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Research Article

EXAMINING OF THE RELATIONSHIP BETWEEN INDIVIDUALS TAKING PCR TESTS AND THEIR RELATED COVID-19 ANXIETY

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Abstract: *This study examines the relationship between individuals' COVID-19-related anxiety and their PCR testing behaviour. The pandemic has had a significant impact on mental health, increasing health-related anxiety, which includes excessive fear of illness. It is important to understand how anxiety affects PCR testing behaviour. The study was conducted in Trabzon, Turkey, with 400 participants aged 18 years and older, using face-to-face interviews. Variables such as age, gender, income, education, COVID-19 history, frequency of PCR testing, and reasons for testing were analysed. Anxiety levels were measured using the Coronavirus Anxiety Scale, and data were analysed using descriptive statistics, Mann-Whitney U, Kruskal-Wallis, and Spearman correlation tests. Results showed that individuals who underwent PCR testing had significantly higher levels of anxiety than those who did not. Voluntary testers reported higher levels of anxiety than those required to be tested for work. However, those who had been tested 1-2 times had higher anxiety than those who had been tested more frequently, suggesting that familiarity with the process may reduce anxiety. Female participants were more anxious than males, while income and education level had no significant effect. Those who obtained COVID-19 information from the internet had lower anxiety than those who used mobile applications. In addition, vaccinated individuals showed higher anxiety, possibly due to concerns about side effects or vaccine effectiveness. In conclusion, there is a significant association between PCR testing and COVID-19 anxiety. Frequency of testing, reasons for testing and sources of information influence anxiety levels. To mitigate this, health authorities should improve guidance and support for individuals undergoing PCR testing to help reduce associated anxiety.*

Keywords: *Anxiety, COVID-19, Health behavior, Pandemic, PCR test*

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1. Introduction

In Maslow's hierarchy of needs, the need for security is identified as one of the most fundamental human necessities [1, 2]. In the past, societies experienced great fears due to their inability to protect themselves from natural disasters, wild animals, and epidemics [2, 3]. Today, despite advancements in technology and medicine that have enabled protection from many past dangers, concerns related to health remain prevalent due to the emergence and spread of various infectious diseases [2-4].

The concept of anxiety, which is defined in both psychological and philosophical domains, refers to an inexplicable state of worry in psychology, whereas, in philosophy, it describes the emotional state that arises from an awareness of the world's meaninglessness, incompleteness, lack of order, and purpose [3, 5]. Anxiety represents the distressing emotion one experiences in response to the overwhelming and often tragic nature of events in the world [6].

In general, anxiety can be defined as a sense of unease or an irrational fear stemming from the anticipation of a threat. Various types of anxiety disorders have been identified in the literature [7, 8]. According to the American Psychiatric Association, anxiety disorders include panic disorder, agoraphobia, phobia, social anxiety disorder, selective mutism, generalized anxiety disorder, separation anxiety disorder, unspecified anxiety disorder, substance/medication-induced anxiety disorder, and anxiety disorder due to another medical condition [9, 10].

The concept of health anxiety was first introduced by Salkovskis and Warwick in 1986. It is defined as an excessive concern about having or developing a serious illness due to the misinterpretation of bodily sensations [11-13]. Health anxiety varies among individuals and can manifest at mild or severe levels [10, 14]. Individuals with high levels of health anxiety often experience intense fears about their health, leading them to frequently consult healthcare professionals [15, 16]. Even when no physical illness is diagnosed, their concerns about their health may persist due to dissatisfaction with medical evaluations [17]. This dissatisfaction with medical examinations often leads individuals to seek information from easily accessible sources such as the internet. However, rather than alleviating their concerns, such sources can exacerbate anxiety by reinforcing the perception of bodily and mental vulnerability [13, 15, 17]. Beyond these factors, one of the most significant contributors to anxiety is the occurrence of pandemics [4].

A pandemic is defined as the widespread transmission of an infectious disease, leading to high rates of infection and mortality across countries and even globally [18]. Throughout history, numerous pandemics have been recorded from the Middle Ages to the present. In December 2019, a novel coronavirus emerged, rapidly spreading across the globe and resulting in a pandemic with severe health and economic consequences [18-21].

The outbreak was initially identified in Wuhan, China, among patients presenting with respiratory symptoms. Further investigations led to the identification of the novel coronavirus, later named covid-19 [19, 22, 23]. Although its impact has diminished over time, covid-19 remains a public health concern. The virus is known to spread through human-to-human contact, animal-to-human transmission, and exposure to contaminated surfaces. Its most common symptoms include fever, cough, diarrhea, and shortness of breath. In severe cases, complications such as pneumonia, acute respiratory distress syndrome, kidney failure, and even death can occur [22].

According to World Health Organization (WHO), by December 2023, approximately 7 million deaths and over 700 million confirmed cases of COVID-19 had been reported worldwide [25]. In Turkey, the first confirmed COVID-19 case was recorded on March 11, 2020. As of March 2023, the Ministry of Health reported 102,174 deaths and 17,232,066 confirmed cases [26]. In response, various precautionary measures were implemented, and vaccines were developed and approved [27]. Additionally, the "gold standard" for COVID-19 detection, the Polymerase Chain Reaction (PCR) test, has been widely used to identify infected individuals [28, 29].

PCR, first discovered by Kary Mullis in 1985 for the purpose of detecting DNA sequences, is an in vitro method that utilizes oligonucleotide primers to enzymatically synthesize specific DNA sequences [30, 31]. The PCR test, with an accuracy and reliability rate of approximately 70%, is administered free of charge to individuals presenting with COVID-19 symptoms [28, 32]. Depending on the patient’s condition, samples are collected from either the upper or lower respiratory tract [32].

The anxiety associated with receiving PCR test results, along with the ongoing impact of the COVID-19 pandemic, is believed to directly influence individuals' psychological well-being [33]. This study aims to examine the relationship between individuals' anxiety levels related to COVID-19 and their decisions to undergo PCR testing.

2. Materials and Methods

This study was designed as a descriptive research study employing quantitative research methods.

2.1. Participants and Sample Size

The study population consisted of individuals residing in the central district of Trabzon, Turkey. Since the exact size of the population was unknown, a sample size was calculated using an unknown population sampling method [34]. The minimum required sample size was determined to be 384 participants aged 18 and above; however, a total of 400 individuals were included in the study. The convenience sampling method was used to select participants. Data were collected through face-to-face surveys conducted with individuals who voluntarily agreed to participate.

2.2. Data Collection Tools

The data collection instrument consisted of two sections. The first section included socio-demographic questions related to participants' age, gender, income level, educational background, history of covid-19 infection, history of PCR testing, frequency of PCR testing, reasons for undergoing PCR testing, vaccination status, experience of losing a loved one due to covid-19, and sources of information about the disease. The second section comprised the Coronavirus Anxiety Scale (CAS). The Coronavirus Anxiety Scale (CAS) was originally developed by Lee and was adapted into Turkish with validated reliability by Biçer and colleagues [35, 36]. The scale consists of five items and employs a five-point Likert-type response format: "0" (Never), "1" (Rarely, less than one or two days), "2" (Several days), "3" (More than seven days), and "4" (Nearly every day in the past two weeks). The total scale score is calculated by summing individual item scores, resulting in a range of 0 to 20. A higher score indicates a greater level of COVID-19-related anxiety. The Cronbach's alpha reliability coefficient for the original scale was found to be 0.832, indicating high reliability. In this study, the Cronbach's alpha reliability coefficient of the scale was calculated as 0.798.

2.3. Data Collection Procedure

The data collection process took place between July and September 2022. Prior to survey administration, participants were provided with an informed consent form explaining the study's purpose, confidentiality measures, and voluntary participation rights. Only those who consented to participate were included in the study.

2.4. Statistical Analysis

The data collected were analyzed using the NCSS (Number Cruncher Statistical System) 2007 (Kaysville, Utah, USA) software. Descriptive statistical methods, including mean, standard deviation, median, frequency, percentage, minimum, and maximum values, were used for data summarization. The Shapiro-Wilk normality test was applied to determine whether the data followed a normal distribution.

For comparisons between two independent groups with non-normally distributed data, the Mann-Whitney U test was employed. For comparisons involving three or more independent groups with non-normally distributed data, the Kruskal-Wallis test was used, followed by Bonferroni-Dunn post hoc tests for pairwise comparisons. The relationships between numerical variables were assessed using Spearman's correlation analysis. A p-value of <0.05 was considered statistically significant.

2.5. Ethical Considerations

The study was approved by Bandırma Onyedi Eylül Universtiy, Non-Interventional Research Ethics Committee of Health Science (Approval Date: 20.06.2022, Approval Number: 2022-105). All

participants provided informed consent before participating in the study, and ethical principles regarding confidentiality and voluntary participation were strictly adhered to.

3. Results

This study was conducted with 400 participants residing in the central district of Trabzon, Turkey. Of the participants, 43.8% (n=175) were female, while 56.2% (n=225) were male. The participants' ages ranged between 18 and 80 years, with a mean age of 35.57 ± 13.03 years. In terms of income level, 12.5% (n=50) reported a low income, 72% (n=288) reported a middle income, and 15.5% (n=62) reported a high income. Regarding educational background, 21.5% (n=86) had primary education, 13.5% (n=54) had secondary education, 28.7% (n=115) had high school education, 34.5% (n=138) had a university degree, and 1.8% (n=7) had postgraduate education. Additionally, 14.8% (n=59) had a chronic disease, while 85.2% (n=341) reported no chronic disease. Findings regarding descriptive characteristics are presented in Table 1.

Table 1. Distribution of Descriptive Characteristics

		min-max (median)	**mean±sd**
Age (year)		18-80 (34)	35.57±13.03
		n	**%**
Gender	Female	175	43.8
	Male	225	56.2
Income status	Low	50	12.5
	Middle	288	72.0
	High	62	15.5
Education status	Primary School	86	21.5
	Secondary School	54	13.5
	High School	115	28.7
	Graduate	138	34.5
	Postgraduate	7	1.8
Chronic disease status	Yes	59	14.8
	No	341	85.2

Among the participants, 50.5% (n=202) had a history of covid-19 infection, and 27% (n=108) had lost a close relative due to covid-19. The primary sources of information regarding covid-19 were television (91%, n=364), radio (22.5%, n=90), internet (81.3%, n=325), social media (70%, n=280), mobile applications (54.5%, n=218), and family and friends (77.5%, n=310). Of the participants in the study, 84.8% (n=339) had received a covid-19 vaccine, while 15.2% (n=61) reported not being vaccinated. The rate of PCR testing was found to be 67.5% (n=270). Among those who had undergone PCR testing, 74.8% (n=202) had been tested 1-2 times, 15.9% (n=43) had been tested 3-4 times, and 9.3% (n=25) had undergone PCR testing five or more times. Regarding the reason for undergoing PCR testing, 71.1% (n=192) stated that they took the test voluntarily, 14.8% (n=40) reported that it was required by their workplace, and 14.1% (n=38) cited other reasons (Table 2).

Table 2. Distribution of COVID-19 Characteristics

		n	%
COVID-19 transmission status	Yes	202	50.5
	No	198	49.5
Loss of a relative due to COVID-19	Yes	108	27
	No	292	73
COVID-19 information source*	Television	364	91
	Radio	90	22.5
	İnternet	325	81.3
	Social media	280	70
	Mobil applications	218	54.5
	Family and friends	310	77.5
Vaccination status	Yes	339	84.8
	No	61	15.2
PCR test status	Yes	270	67.5
	No	130	32.5
Test number (n=270)	1-2 times	202	74.8
	3-4 times	43	15.9
	More than 5	25	9.3
Reason for having a test (n=270)	My own will	192	71.1
	Request of my workplace	40	14.8
	Other	38	14.1

*Multiple options were selected

The responses of the participants to the Coronavirus Anxiety Scale (CAS) items are detailed in Table 3.

Table 3. Distribution of Responses to the Coronavirus Anxiety Scale (CAS) Items

	Never		**Rarely (Less than one or two days)**		**Several Days**		**More than Seven Days**		**Nearly Every Day in the Last Two Weeks**		**Mean±Sd**
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	
I felt dizzy, lightheaded, or as if I was going to faint when reading or listening to news about covid-19.	333	83.3	46	11.5	18	4.5	2	0.5	1	0.3	0.23±0.57
I had trouble falling asleep or staying asleep because I was thinking about covid-19.	309	77.3	55	13.8	33	8.3	2	0.5	1	0.3	0.33±0.67
I felt paralyzed or as if I had a stroke when thinking about or being exposed to covid-19-related topics.	372	93.0	20	5.0	7	1.8	0	0	1	0.3	0.10±0.39
I lost my appetite when thinking about or being exposed to covid-19-related topics.	332	83.0	40	10.0	20	5	7	1.8	1	0.3	0.26±0.65
I experienced nausea or stomach problems when thinking about or being exposed to covid-19-related topics.	342	85.5	49	12.3	6	1.5	2	0.5	1	0.3	0.18±0.49

Participants' responses to the Coronavirus Anxiety Scale (CAS) were analyzed, revealing that COVID 19 anxiety scores ranged from 0 to 16, with a mean score of 1.09 ± 2.10. The Cronbach's alpha reliability coefficient for the scale was calculated as 0.798, indicating a high level of reliability (Table 4).

Table 4. Distribution of Coronavirus Anxiety Scale (CAS) Scores

	Covid-19 Anxiety Scores
Items number	5
Min-Max (Median)	0-16 (0)
Mean±Sd	1.09±2.10
Cronbach's Alpha	0.798

Table 5 presents the differences between participants' descriptive characteristics and their COVID-19 anxiety scores. According to the findings, no statistically significant relationship was found between age and COVID-19 anxiety scores ($p>0.05$). A statistically significant difference was observed between gender and COVID-19 anxiety scores ($p=0.001$, $p<0.01$), with female participants reporting higher anxiety levels than males. However, age was not significantly correlated with COVID-19 anxiety scores ($p>0.05$). Similarly, no statistically significant difference was found between income level and covıd-19 anxiety ($p>0.05$) or educational background and COVID-19 anxiety ($p>0.05$). Furthermore, chronic illness status was not associated with significant differences in COVID-19 anxiety scores ($p>0.05$).

Table 5. Evaluation of COVID-19 Anxiety Scores Based on Descriptive Characteristics

			COVID-19 Anxiety Scores		**p**
			min-max (median)	**Mean±SD**	
Age (year)	r	n	0.093		
	p		*0.064*		
Gender	Female	175	0-16 (0)	1.82±2.74	*[a]0.001***
	Male	225	0-7 (0)	0.53±1.14	
Income status	Low	50	0-7 (0)	0.70±1.46	*[b]0.419*
	Middle	288	0-12 (0)	1.09±1.94	
	High	62	0-16 (0)	1.42±3.03	
Education status	Primary School	86	0-7 (0)	0.88±1.56	*[b]0.263*
	Secondary School	54	0-16 (0)	1.85±3.11	
	High School	115	0-12 (0)	0.94±1.94	
	Graduate and Postgraduate	145	0-11 (0)	1.06±1.99	
Chronic disease status	Yes	59	0-7 (0)	0.86±1.68	*[a]0.462*
	No	341	0-16 (0)	1.13±2.16	

r: Spearman's Correlation Coefficient, a: Mann-Whitney U Test, b: Kruskal-Wallis Test; **p<0.01

No statistically significant difference was found between COVID-19 infection history and anxiety scores ($p>0.05$) or losing a relative due to COVID-19 and anxiety scores ($p>0.05$). When analyzing information sources, participants who obtained covid-19 information from the internet reported significantly lower anxiety levels compared to those who did not use the internet for this purpose ($p=0.002$, $p<0.01$). Conversely, participants who relied on mobile applications for COVID-19 information exhibited significantly higher anxiety levels ($p=0.021$, $p<0.05$). A statistically significant difference was found between vaccination status and covıd-19 anxiety scores ($p=0.006$, $p<0.01$), with vaccinated participants reporting higher anxiety levels than unvaccinated individuals. Additionally, a

significant difference was observed in COVID-19 anxiety levels based on PCR testing status (p=0.022, p<0.05), with those who had undergone PCR testing exhibiting higher anxiety scores than those who had not. When examining the number of PCR tests taken, a statistically significant difference was found (p=0.018, p<0.05). Participants who had undergone 1-2 PCR tests reported higher anxiety levels compared to those who had taken 3-4 tests (p=0.048, p<0.05). However, no significant difference was found in comparisons involving individuals who had taken five or more tests (p>0.05). A statistically significant difference was found in COVID-19 anxiety levels based on participants' reasons for undergoing PCR testing (p=0.007, p<0.01). Pairwise comparisons revealed that participants who voluntarily underwent PCR testing reported higher anxiety levels than those who were required to take the test by their workplace (p=0.035, p<0.05). No significant difference was found among other test motivation groups (p>0.05) (Table 6).

Table 6. Evaluation of COVID-19 Anxiety Scores Based on COVID-19 Characteristics

		n	COVID-19 Anxiety Scores		p
			min-max (median)	Mean±SD	
Covid-19 transmission status	Yes	202	0-11 (0)	1.20±2.12	[a]0.627
	No	198	0-16 (0)	0.98±2.08	
Loss of a relative due to Covid-19	Yes	108	0-8 (0)	0.96±1.80	[a]0.752
	No	292	0-16 (0)	1.14±2.20	
Covid-19 information source ***					
Television	Yes	364	0-16 (0)	1.10±2.12	[a]0.946
	No	36	0-8 (0)	1.03±1.95	
Radio	Yes	90	0-7 (0)	1.06±1.83	[a]0.731
	No	310	0-16 (0)	1.10±2.17	
Internet	Yes	325	0-16 (0)	0.98±2.06	[a]0.002**
	No	75	0-10 (1)	1.56±2.23	
Social media	Yes	280	0-16 (0)	1.03±2.06	[a]0.261
	No	120	0-12 (0)	1.25±2.19	
Mobil applications	Yes	218	0-16 (0)	1.31±2.35	[a]0.021*
	No	182	0-10 (0)	0.83±1.73	
Family and Friends	Yes	310	0-12 (0)	1.09±2.01	[a]0.585
	No	90	0-16 (0)	1.09±2.38	
Vaccination status	Yes	339	0-12 (0)	1.13±2.00	[a]0.006**
	No	61	0-16 (0)	0.87±2.60	
PCR test status	Yes	270	0-16 (0)	1.28±2.33	[a]0.022*
	No	130	0-8 (0)	0.71±1.44	
Test number (n=270)	1-2 times	202	0-16 (0)	1.42±2.40	[b]0.018*
	3-4 times	43	0-10 (0)	0.91±2.26	
	More than 5	25	0-7 (0)	0.76±1.76	
Reason for having a test (n=270)	My own will	192	0-16 (0)	1.49±2.48	[b]0.007**
	Request of my workplace	40	0-9 (0)	0.83±2,09	
	Other	38	0-7 (0)	0.66±1.48	

[a]Mann Whitney U Test, [b]Kruskal Wallis Test; *p<0.05; **p<0.01, *** Multiple options were selected

4. Discussion

This study aimed to determine the relationship between individuals' COVID-19-related anxiety levels and their PCR testing status. The study analyzed the statistical differences between participants'

sociodemographic characteristics, perceptions of COVID-19, and anxiety levels, discussing the findings in light of existing literature.

No statistically significant relationship was found between age and COVID-19 anxiety scores. However, previous studies in the literature have found different results, showing that participants over 50 years old had higher anxiety levels than younger individuals [37]. The difference in results may be attributed to variations in the study regions and the timing of the research.

A statistically significant difference was found between gender and COVID-19 anxiety levels, with females reporting higher anxiety scores than males. Similar studies have also found that females experience higher levels of anxiety than males [38-42]. The reason behind this finding may be attributed to women's higher emotional sensitivity and men's tendency to adopt a protective and resilient approach, which allows them to recover more quickly from stress [41, 43].

No statistically significant relationship was found between income level and COVID-19 anxiety scores. However, previous studies in the literature have yielded mixed results. Some studies, such as one conducted in Bitlis, Turkey, found that individuals with higher income levels had lower anxiety levels, while another study also reported a significant relationship between income level and coronavirus anxiety [42, 44]. Conversely, some research findings support the results of the present study, indicating no significant relationship between income level and COVID-19 anxiety [45].

Similarly, no significant difference was found between educational level and COVID-19 anxiety scores. This finding is consistent with previous research in the literature, which also did not find a significant relationship between education level and coronavirus anxiety [42, 43].

Regarding sources of information about COVID-19, the study found that obtaining information from television, radio, social media, and family/friends did not significantly impact anxiety scores. However, a study conducted in Wuhan, China, found that social media users had higher anxiety levels [46].

In contrast, participants who obtained information about COVID-19 from the internet had lower anxiety levels than those who did not use the internet for this purpose. This result may be because internet users have access to positive news, such as increasing recovery rates, which may help alleviate their anxiety. Supporting this finding, Wang et al. found that exposure to information about covid-19 recovery rates helped reduce anxiety levels [47]. On the other hand, participants who relied on mobile applications for information had higher anxiety levels than those who did not. This finding appears contradictory to the previous one, as both sources are digital. However, this discrepancy may be due to regional differences. In the region where the study was conducted, there may be higher trust in healthcare professionals and official government sources, which could explain the higher anxiety levels among those using mobile apps for COVID-19 information. A study by Köse also confirmed that healthcare professionals were the primary source of health-related information in the Black Sea region of Turkey [48].

A significant difference was found between vaccination status and COVID-19 anxiety levels, with vaccinated individuals reporting higher anxiety levels than unvaccinated individuals. Similar studies in the literature have also found that vaccinated individuals exhibit higher levels of COVID-19-related anxiety [49]. The psychological and sociological impact of the COVID-19 pandemic, along with the fear of the disease and potential death, may have influenced individuals to get vaccinated. Additionally, concerns about vaccine side effects or its effectiveness may have contributed to higher anxiety levels among vaccinated individuals.

The study found no significant difference in COVID-19 anxiety scores based on chronic illness status. Previous studies conducted among emergency healthcare workers in Turkey have reported similar findings, indicating no significant relationship between chronic illness and coronavirus anxiety [44]. Additionally, Özdede et al., also found no significant relationship between having a chronic illness

and COVID-19-related anxiety [50]. However, some studies in the literature contradict these findings, reporting that individuals with chronic illnesses experience significantly higher COVID-19-related anxiety levels than healthy individuals [51-54].

No significant relationship was found between having previously contracted COVID-19 and coronavirus anxiety scores. This result aligns with previous studies that found no significant relationship between having had COVID-19 and anxiety levels [44]. However, other studies, such as those by Aslaner et al. and Cansel et al., reported that individuals who tested positive for COVID-19 exhibited higher anxiety levels [37].

Similarly, losing a loved one due to COVID-19 was not associated with a significant difference in anxiety scores. A study by Yıldız et al. found that losing a loved one due to COVID-19 did not significantly impact anxiety or fear levels. One possible explanation is that during the pandemic, constant exposure to mortality statistics may have led individuals to psychologically normalize COVID-19-related deaths [55]. However, other studies in the literature have found that individuals who lost a loved one due to COVID-19 experienced significantly higher anxiety levels [37, 56, 57].

The study found a significant relationship between PCR testing status and COVID-19 anxiety levels, with those who underwent PCR testing reporting higher anxiety levels than those who did not. This finding is consistent with similar studies that have also found higher anxiety levels among individuals who underwent PCR testing [37, 45].

Regarding the frequency of PCR testing, individuals who had been tested 1-2 times exhibited higher anxiety levels than those tested 3-4 times. This finding is supported by previous research, such as a study by Cansel et al., which found a significant relationship between PCR testing frequency and anxiety levels [37]. However, other studies, such as Wahyuni et al., did not find a significant relationship between PCR test frequency and COVID-19 anxiety [58].

A statistically significant difference was found in COVID-19 anxiety scores based on the reason for undergoing PCR testing. Pairwise comparisons showed that individuals who voluntarily underwent PCR testing exhibited higher anxiety levels than those required to take the test for work-related reasons. A review of the literature revealed a lack of studies specifically examining the relationship between PCR test motivation and COVID-19-related anxiety, suggesting that this study fills a gap in the literature by providing new insights into this issue.

5. Conclusion

In conclusion, it was determined that COVID-19 anxiety scores were high in certain groups and that there were statistically significant differences in anxiety scores based on PCR testing status. To reduce anxiety experienced during PCR testing, individuals should be provided with detailed information about COVID-19 and the purpose of the PCR test, and they should be allowed to express their concerns. Continuous support should be provided to individuals to help alleviate anxiety symptoms. Health care professionals should also receive training on this issue, enabling them to develop empathy with patients and offer appropriate counseling and psychological support to those experiencing high levels of anxiety. In addition, having informative videos or written materials explaining the PCR test process simply and understandably in test centers may contribute to reducing individuals' anxiety caused by uncertainty. Assigning personnel trained in psychological first aid to provide on-site support to individuals with high levels of anxiety in areas with high test intensity may be an effective approach to anxiety management.

Ethical Statement:

Before data collection, written approval was taken from the Non-Interventional Research Ethics committee of Bandırma Onyedi Eylül University (Decision number and date: 2022-5; 20.06.2022).

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Conflict of Interest:

The authors declare that there is no conflict of interest.

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Authors Contribution:

H.K.K.: Conceptualization, Methodology, Data Collection and Processing, Analyses, Writing-Original Draft Preparation, Resources (%60).

G.A.: Conceptualization, Methodology, Review, Control-Supervision (%40).

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The author(s) declare that no Gen AI was used in the creation of this manuscript.

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