İstanbul Üniversitesi Sosyoloji Dergisi

RESEARCH ARTICLE

The Mental Health of a Society in Crisis: Complaints of Depression and Anxiety

Veysel Bozkurt[1] ⓘ**, Hasan Kaya**[2] ⓘ**, Erol Göka**[3] ⓘ**, Kadriye Burcu Öngen Bilir**[4] ⓘ

Abstract
The aim of this paper is to examine the change in anxiety and feelings of depression within the Turkish population, including the factors behind these changes, during the most intense period of the COVID-19 pandemic crisis. Data were collected online from a population with similar characteristics using the convenience sampling method at the beginning of the pandemic (2020) and during its second year (2021). After parsing the data, a total of 9,369 questionnaires were evaluated. The Anxiety and Depressive Complaints questionnaire was prepared based on the conditions related to COVID-19. The scale was produced by selecting from a large set of questions using Factor Analysis (FA). The Confirmatory Factor Analysis (CFA) values of the measurement tool fell within the acceptable limits. It was observed that both anxiety and feelings of depression were extraordinarily high during this period. The data showed that gender, family communication problems, trust in the state, fear of losing one's job, religious involvement, and time had predictive effects on anxiety. All the predictive variables for anxiety also had significant effects on depressive complaints. Age, household income, and living in rural or urban areas were also determined to be predictive for depressive complaints.

Keywords: COVID-19 Pandemic • Anxiety • Depressive complaints • Trust • Religious commitment and predictive variables

1 **Correspondence to:** Veysel Bozkurt (Prof), Economic Sociology Sub-Department, Faculty of Economics, Istanbul University, Istanbul, Turkiye. Email: vbozkurt@istanbul.edu.tr ORCID: 0000-0001-7623-3132
2 Hasan Kaya (Assoc. Prof.), SUAM Mental Health and Diseases, Gulhane Medical Faculty Ankara City Hospital, Health Sciences University, Ankara, Turkiye. Email: dr.kaya.hasan@gmail.com ORCID: 0000-0002-9289-6013
3 Erol Göka (Prof.), SUAM Mental Health and Diseases, Gulhane Medical Faculty Ankara City Hospital, Health Sciences University, Ankara, Turkiye. Email: erolgoka@hotmail.com ORCID: 0000-0001-7066-2817
4 Kadriye Burcu Öngen Bilir (Assoc. Prof.), Department of Business Administration, Faculty of Humanities and Social Sciences, Bursa Technical University, Bursa, Turkiye. Email: burcu.bilir@btu.edu.tr ORCID: 0000-0003-2581-0125

At a time when people's trust in science and technology has increased tremendously, the COVID-19 pandemic caught humanity by surprise. The whole world faced a similar shock. Millions of people lost their lives, and many others were unable to work, causing massive economic losses. People were confined to their homes for long periods of time. There was intense fear around the potential of death, catching the virus, and losing loved ones. The norms with which people were familiar ceased abruptly, causing feelings of uncertainty and helplessness and deeply shaking the basic sense of security. Negative emotions, such as fear, anxiety, anger, and grief, took hold during the COVID-19 pandemic (Markowitz, 2021; Göka, 2020). Although the severity of effect differed from person to person (Göka, 2020 (a), the mental health of a large portion of society was deeply affected during the pandemic. Academic literature has revealed that anxiety and depressive disorders increased greatly during the period of the COVID-19 pandemic (Vindegaard & Benros, 2020; Gayatri & Irawaty, 2022; Kaya et al., 2021). The number of antidepressants sold in Turkey increased by 10 million during this period, from 49 million in 2019 to 59 million in 2021. This rate of increase is much higher than would be expected in the absence of a pandemic (Elmacıoğlu & Çar, 2022).

The aim of this paper was to demonstrate, with the use of a comprehensive data set, how a large-scale pandemic affects the mental health (anxiety and feelings of depression) of the population. Therefore, the level of anxiety and depressive complaints was examined in 2020 and 2021, when the number of cases peaked and vaccination had not yet become widespread. The effects the pandemic had on the mental health of society were evaluated along the demographic factors of: age, gender, family communication, household income, and place of residence. Two different quantile regression models were used to measure the effect on anxiety and depressive complaints related to: trust in the state, family communication problems, fear of losing one's job, and religious commitment. It is hoped that this research can contribute to the literature by revealing the psychological response of society and the factors which affect it within a crisis situation such as a pandemic, which affects all people and disrupts every facet of life.

Age

COVID-19 infection is known to be a greater threat to those with weakened immune systems and those who are older. Accordingly, doctors have frequently stated that the risk of death is lower for young people with a relatively stronger immune system. However, the preventative measures taken during the pandemic forced young people to remain at home during the most active periods of their lives and isolated them from their friends. Young people are the age group with the highest level of physical activities and social interactions. Such activities are crucial in terms of psychological health, as this is a time of identity development. The difficulty of adapting to the "new normal" and the "stigma" greatly increased the restlessness of young people. It has been

observed that anxiety and depressive symptoms are much higher among young people with chronic health problems and those from socio-economically disadvantaged groups who are worried about the future (Hajek et al., 2022; Browning et al., 2021; Bayhan & Bozkurt, 2021; Civan-Kahve, Kaya, Darben, Gul-Cakil & Goka, 2021). One of the effects of the pandemic was the shrinking of the labor market, leaving young people who were new to a job or in the process of preparing to enter the workforce to face more uncertainty and stress than adults (Blundell, Costa-Dias, Joyce & Xu, 2020). Therefore, the first hypotheses *of this study were that anxiety (H1a) and depressive complaints (H1b) would increase as age decreased.*

Gender Factor

Anxiety and depressive complaints were known to be more common among women than men before the pandemic. Academic literature has shown that anxiety and mood disorders are more than twice as prevalent in women than in men (Faravelli, Alessandra Scarpato, Castellini & Lo Sauro, 2013; (Bebbington et al., 1998; Kuehner, 2003; Van de Velde, Bracke, & Levecque, 2010; Hankin, Mermelstein, & Roesch, 2007; Browning et al., 2021). In a study based on data from the third wave of the European Social Survey (ESS-3), Van de Velde et al. (2010) reported that women aged 18-75 years in 23 European countries had higher depression scores than men in all countries. According to the findings of a study conducted on 3,088 people in China immediately after the onset of the COVID-19 pandemic, the total prevalence of depression and anxiety of the participants was between 13.25% and 14.14%, with women showing more severe symptoms of stress and anxiety (Hou, Bi, Jiao, Luo, & Song, 2020). In another study of Spanish university students, it was observed that after the pandemic, women showed higher anxiety and perception of danger in respect to COVID-19 infection than men (Rodriguez-Besteiro et. all., 2021; Usta & Bozkurt, 2022). There are also reports in the literature that despite the increase in anxiety and depressive complaints among all social groups, the rate was much higher among women than men (Clemente-Suárez et al., 2021). For all these reasons, the second *hypotheses of the current study were that women would show more anxiety (H2a) and depressive complaints (H2b) than men during the COVID-19 pandemic*.

Household Income

Low-income groups have less capacity to cope with difficulties and experience greater stress in times of crisis because the savings of these groups are more limited. If these people are not working, they face greater troubles. Higher rates of depression and post-traumatic stress symptoms have been reported after terrorist attacks or natural disasters, especially among low-income groups (Chatterjee et al., 2018; Tsai, Elbogen, Huang, North, & Pietrzak, 2021). Although the COVID-19 pandemic affected all social groups, low-income groups with insufficient savings were more deeply affected, with

existing inequalities only deepening (Ataman et al., 2021; Bozkurt, 2020; Blundell et al., 2020). A study conducted on 14,387 individuals in the United Kingdom found a relationship between depression and low income (Pierre et al., 2021). Studies conducted in the USA also revealed that low-income groups experienced more psychological distress after the COVID-19 pandemic (Tsai et al., 2021). Therefore, the third hypotheses of this study were that *there would be a relationship between low household income and anxiety (H3a) and depression (H3b).*

The Place of Residence

Even before the COVID-19 pandemic, place of residence has been associated with depression and anxiety. Historically, pandemics have affected larger cities, which are centers of international trade and human mobility (Florida et al., 2020; Snowden, 2020). The COVID-19 pandemic also began, as expected, in major cities where human mobility is common. At the very beginning of the pandemic, more than half of the cases in Turkey were recorded in Istanbul, with this global city feeling the effects of the pandemic more profoundly than other regions of Turkey (Sayın & Bozkurt, 2020). During the lockdown periods in Turkey, people in urban areas, most of whom were forced to confine themselves to their apartments, felt the effects of physical immobility and social isolation more deeply.

Post-pandemic studies have revealed that living in urban areas increased the risk of depression and anxiety (Özdin & Bayrak-Özdin, 2020; Liu et al., 2021; Liu, Shi, Auden, & Rozelle, 2018; Vindegaard & Benros, 2020). A relationship between reduced physical activity and deterioration in mental health during periods of lockdown has been reported in many countries (Karageorghis et al., 2021; Fornili et al., 2021; Radino & Tarantino, 2022). People who are confined to urban spaces were especially seen to have become more anxious and depressed. Therefore, *the fourth hypotheses of this study were that living in an urban area would increase anxiety (H4a) and depressive complaints (H4b).*

Family Communication Problems

Strong social ties have always played a vital role in coping with the economic and psychological problems that arise in times of crisis. In particular, strong family ties and family resilience have a protective effect against the negative psychological effects of pandemic stressors, although they vary across cultures (Chen, Yu, Su, Tong, & Wu, 2021). Thus, when family problems increase, individuals lose their most important support. As the period of the COVID-19 pandemic continued, just as for other problems, there was an increase in family economic and communication problems. Domestic violence during the COVID-19 pandemic has been one of the most researched topics (Gönç Şavran & Suğur, 2021; Dawes & Broadfield, 2021; Ağca-Varoğlu, 2021; Çakı, Corr, & Krupić, 2021; Macit, 2021). Studies have revealed that domestic violence has

been an important predictor of depression and anxiety in this period (Indu, Vijayan, Tharayil, Ayirolimeethal, & Vidyadharan, 2021). It has been observed that domestic violence and communication problems increased relatively more in lower income groups (Şentürk & Bozkurt, 2021; Şahin, & Nerse, 2021). Therefore, *it was hypothesized that when family communication problems increase, anxiety (H5a) and depressive (H5b) complaints would also increase.*

Confidence in the Government

In times of crisis, people need institutions that they can trust to be able to cope with their psycho-social problems. Having a strong authority to support them in difficult times makes people feel good about themselves. After the COVID-19 pandemic, it was reported that trust in the government also played an important function in terms of protecting mental health (Ataman et al., 2021).

Research has shown that as confidence in public authority declines, psychological problems increase. In other words, "post-traumatic stress disorder" (PTSD) symptoms are diminished by trust in government. Therefore, trust in the government also increases the likelihood that the people will comply with the measures taken in times of crisis (Fornili et al., 2021; Georgieva et al., 2021; Chen et al., 2021; Bäuerle et al., 2020). Therefore, *it was hypothesized that as confidence in the government increases, anxiety (H6a) and depressive complaints (H6b) would decrease.*

Fear of Losing One's Job

The fear of unemployment was one of the most important problems faced by employees during the pandemic, as many businesses became inoperable during this period. Restaurants, cinema/theaters and many other businesses closed, leaving those who worked there unable to work. Thus, the fear of losing one's job was added to the life-threatening dangers posed by the virus. The future thus become much more uncertain. In Turkey, despite public sector employees with job security feeling relatively more confident in this issue, private sector employees and self-employed small business owners felt increased fear (Blundell et al., 2020). According to the findings of a study conducted on 19,496 adults in Italy, a significant relationship was found between the fear of being unemployed after COVID-19 and depression (Pompili et al., 2022). Based on these findings in the literature, it was hypothesized that *anxiety (H7a) and depression complaints (H7b) would increase as the fear of losing a job increased.*

Religious Commitment and the Pandemic

The pandemic has deeply shaken people's sense of security. In periods when the sense of security is shaken, people turn to more spiritual practices and the expression of their religion. When people feel the presence of a higher power at their side, it makes them

more resilient in the face of loss during times of crisis. In addition, people with high levels of religious commitment have been reported to be more resilient against psycho-social problems caused by crises due to their strong family and community ties (Gülerce & Maraj, 2019). Throughout history, spirituality has been one of the most widely researched topics in coping with the psychological problems created by crises (Thuné-Boyle, Stygall, Keshtgar, & Newman, 2006). During the COVID-19 pandemic, it was observed that both anxiety and depression decreased as positive religious coping strategies were strengthened (Chow et al., 2021). For example, a study in Brazil found a positive correlation between high levels of religious/spiritual belief and better mental health during the pandemic. As religiosity and spirituality gained strength, there was greater resilience to the suffering of the pandemic (Lucchetti et al., 2021). In this study, it was hypothesized that *those who believed and fulfilled their religious obligations would have lower anxiety (H8a) and depressive complaints (H8b) than other groups.*

Society in the Second Year of the Pandemic

The COVID-19 pandemic first began in China at the end of 2019 before spreading rapidly across the world. As the pandemic dragged on, fatigue, boredom, and pessimism increased. In the first year of the pandemic (2020), a large number of people were pessimistic. In the second year (2021), pessimistic, anxious, and depressed moods became much more dominant (Ionescu, Fetecau, Boscaiu, & Tudose, 2021). An analysis based on the data of the European COVID-19 Survey revealed the existence of high rates of anxiety and depression, especially in the 18-29 age group (Hajek et al., 2022). An anxious and depressive mood became dominant in Turkey due to the pessimism caused by exhaustion and the shrinking economy which resulted from the prolongation of the pandemic. The findings of the Gallup Global Emotions Survey and the World Happiness Report on Turkey showed the extent of growing unrest (Helliwell et. al. 2022). Similar results can also be seen in the experiences of other countries (Pierre et al., 2021). The findings of a study conducted in Japan between May 2020 and May 2021 revealed that the rates of anxiety and depression increased in the intervening time (Fuse-Nagase, 2022). As a final hypothesis of this study, it was assumed that *anxiety (H9a) and depressive complaints (H9b) would increase in the second year of the pandemic*. In a survey conducted immediately after the first official case in Turkey in March 2020, the majority of people said that the crisis would pass within six months. However, with the prolongation of the pandemic and the loss of lives, people grew increasingly weary of the conditions.

Method

The data were collected online through convenience sampling in 2020 and 2021, when the concern about the COVID-19 pandemic reached the highest level in Turkey. After parsing the data, the responses of 9,639 questionnaires were evaluated, with

5,054 answers from 2020 and 4,315 from 2021. This study began as an international research on social networks in 2020, but as insufficient data were collected from other countries to be able to make comparisons, the data from Turkey were evaluated separately. Therefore, the first ethics committee decision of the research was taken from James Cook University (H8139/2020) in Australia in 2020, and the second from Istanbul University (2021/195) after updating the questionnaire. No financial support for the study was received from any institution.

The respondents comprised 58% females and 42% males, with a mean age of 34.35 years. The sample population was seen to be a highly educated group, with 93.5% of the respondents having a university education or higher and only 6.5% having an education level of high school or lower. In terms of income, 1.1 % of the respondents were in the highest bracket. For place of residence, 93.6% were living in a city of metropolitan area, with the rest living in villages and towns. Therefore, the data can be summarized as representing the urban and educated middle classes. This research does not claim to represent the entire Turkish population. On the questionnaire, six items referred to depressive complaints and three items to existential anxieties. Responses were given as 5-point Likert-type responses. The measurement tool was produced using Exploratory Factor Analysis (EFA) from a wide set of questions, with the data then tested using Confirmatory Factor Analysis (CFA) on a randomly selected group of the sample. The EFA Cronbach Alpha values were 0.89 for depressive complaints and 0.84 for existential anxieties. The Chi-Square/SD, CFI, GFI, NFI, AGFI, and RMSEA values of the CFA were seen to be within acceptable limits (Table 1).

Table 1
Exploratory (EFA) and Confirmatory (CFA) Factor Analysis Results

	EFA		CFA	
	Factor loading N=9369		Factor loading N=466	
	Depressive complaints	Existential anxieties	Depressive complaints	Existential anxieties
I became more irritable and quick to anger	0.798		0.738	
I have trouble doing daily chores	0.793		0.820	
I lost my sense of control over my life	0.776		0.690	
I feel constantly tired and exhausted	0.768		0.848	
My sleep quality has deteriorated	0.747		0.804	
My sense of loneliness increased	0.655		0.764	
I am in constant fear of catching the virus		0.845		0.862
My fear of death has increased		0.843		0.896
I've become afraid of losing loved ones		0.771		0.753

Cronbach Alpha	0.89	0.84	0.91	0.86
CR			0,91	0,86
AVE			0,63	0,69
MSV			0,49	0,49
ASV			0,49	0,49
Explained variance:	0.69		0.73	
KMO	0.91		0.91	
Chi square /SD			3.07	
CFI			0.974	
GFI			0.955	
NFI			0.965	
AGFI			0.920	
RMSEA			0.077	

Quantile Regression Analysis, which does not require a normal distribution condition, was preferred in the data analysis. Categorical variables were coded as dummy variables before being included in the regression analysis.

Results

The frequency distributions revealed that anxiety and feelings of depressive were quite high in the examined period. The highest levels of responses were to the statements of: "I became more irritable and quick to anger" (40%), "I have trouble doing daily chores" (40.6%), "I lost my sense of control over my life" (35%), "I am constantly feeling tired and exhausted" (45%), "My sleep quality has deteriorated" (53%), and "My sense of loneliness increased" (37%).

Existential anxieties were also at a very high level. Of the total respondents, 66% stated "I've become afraid of losing loved ones," 33% that "My fear of death has increased," and 42% that "I am in constant fear of catching the virus."

The data shown in Table 3 demonstrate that as age decreased, there was a statistically significant increase in depressive complaints (b=-0.016, t(5907)= -10.238, p = 0.000). This result confirms the H1b hypothesis. Anxiety levels in young people were determined to be higher than in adults, but not at a level of statistically significant difference (b=-0.004, t(5897)= -1.912, p = 0.056). Therefore, the H1a hypothesis was rejected.

It has been stated in the literature that both depression and anxiety were higher among women than men before the pandemic. During the pandemic, both depressive complaints (b = -0.221, t(5907)= -6.432, p = 0.000) and anxiety (b=-0.423, t(5897)= -9.208, p = 0.000) were observed to be much higher among women. These results confirm the H2a and H2b hypotheses.

It is often observed that crises negatively affect the poor the most. During the lockdown periods of the COVID-19 pandemic, a large group of people could not work and suffered loss of income. This situation resulted in a more depressed mood among low-income families. The results of this study also confirmed the hypothesis (H3b) that there is a relationship between low household income and depression (b= -0.164, t(5907)= -4.088, p = 0.000). However, the H3a hypothesis was rejected because household income did not have a significant effect on anxiety, contrary to expectations (b= -0.045, t(5897)= -0.847, p = 0.397).

Table 2
Existential Anxieties, Quantile Regression Analysis Results (q=0,5)[a,b]

Parameter	Coefficient	Std. Error	t	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
(Intercept)	3.074	0.1230	24.991	5897	0.000	2.833	3.316
Age	-0.004	0.0021	-1.912	5897	0.056	-0.008	0.000
Gender (Female:1; Male:2)	-0.423	0.0460	-9.208	5897	.000	-0.513	-0.333
Household income (O=Other,1=Middle and upper)	-0.045	0.0534	-0.847	5897	0.397	-0.150	0.060
Place of residence (0=City,1=Rural)	-0.117	0.0934	-1.257	5897	.209	-0.301	0.066
Intra-family communication problems 0=Other, 1=Increased)	0.506	0.0540	9.364	5897	0.000	0.400	0.612
Trust in the government (0=Other, 1=Yes)	-0.208	0.0521	-4.003	5897	,000	-0.311	-0.106
Anxiety about losing your job (0=Other, 1=Yes)	0.404	0.0488	8.279	5897	0.000	0.309	0.500
Religious affiliation (0=Other, 1=I believe and fulfill my religious obligations)	-0.279	0.0494	-5.657	5897	0.000	-0.376	-0.182
Year (1=2020; 2=2021)	0.256	0.0449	5.700	5897	0.000	0.168	0.344

a. Dependent Variable: Existential Anxieties

b. Model: (Intercept), Age, Gender, Household_Income, Place_Recidence2, Intra-family communication problems, Trust in the government, Anxiety about losing your job, Religious_invol2, Year

The hypothesis that people living in urban areas would experience more anxiety (H4a) than those living in rural areas was rejected (b= -0.117, t(5897)= -1.257, p = 0.209). As depressive symptoms were found to be relatively higher in urban areas, hypothesis H4b was confirmed (b= -0.144, t(5907)= -2.062, p = 0.039).

Families who were confined to their homes during the peak periods of the pandemic started to spend more time together. While some were satisfied with this situation, some began to experience communication problems. The survey results demonstrated that when communication problems within the family increased, there was also an increase in anxiety (b= 0.506, t(5897)= -9.364, p = 0.000) and depressive complaints (b= 0.879, t(5907)= 21.702, p= 0.000). Thus, hypotheses H5a and H5b were confirmed.

In times of crisis, the trust of citizens towards the government and administrators will lead them to obey the rules and feel more secure, which can help them cope with anxiety and a depression. As predicted in hypotheses H6a and H6b, it was seen that as confidence in the government increased, there was a decrease in both anxiety (b= -0.208, t(5897)= -4.003, p = 0.000) and depressive complaints (b= -0.216, t(5907)= - 5.530, p= 0.000). Thus, hypotheses H6a and H6b were confirmed.

Table 3

Depressive Complaints Quantile Regression Analysis Results (q=0,5)[a,b]

Parameter	Coefficient	Std. Error	t	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
(Intercept)	3.275	0.0922	35.530	5907	0.000	3.094	3.456
Age	-0.016	0.0016	-10.238	5907	0.000	-0.020	-0.013
Gender (Female:1; Male:2)	-0.221	0.0344	-6.432	5907	0.000	-0.289	-0.154
Household income (O=Other,1=Middle and upper)	-0.164	0.0401	-4.088	5907	0.000	-0.242	-0.085
The place of residence (0=City,1=Rural)	-0.144	0.0700	-2.062	5907	0.039	-0.282	-0.007
Intra-family communication problems 0=Other, 1=Increased)	0.879	0.0405	21.702	5907	0.000	0.799	0.958
Trust in the government (0=Other, 1=Yes)	-0.216	0.0390	-5.530	5907	0.000	-0.292	-0.139
Anxiety about losing your job (0=Other, 1=Yes)	0.361	0.0366	9.857	5907	0.000	0.289	0.433
Religious affiliation (0=Other, 1=I believe and fulfill my religious obligations)	-0.276	0.0370	-7.462	5907	0.000	-0.349	-0.204
Year (1=2020; 2=2021)	0.273	0.0337	8.116	5907	0.000	0.207	0.339

a. Dependent Variable: Depressive Complaints

b. Model: (Intercept), Age, Gender, Household_Income, Place_Recidence2, Intra-family communication problems, Trust in the government, Anxiety about losing your job, Religious_invol2, Year

A significant proportion of individuals whose jobs were not suitable for working online became unable to work during the lockdown period. Due to the shrinking

markets, people began to fear losing their jobs. Therefore, as well as the increase in family communication problems, the fear of losing one's job also had a strong effect on both anxiety (b= 0.404, t(5897)= 8.279, p =0.000) and depressive complaints (b= 0.361, t(5907)= -9.857, p=0.000). The hypotheses that anxiety (H7a) and depression complaints (H7b) would increase as the fear of losing their job increased were confirmed.

The relevant academic literature has shown that religious affiliation increases the resilience of people in times of crisis. The current study data showed that anxiety (b= -0.279, t(5897)= -5.657, p = 0.000) and depressive complaints (b= -0.276, t(5907)= -7.462, p= 0.000) declined among those who believed and fulfilled religious obligations. Thus, hypotheses H8a and H8b were confirmed.

Finally, it has been observed that people became exhausted, fed up, and restless during the pandemic. The bewilderment experienced in 2020 turned into fatigue in 2021. People who were constantly afraid of catching the virus and losing their loved ones became more depressed. When the results of 2020 and 2021 were compared between the two groups with similar characteristics, it was determined that both anxiety (b= 0.256, t(5897)= 5.700, p = 0.000) and depression complaints (b= 0.273, t(5907)= 8.116), p=0.000) increased. In addition, as seen in both tables of regression analyses aiming to determine the variables that predict anxiety and depressive symptoms, the time factor was seen to have a significant effect. Thus, hypotheses H9a and H9b were confirmed.

Conclusion/Discussion

In 2020 and 2021, the COVID-19 pandemic rendered existing norms unworkable, with the precautions implemented requiring people to stay at home, which resulted in a deeply shaken sense of security. As in other countries, existential anxieties and feelings of depression increased at an unprecedented level in Turkey. In this study, which aimed to reveal the dimensions of anxiety and depressive complaints in society and the factors which could predict these the during the peak period of the pandemic, 15 of the 18 hypotheses fundamental to this study were confirmed, with three being rejected.

Thus, the results of this research coincide with the findings of the academic literature suggesting that fear, anxiety, and depressive complaints increased greatly during the pandemic (Vindegaard & Benros, 2020; Gayatri & Irawaty, 2022; Göka, 2020a; Markowitz, 2021). While at the very beginning of the pandemic, it was often stated that the virus was a greater risk for the older age group, the social and psychological impact of the pandemic has been seen to be more severe among young people than among adults. In the results of this study, the Kruskal-Wallis test showed that both the

highest anxiety (H(4)=171.582, p=0.000) and the highest depressive complaints (H(4)= 671.164, p=0.000) were determined in young people. Depressive symptoms in particular were seen to be higher in young people under the age of 25 years than in all the other groups. Social distancing (isolation), inactivity, stigma, and shrinkage in the employment market become a concern for young people (Hajek et al., 2022; Browning et al., 2021; Bayhan & Bozkurt, 2021; Blundell et al., 2020). However, the age factor did not have a significant predictive effect on anxiety. Conversely, anxiety was seen to increase with age, but its effect in the regression analysis was not statistically significant (05% significance level) (p=0.06).

Together with young people, females constituted another group hit hardest by the pandemic. As previous academic literature has shown, the tendency to feel anxiety and depression was more common than ever among women. The findings of this research were seen to be similar to the results of previous studies (Faravelli et al., 2013; Bebbington et al., 1998; Kuehner, 2003; Van de Velde et al., 2010; Hankin et al., 2007; Browning et al., 2021; Hou et al., 2020; Rodriguez-Besteiro et al., 2021; Usta & Bozkurt, 2022). The data reveals that the rates of both anxiety and depression are higher in women than men. Although anxiety and depression increased in all groups as the pandemic went on, these feelings increased more in women than in men.

Contrary to the hypothesis, the household income coded as a dummy variable had no significant predictive effect on anxiety. This may have been because the virus infected all groups, regardless of class. However, it was concluded that household income had a significant predictive effect on depression. This result is similar to the findings of two different studies, conducted in England and the USA (Pierre et al., 2021; Tsai et al., 2021).

Again, contrary to expectations, the place of residence had no significant predictive effect on anxiety. However, depressive symptom scores were determined to be higher in urban areas where the virus was most common. It has been reported that during the lockdown periods, going out and walking around were the activities that people missed the most, with people in cities who felt a greater sense of isolation being more negatively affected by the pandemic (Özdin & Bayrak Özdin, 2020; Li, Wang, Wu, Han, & Huang, 2021; Vindegaard & Benros, 2020). A relationship between reduced physical activity and deterioration in mental health has been found in many countries during periods of lockdown (Karageorghis et al., 2021; Fornili et al., 2021; Radino & Tarantino, 2022).

The stress caused by the prolongation of the pandemic process increased domestic communication problems, with domestic violence becoming one of the most discussed issues during this period (Gönç-Şavran & Suğur, 2021; Dawes & Broadfield, 2021; Ağca-Varoğlu, 2021; Çakı et al., 2021; Macit, 2021). However, the importance of

family and strong social ties in coping with economic and psychological problems emerged once again during this pandemic. The results of the current study revealed that intra-familial communication was one of the most important indicators for the prediction of anxiety and depressive symptoms during the pandemic.

At times when people's sense of security is shaken, trust in government institutions is of critical importance. Therefore, trust in the government was a psycho-social support for individuals during the COVID-19 pandemic. Other studies have reported that trust in the state played an important role in protecting mental health during the pandemic (Fornili et al., 2021; Georgieva et al., 2021; Chen et al., 2021; Bäuerle et al., 2020; Ataman et al., 2021). The findings of this study also revealed that trust in the government was effective in coping with anxiety and depression.

Similar to the findings of a study of 19,496 adults in Italy by Pompili et al. (2022), this study also observed that depressive symptoms and anxiety increased as people's fear of losing their jobs increased. While those working in public institutions felt relatively safe during the pandemic, anxiety and depressive complaints were observed especially among those working outside the public sector because of the fear of losing their job. In addition, the potential employment problems that the shrinking labor market would produce in the future became a cause for concern for young people who were still students.

Religious commitment and spirituality have a special importance in coping with psychological problems caused by crises (Gülerce & Maraj, 2019; Thuné-Boyle et al., 2006; Chow et al., 2021). Similar to the results of previous academic studies on the subject, the results of the current study demonstrated that anxiety and feelings of depression were significantly lower among people who said "I believe and fulfill my religious obligations." In other words, the social bonds established by religion, as well as the trust that comes along with it and meanings which can attributed to even the greatest disasters increase the resilience of pious individuals in difficult times.

The prolongation of the pandemic and the lockdowns imposed after one year increased fatigue, boredom, and pessimism. As a result of the research examined in the literature review section of this paper, it was seen that the unrest increased to a great extent in the second year of the pandemic. Similar to the results of other studies (Fuse-Nagase, 2022), the results of the current study demonstrated that the level of anxiety and depression increased in 2021 compared to 2020.

In 2022, the virus lost its strength to a large extent after the emergence of the Omicron variant, which began the normalization process. However, many viruses still exist in nature. The experience of the COVID-19 pandemic has shown that a virus (or variant) which starts in one part of the world can rapidly spread to other countries due to increased global mobility. Therefore, there is no guarantee that we will not face similar

pandemics in the future. The findings of this research help to understand the mood of the society in the most intense period of the crisis (2020-2021), and may contribute to revealing the variables that predict anxiety and depressive symptoms. It can also help us as a society to understand our strengths and weaknesses in crisis situations and better prepare for future crises.

References

Ağca Varoğlu, F. (2021). "Staying at home": A rhythmanalysis of self-quarantine. In V. Bozkurt, G. Dawes, H. Gülerce & P. Westenbroek (Eds.), *The societal impacts of Covid-19: A transnational perspective* (pp. 45–62). Istanbul University Press. https://doi.org/10.26650/B/SS49.2021.006.04

Ataman, K., Bozkurt, V., Göka, E., İlhan, M. N., Yıldırım, N., Çiftçi, E. … Vuran, B. (2021). The social effects of Covid-19 pandemics. *Türk Hijyen ve Deneysel Biyoloji Dergisi, 78*(3), 235–248. https://doi.org/10.5505/TurkHijyen.2021.83357

Bäuerle, A., Teufel, M., Musche, V., Weismüller, B., Kohler, H., Hetkamp, M. … Skoda, E. M. (2020). Increased generalized anxiety, depression and distress during the COVID-19 pandemic: A cross-sectional study in Germany. *Journal of Public Health*, *42*(4), 672–678. https://doi.org/10.1093/pubmed/fdaa106

Bayhan, V.& Bozkurt, V. (2021). Psycho-social effects of the covid-19 pandemic on the young people. In H. Gülerce, V. Nimehchisalem, V. Bozkurt, G. Dawes & S. Rafik-Galea (Eds.), *Society in the covid-19 pandemic: Inequalities, challenges, and opportunities* (pp. 57–68). Ankara: Pegem Akademi..

Bebbington, P. E., Dunn, G., Jenkins, R., Lewis, G., Brugha, T., Farrell, M., & Meltzer, H. (1998). The influence of age and sex on the prevalence of depressive conditions: Report from the National Survey of Psychiatric Morbidity. *Psychological Medicine*, *28*(1), 9–19. https://doi.org/10.1017/s0033291797006077

Blundell, R., Costa Dias, M., Joyce, R., & Xu, X. (2020). Covıd-19 and inequalities. *Fiscal Studies*, *41*(2), 291–319 https://doi.org/10.1111/1475-5890.12232

Bozkurt, V. (2020). Working during a pandemic: Economic concerns, digitalization, and productivity. In D. Demirbaş, V. Bozkurt & S. Yorgun (Eds.), *The COVID-19 pandemic and its economic, social, and political impacts* (pp. 87–106). Istanbul University Press.

Browning, M. H. E. M., Larson, L. R., Sharaievska, I., Rigolon, A., McAnirlin, O., Mullenbach, L. … Alvarez, H. O. (2021). Psychological impacts from COVID-19 among university students: Risk factors across seven states in the United States. *PloS One*, *16*(1), e0245327. https://doi.org/10.1371/journal.pone.0245327

Chatterjee, A., Banerjee, S., Stein, C., Kim, M.H., DeFerio, J., & Pathak, J. (2018). Risk factors for depression among civilians after the 9/11 World Trade Center terrorist attacks: A systematic review and meta-analysis. *PLoS Currents*, *10*. https://doi.org/10.1371/currents. dis.6a00b40c8ace0a6a0017361d7577c50a

Chen, J. H., Yu, E. W.-Y., Su, X., Tong, K. K., & Wu, A. M. S. (2021). Mental distress during the COVID-19 pandemic: Its association with public perceptions toward government's pandemic responses and lifestyle changes. *Current Psychology 40*(12), 6282–6290. https://doi.org/10.1007/s12144-021-01547-4

Chow, S. K., Francis, B., Ng, Y. H., Naim, N., Beh, H. C., Ariffin, M. A. A. … Sulaiman, A. H. (2021). Religious coping, depression and anxiety among healthcare workers during the COVID-19 Pandemic: A Malaysian perspective. *Healthcare*, *9*(1). https://doi.org/10.3390/healthcare9010079

Civan , A.C., KAYA, H., Darben, Y., Gul Cakil, A., & Goka, E. (2021). From predictions to evidence: Treatment compliance, disease progression and social compliance of patients with schizophrenia in the COVID-19 pandemic. *Perspectives in Psychiatric Care*, *57*(4), 1991–1998. https://doi.org/10.1111/ppc.12824

Clemente-Suárez, V. J., Martínez-González, M. B., Benitez-Agudelo, J. C., Navarro-Jiménez, E., Beltran-Velasco, A. I., Ruisoto, P. …Tornero-Aguilera, J. F. (2021). The Impact of the COVID-19 pandemic on mental disorders. A critical review. *International Journal of Environmental Research and Public Health*, *18*(19). https://doi.org/10.3390/ijerph181910041

Çakı, N., Corr, P., & Krupıć, D. (2021). Pyschosocial effects of the Covid-19 pandemic. In V. Bozkurt, G. Dawes, H. Gülerce & P. Westenbroek (Eds.), *The societal impacts of Covid-19: A transnational perspective* (pp. 63–78). Istanbul University Press. https://doi.org/10.26650/B/SS49.2021.006.05

Dawes, G., & Broadfield, K. (2021). Risking a new underclass: Young Australians, broken transitions, and the pandemic. In V. Bozkurt, G. Dawes, H. Gülerce, & P. Westenbroek (Eds.), *The societal impacts of Covid-19: A transnational perspective* (pp. 17–28). Istanbul University Press. https://doi.org/10.26650/B/SS49.2021.006.02

Elmacıoğlu, L. (2022). Türkiye'de antidepresan kullanımındaki yükseliş alarm veriyor: Son 2 yılda satışlar 10 milyon kutu arttı. *Independent Türkçe* (27 Nisan 2022). https://www.indyturk.com/node/503126/sa%C4%9Flik/t%C3%BCrkiyede-antidepresan-kullan%C4%B1m%C4%B1 ndaki-y%C3%BCkseli%C5%9F-alarm-veriyor-son-2-y%C4%B1lda-sat%C4%B1%C5%9Flar

Faravelli, C., Alessandra Scarpato, M., Castellini, G., & Lo Sauro, C. (2013). Gender differences in depression and anxiety: The role of age. *Psychiatry Research*, *210*(3), 1301–1303. https://doi.org/10.1016/j.psychres.2013.09.027

Florida, R., Glaeser, E., Sharif, M.M., Bedi, K., Campanella, T.J., Chee, C.H. … Theil, S. (2020). How life in our cities will look after the coronavirus pandemic. *Foreign Policy* (01 Mayıs 2020).

Fornili, M., Petri, D., Berrocal, C., Fiorentino, G., Ricceri, F., Macciotta, A. … Baglietto, L. (2021). Psychological distress in the academic population and its association with socio-demographic and lifestyle characteristics during COVID-19 pandemic lockdown: Results from a large multicenter Italian study. *PloS One*, *16*(3), e0248370. https://doi.org/10.1371/journal.pone.0248370

Fuse-Nagase, Y. (2022). Mental health status among university students during COVID-19 pandemic in Japan: A longitudinal study with one year interval. *Asian Journal of Psychiatry*, *68*, 102973. https://doi.org/10.1016/j.ajp.2021.102973

Gayatri, M., & Irawaty, D. K. (2021). Family resilience during COVID-19 pandemic: A literature review. The *Family Journal*, *30*(2), 132–138. https://doi.org/10.1177/10664807211023875

Georgieva, I., Lepping, P., Bozev, V., Lickiewicz, J., Pekara, J., Wikman, S. … Lantta, T. (2021). Prevalence, new incidence, course, and risk factors of PTSD, depression, anxiety, and panic disorder during the Covid-19 pandemic in 11 countries. *Healthcare*, *9*(6). https://doi.org/10.3390/healthcare9060664

Göka, E. (2020). Psikolojimize protez bir ilave ve yeni normal. In M. Şeker, A. Özer, C. Korkut (Ed.). *Küresel salgının anatomisi: insan ve toplumun geleceği* (pp. 715-736). Türkiye Bilimler Akademisi.

Göka, E.(2020a). Yepyeni Bir Dünyada Yaşarken Gezegenimize Pandemi Çarptı. In K. Sayar (Ed.). *Kaygı Çağı: Salgın Zamanlarında Ruh Sağlığı* (pp. 131-163). Kapı Yayınları.

Şarvan, T. G., & Suğur, N. (2021). The gendered pattern of COVID-19 pandemic. In H. Gülerce, V. Nimehchisalem, V. Bozkurt, G. Dawes & S. Rafik-Galea (Eds.), *Society in the Covid-19 pandemic: Inequalities, challenges, and opportunities* (pp. 1-20). Pegem Akademi.

Gülerce, H., & Maraj, H. A. (2021). Resilience and hopelessness in Turkish society: Exploring the role of spirituality in the COVID-19 pandemic. *Journal of Economy, Culture and Society*, *63*, 1–15. https://doi.org/10.26650/JECS2020-0075

Hajek, A., Sabat, I., Neumann-Böhme, S., Schreyögg, J., Barros, P. P., Stargardt, T., & König, H. H. (2022). Prevalence and determinants of probable depression and anxiety during the COVID-19 pandemic in seven countries: Longitudinal evidence from the European COvid Survey (ECOS). *Journal of Affective Disorders*, *299*, 517–524. https://doi.org/10.1016/j.jad.2021.12.029

Hankin, B. L., Mermelstein, R., & Roesch, L. (2007). Sex differences in adolescent depression: Stress exposure and reactivity models. *Child Development*, *78*(1), 279–295. https://doi.org/10.1111/j.1467-8624.2007.00997.x

Helliwell, J. F., Layard, R., Sachs, J. D., De Neve, J.-E., Aknin, L. B., & Wang, S. (Eds.) (2022). *World happiness report*. New York.

Hou, F., Bi, F., Jiao, R., Luo, D., & Song, K. (2020). Gender differences of depression and anxiety among social media users during the COVID-19 outbreak in China: A cross-sectional study. *BMC Public Health*, *20*(1), 1648. https://doi.org/10.1186/s12889-020-09738-7

Indu, P. V., Vijayan, B., Tharayil, H. M., Ayirolimeethal, A., & Vidyadharan, V. (2021). Domestic violence and psychological problems in married women during COVID-19 pandemic and lockdown: A community-based survey. *Asian Journal of Psychiatry*, *64*, 102812. https://doi.org/10.1016/j.ajp.2021.102812

Ionescu, T. C., Fetecau, B. I., Boscaiu, V., & Tudose, C. (2021). Anxiety, perceived stress, and resilience during the COVID-19 pandemic: Population estimates of persons presenting to a general practitioner in Romania. *Brain Sciences*, *11*(11). https://doi.org/10.3390/brainsci11111541

Markowitz, J.C. (2021). *In the aftermath of the pandemic: Interpersonal psychotherapy for anxiety, depression, and PTSD*. Oxford University Press.

Karageorghis, C. I., Bird, J. M., Hutchinson, J. C., Hamer, M., Delevoye-Turrell, Y. N., Guérin, S. M. R. . . . Terry, P. C. (2021). Physical activity and mental well-being under COVID-19 lockdown: A cross-sectional multination study. *BMC Public Health*, *21*(1), 988. https://doi.org/10.1186/s12889-021-10931-5

Kaya, H., Kahve A.C., Eltemiz, M., Cellat, E., Göka, E. (2021). Psychological complaints, treatment compliance, and online consultation expectations of geriatric psychiatric patients in Covid-19 pandemic: A crosssectional evaluation.. *Turkish Journal of Geriatrics*, *24*(4), 499–509. https://doi.org/10.31086/tjgeri.2021.247

Kuehner, C. (2003). Gender differences in unipolar depression: An update of epidemiological findings and possible explanations. *Acta Psychiatrica Scandinavica*, *108*(3), 163–174. https://doi.org/10.1034/j.1600-0447.2003.00204.x

Li, Y., Wang, A., Wu, Y., Han, N., & Huang, H. (2021). Impact of the COVID-19 pandemic on the mental health of college students: A systematic review and Meta-Analysis. *Frontiers in Psychology*, *12*, 669119. https://doi.org/10.3389/fpsyg.2021.669119

Liu, H., Shi, Y., Auden, E., & Rozelle, S. (2018). Anxiety in rural Chinese children and adolescents: Comparisons across provinces and among subgroups. *International Journal of Environmental Research and Public Health*, *15*(10). https://doi.org/10.3390/ijerph15102087

Liu, L., Xue, P., Li, S. X., Zhang, J., Zhou, J., & Zhang, W. (2021). Urban-rural disparities in mental health problems related to COVID-19 in China. *General Hospital Psychiatry*, *69*, 119–120. https://doi.org/10.1016/j.genhosppsych.2020.07.011

Liu, Y., Yue, S., Hu, X., Zhu, J., Wu, Z., Wang, J., & Wu, Y. (2021). Associations between feelings/behaviors during COVID-19 pandemic lockdown and depression/anxiety after lockdown in a sample of Chinese children and adolescents. *Journal of Affective Disorders*, *284*, 98–103. https://doi.org/10.1016/j.jad.2021.02.001

Lucchetti, G., Góes, L. G., Amaral, S. G., Ganadjian, G. T., Andrade, I., Almeida, P. O. d. A. … Manso, M. E. G. (2021). Spirituality, religiosity and the mental health consequences of social isolation during Covid-19 pandemic. *The International Journal of Social Psychiatry*, *67*(6), 672–679. https://doi.org/10.1177/0020764020970996

Macit, R. (2021). The impact of Covid-19 on crime. In V. Bozkurt, G. Dawes, H. Gülerce, & P. Westenbroek (Eds.), *The societal impacts of Covid-19: A Transnational perspective* (pp. 173–181). Istanbul University Press. https://doi.org/10.26650/B/SS49.2021.006.12

Özdin, S., & Bayrak Özdin, Ş. (2020). Levels and predictors of anxiety, depression and health anxiety during COVID-19 pandemic in Turkish society: The importance of gender. *The International Journal of Social Psychiatry*, *66*(5), 504–511. https://doi.org/10.1177/0020764020927051

Pierre, M., Keller, M., Altschul, D., Fawns-Ritchie, C., Hartley, L., Nangle, C. … Porteous, D. (2021). Socioeconomic position and mental health during the COVID-19 pandemic: A cross-sectional analysis of the CovidLife study. *Wellcome Open Research*, *6*, 139. https://doi.org/10.12688/wellcomeopenres.16820.1

Pompili, M., Innamorati, M., Sampogna, G., Albert, U., Carmassi, C., Carrà, G. … Fiorillo, A. (2022). The impact of Covid-19 on unemployment across Italy: Consequences for those affected by psychiatric conditions. *Journal of Affective Disorders*, *296*, 59–66. https://doi.org/10.1016/j.jad.2021.09.035

Radino, A., & Tarantino, V. (2022). Impact of physical activity on response to stress in people aged 65 and over during COVID-19 pandemic lockdown. *Psychogeriatrics : The Official Journal of the Japanese Psychogeriatric Society*, *22*(2), 227–235. https://doi.org/10.1111/psyg.12806

Rodriguez-Besteiro, S., Tornero-Aguilera, J. F., Fernández-Lucas, J., & Clemente-Suárez, V. J. (2021). Gender differences in the COVID-19 pandemic risk perception, psychology, and behaviors of Spanish University students. *International Journal of Environmental Research and Public Health*, *18*(8). https://doi.org/10.3390/ijerph18083908

Sayın, Ö., & Bozkurt, V. (2020). Pandemide küresel kentte yaşamak: İstanbul'un Covıd-19 deneyimi [Living in a global city during the pandemic: Istanbul's COVID-19 experience]. In D. Demirbaş, V. Bozkurt, & S. Yorgun (Eds.), *Covıd-19 pandemisinin ekonomik, toplumsal ve siyasal etkileri* [Economic, social and political effects of the COVID-19 pandemic] (pp. 203–216). Istanbul University Press. https://doi.org/10.26650/B/SS46.2020.005.13

Snowden, F. M. (2020). *Epidemics and society: From the Black Death to the present* ([Paperback edition]). *The open Yale courses series*. Yale University Press.

Şahin, H., & Nerse, S. (2021). Psycho-social effects in the pandemic process and expectations for new social life. In H. Gülerce, V. Nimehchisalem, V. Bozkurt, G. Dawes & S. Rafik-Galea (Eds.), *Society in the Covid-19 pandemic. Inequalities, challenges, and opportunities* (pp. 69–85). Pegem Akademi.

Şentürk, Ü., & Bozkurt, V. (2021). Family in the Covid-19 pandemic: Family ties and communication problems. In V. Bozkurt, G. Dawes, H. Gülerce & P. Westenbroek (Eds.), *The societal impacts of Covid-19: A transnational perspective* (pp. 183–201). Istanbul University Press. https://doi.org/10.26650/B/SS49.2021.006.13

Thuné-Boyle, I. C., Stygall, J. A., Keshtgar, M. R., & Newman, S. P. (2006). Do religious/spiritual coping strategies affect illness adjustment in patients with cancer? A systematic review of the literature. *Social Science & Medicine*, *63*(1), 151–164. https://doi.org/10.1016/j.socscimed.2005.11.055