scales	Groups	N	\bar{x}	Ss	t	sd	p
Generalized Anxiety Disorder Scale	Rural	70	6.37	5.21	-1.317	469	0.188
	Urban	401	7.21	4.86			

Table 7 shows the results of the Independent Samples t-Test to compare the mean scores of the Generalized Anxiety Disorder Scale according to the variable of the region of residence. The mean scores

of the statistically Generalized Anxiety Disorder Scale did not significantly differ according to the variable of the region of residence ($p > 0.05$).

Table 8. Independent Samples t-Test Results for the Analysis of the Scores of the Generalized Anxiety Disorder Scale According to Living with Parents

Scales	Groups	N	\bar{x}	Ss	t	sd	p
Generalized Anxiety Disorder Scale	Living with Parents	428	7.09	4.88	0.504	-0.126	467
	Not Living with Parents	41	7.20	5.33			

The results of the Independent Samples t-Test to compare the mean scores of the Generalized Anxiety Disorder Scale according to the variable of living with parents are given in Table 8. It was determined

that the mean scores of the Generalized Anxiety Disorder Scale did not differ significantly according to the variable of living with parents ($p > 0.05$).

Table 9. Independent Samples t-Test Results for the Analysis of the Scores of the Generalized Anxiety Disorder Scale According to the Situation of a Relative Diagnosed with COVID-19

Scales	Groups	N	\bar{x}	Ss	t	sd	p
Generalized Anxiety Disorder Scale	Diagnosed	94	8.15	4.91	2.357	469	0.019*
	Not Diagnosed	377	6.82	4.89			

In Table 9, the results of the Independent Samples t-Test are given to compare the mean scores of the Generalized Anxiety Disorder Scale according to the variable of having a relative diagnosed with COVID-19. It was revealed that the mean scores of the statistically Generalized Anxiety Disorder Scale differed significantly according to the variable of a

relative that was diagnosed with COVID-19 ($t(469) = 2.357$; $p < .05$). Participants with a relative diagnosed with COVID-19 were found to have higher General Anxiety Disorder Scale scores than participants who did not have a relative diagnosed with COVID-19.

Table 10. Independent Samples t-Test Results for the Analysis of Generalized Anxiety Disorder Scale Scores by Feeling Worried about the Delay of the Academic Calendar due to COVID-19

Scales	Groups	N	\bar{x}	Ss	t	sd	p
Generalized Anxiety Disorder Scale	Worried	270	8.34	4.96	6.857	457.118	0.000**
	Not Worried	201	5.40	4.33			

The results of the Independent Samples t-Test are given in Table 10 to compare the mean scores of the Generalized Anxiety Disorder Scale according to the variable of feeling worried. It was found that the mean scores of the statistically Generalized Anxiety Disorder Scale significantly differed according to the variable of worrying about the delay of the academic

calendar due to COVID-19 ($t(457.118) = 6.857$; $p < .01$). Participants concerned about the delay in the academic calendar due to COVID-19 were found to have higher Generalized Anxiety Disorder Scale scores than participants who were not concerned about the delay in the academic calendar due to COVID-19.

Table 11. Independent Samples t-Test Results for the Analysis of Generalized Anxiety Disorder Scale Scores by Feeling Worried about the Effect of COVID-19 on Daily Life

Scales	Groups	N	\bar{x}	Ss	t	sd	p
Generalized Anxiety Disorder Scale	Worried	391	7.87	4.81	10.397	153.874	0.000**
	Not Worried	80	3.23	3.36			

In Table 11, Independent Samples t-Test results are given to compare the mean scores of the Generalized Anxiety Disorder Scale according to the variable that COVID-19 will affect daily life. It was determined that the mean scores of the statistically Generalized Anxiety Disorder Scale differed significantly according to the state of concern

variable that COVID-19 will affect daily life ($t(153.874) = 10.397$; $p < .01$). It was observed that the Generalized Anxiety Disorder Scale scores of the participants who were concerned about the impact of COVID-19 on daily life were higher than the participants who were not concerned that COVID-19 would affect their daily life.

Table 12. ANOVA Results for the Analysis of the Generalized Anxiety Disorder Scale Scores by Age

Scales	Groups	N	\bar{x}	Ss	F	sd	p
Generalized Anxiety Disorder Scale	18-21	262	7.17	4.92	.250	2 468	.779
	22-25	174	7.07	4.95			
	26 and Over	35	6.54	4.80			

Table 12 shows the ANOVA results to compare the mean scores of the Generalized Anxiety Disorder Scale according to the age variable. It was revealed that the mean scores of the Generalized Anxiety Disorder Scale did not differ significantly according to the age variable ($p > .05$).

Table 13. ANOVA Results for the Analysis of the Generalized Anxiety Disorder Scale Scores by Monthly Family Income

Scales	Groups	N	\bar{x}	Ss	F	sd	p
Generalized Anxiety Disorder Scale	0-2500	111	6.18	4.62	2.387	2 446	0.068
	2501-5000	230	7.30	4.92			
	5001-10000	89	7.94	4.95			
	10001 and Over	20	6.70	4.99			

The ANOVA results to compare the mean scores of the Generalized Anxiety Disorder Scale according to the monthly family income variable are given in

Table 13. It was determined that the mean scores of the Generalized Anxiety Disorder Scale did not differ significantly according to the monthly family income variable ($p > .05$).

Table 14. ANOVA Results for the Analysis of the Generalized Anxiety Disorder Scale Scores by Years of Study

Scales	Groups	N	\bar{x}	Ss	F	sd	p
Generalized Anxiety Disorder Scale	Freshmen	110	8.50	4.82	9.883	3 467	0.901
	Sophomore	246	5.95	4.79			
	Junior	41	8.44	4.86			
	Senior	74	8.01	4.67			

In Table 14, ANOVA results are given for comparing the mean scores of the Generalized Anxiety Disorder Scale according to the years of study variable. It was found that the mean scores of

the Generalized Anxiety Disorder Scale did not differ significantly according to the years of study variable ($p > .05$).

Table 15. Independent Samples t-Test Results for the Analysis of Generalized Anxiety Disorder Scale Scores According to the Materials Used in the Distance Education Process

Scales	Groups	N	\bar{x}	Ss	F	sd	p
Generalized Anxiety Disorder Scale	Smart Phones	110	8.50	4.82	9.883	3 467	0.901
	Computers	246	5.95	4.79			

Table 15 shows the Independent Samples t-Test results to compare the mean scores of the Generalized Anxiety Disorder Scale according to the material variable used in the distance education process. It was revealed that the mean scores of the statistically

Generalized Anxiety Disorder Scale did not significantly differ according to the variable of the Materials Used in the Distance Education Process ($p > 0.05$).

DISCUSSION AND RESULTS

In our study, the mean scores of the GAD-7 scale showed significant differences according to the gender variable. 66,8% of the participants were female, and 33,2% of them were male. Moreover, it was also seen that the Generalized Anxiety Disorder Scale scores of the participants who have a relative diagnosed with COVID-19 are higher than those who did not have a relative diagnosed with COVID-19. There is also a significant difference between the participants who worry about the delay in the academic calendar due to COVID-19. In this difference, it was seen that those who were worried were at a higher level with 270 people. This situation shows that face to face education is less worrying than distance education. It was also determined that the mean scores of the statistically Generalized Anxiety Disorder Scale show a significant difference

according to the state of concern variable that COVID-19 will affect daily life.

The findings obtained as a result of the study are the same as the results of many other studies. A study conducted by Wang et al. (2020), revealed that 53.8% of the participants reported the psychological impact of the pandemic was moderate or severe; 16.5% had moderate to severe depressive symptoms; 28.8% had moderate to severe anxiety symptoms and 8.1% had moderate to severe stress levels. In their study, Ahmed et al. (2020) found that COVID-10 showed a strong and positive correlation with anxiety, depression, and mental well-being. Sher (2020) indicates that isolated individuals have higher levels of anxiety and stress, and they also have a low quality of sleep. According to the results of our study, 26.8% of 471 participants had high levels of anxiety. In the study by Elhai et al. (2020), it was found that 24% of

the participants experienced moderate levels of anxiety. In our study, however, 31.1% of the participants experienced moderate levels of anxiety.

Maaravi and Heller (2020) found that women were more anxious than men, people were more concerned about others than themselves, their anxiety about their relatives was higher than strangers, and health-related concerns were higher than financial issues. A similar result was also revealed by our study, and it was found that the female participants had higher levels of anxiety than the male participants ($p < 0.05$). It was detected in the study made by Labrague et al. (2020) that 37.8% of the nurses had dysfunctional anxiety levels.

In their studies, Cao et al. (2020) proved that about 24,9% of university students experienced anxiety due to COVID-19. In our study, the high level of anxiety was determined by 26,8% of the participants. It was determined that living in urban areas with parents and having a regular income is one

of the factors that protect university students against anxiety during the COVID-19 pandemic. Besides, living with a relative infected with COVID-19 was determined as a risk factor for anxiety. It was also found that the impacts of social and economic stress factors related to COVID-19 increase the anxiety levels of university students.

Many studies conducted with different sample groups in different countries show that there is a strong connection between the anxiety levels of the societies and COVID-19. University students are significantly affected when faced with mental health and public health emergencies and need the attention, assistance, and support of the community, families, and school administrations. It is recommended that the government and universities should work together in order to provide quality, timely, and crisis-oriented psychological services to the university students and solve this problem.

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