



# Health anxiety and world assumptions of the society and health care professionals concerning COVID-19

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## Abstract

**Aim:** This study aimed to review the health anxiety and world assumptions of individuals and health care professionals concerning COVID-19 as well as the factors affecting there too.

**Materials and Methods:** This study is descriptive, cross-sectional, and correlational. The "Personal Information Form (PIF)," "Health Anxiety Inventory (HAI)," and "World Assumptions Scale (WAS)" were used to collect data.

**Results:** 56.6% of the participants were health care professionals. WAS total score differs based on gender, marital status, and educational background criteria ( $p < 0.05$ ). HAI score differs based on gender, the willingness to visit dining and shopping venues after the pandemic ends, house cleaning, social distancing, and the perception of the world's change after the COVID-19 pandemic ( $p < 0.05$ ). Mean HAI scores of individuals from the society and health care professionals were found to as  $16.42 \pm 6.21$  and  $15.96 \pm 6.37$  respectively. Mean WAS scores of individuals from the society and health care professionals were found to as  $107.40 \pm 22.15$  and  $109.27 \pm 19.84$  respectively. A statistically significant relationship was determined between HAI and luck (fortune), self-worth, and WAS total scores ( $p < 0.05$ ). The linear regression model, established to examine the effect of demographic characteristics on the WAS score, was discovered to have statistical significance ( $F=4.180$ ;  $p < 0.001$ ). The linear regression models were established to examine the effect of demographic characteristics on the HAI score ( $F=6.458$ ,  $p < 0.001$ ), and the effect of WAS sub-dimension scores on anxiety ( $F=3.399$ ;  $p=0.003$ ) were both found to be statistically significant. Accordingly, the anxiety score decreases by 0.327 as the self-worth score increases by one unit ( $p=0.001$ ).

**Conclusion:** The anxiety experienced by health care workers and persons from society, as well as their world assumptions, are similar, according to this study, which was done near the end of the COVID-19 outbreak. However, it has been determined that the epidemic causes differences concerning perceptions about daily life and the well-being of the world.

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## Introduction

Humanity as of its co-existence throughout history has been struggling with various natural disasters and epidemics [1]. The virus, which was reported to have emerged from a fish market in Wuhan, Hubei province of China at the beginning of December 2019, was defined as "2019 Novel Coronavirus (2019-nCoV) Pneumonia" [2]. On December 31, 2019, China reported to the World Health Organization that there were cases of pneumonia with no known underlying cause, with over 81,000 cases identified in the process [3,4]. On January 30, 2020, the World

Health Organization (WHO) proclaimed the COVID-19 pandemic a Public Health Emergency of International Concern (PHEIC) [5]. The first case linked to the COVID-19 pandemic was announced in Turkey on 10 March 2020 and on 11 March 2020, a worldwide pandemic was declared. As of March 16, various restrictions have been imposed on social life and thereafter many policies have been executed to prevent the dissemination of the virus during the epidemic outbreak [6-11]. The epidemic has soon become a global health emergency not only for physical health but also for mental and social health concerning the entire society because the virus is invisible to the eyes, is fatal, and due to mandatory measures such as quarantine, social isolation, restriction [12-16]. Determin-

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ing and correctly directing the public's mental health response during an epidemic may help communities prepare more effectively for emergency public health events [17]. As of November 2021, 5,542,359 deaths and a total of 328,532,929 cases due to COVID-19 have been reported worldwide; simultaneously 73,973 deaths and a total of 10,521,208 cases due to COVID-19 have been identified in Turkey [18]. Evidence derived from outbreaks experienced throughout history has revealed that outbreaks have significant and long-term effects on mental health [19].

Along with the COVID-19 pandemic, both health care professionals and individuals from society are increasingly under pressure from mental problems such as fear, anxiety, panic, insomnia, and depression; accordingly, mental problems pose a serious obstacle before ensuring control over the disease [20-25]. The resulting mental problems significantly affect the quality of life and physical health of not only infected patients but also the individuals from society and health care professionals [26]. Should these symptoms persist for a long time, the problem may become chronic and cause PTSD (Post Traumatic Stress Disorder). A study on the COVID-19 pandemic conducted with different groups revealed that the incidence of PTSD varies between 7-53.8%. For this reason, it is reported that risk factors should be correctly identified and the risk of chronicization should be avoided [27].

Community studies indicate that 20-30% of individuals have experienced significant levels of health anxiety in their lives [28]. COVID-19 pandemic has both augmented this existing health anxiety and resulted in a universal existential crisis with effects on many dimensions [29]. "Health Anxiety" arises when the individual interprets his/her physical sensations negatively although the individual does not have a physical illness. There are 2 main components of this anxiety: One is the individual's belief that he or has a serious illness, and the other is his perception that there are negative consequences of this illness [30]. This anxiety may prevent individuals from undergoing a physician's check-up, cause a perception of constant self-control and affect their protective attitudes towards the pandemic [31].

One of the important factors causing health anxiety and other mental symptoms and chronicization during the COVID-19 pandemic is the meaning and perceptions that are ascribed to the epidemic process and its components. This attribution shapes the behavior and attitudes of the individual, however, may lead to psychopathological problems if it lasts for a long time [32-34]. Prior study in the literature indicates that the COVID-19 pandemic has undermined the basic assumptions about the course of human life in societies around the world [35]. According to the Shattered Assumptions theory [36], a traumatic incident can reduce the degree of optimism in one's world assumptions [37]. Traumatic life events shatter the traumatized individual's preconceptions about himself and the world [32]. There are eight propositions of world assumptions regarding the well-being of the world, well-being of the individual, fairness, controllability, coincidence, self-worth, self-control, and luck [34]. Although vaccination is available for health care professionals and qualified adults and over a million people have already been vaccinated in

Turkey as of 6 November 2021 (55.614.401 (89.9%) first dose of vaccine and 49.164.915 (79.19%) the second dose of the vaccine have been administered) amid national hesitations about vaccination, the epidemic continues to influence all perceptions, attitudes, and meanings attributed to life by society and health care professionals [38,39].

The current study was conducted at a later stage of the unprecedented COVID-19 pandemic. The purpose, at this stage, was to determine the correlation between health anxiety levels, which are the antecedents of mental health outcomes, and the world assumptions that predict cognition in addition to the influencing factors.

## Materials and Methods

This cross-sectional, descriptive, and correlational survey study was conducted between 24 July and 25 October 2020 to review the health anxiety and world assumptions of health care professionals as well as individuals from the society concerning COVID-19 as well as the factors affecting there to.

Turkish-speaking health care professionals and individuals from the society, between 18-65 years of age and who can use the Internet constituted the sample of the study. The universe of the study consisted of individuals residing in Turkey. As it was not possible to meet face-to-face during the pandemic outbreak and time constraints, an online survey has been prepared using Google Forms®. The convenience sampling method was chosen as one of the non-probable sampling methods in the study, and by preparing an online questionnaire, it was easier to reach different regions of Turkey. All of the questionnaires were prepared online and links were shared with anyone who could voluntarily participate in the research. Participants from approximately 7 regions across Turkey filled out the questionnaire. Participants were informed about the purpose and procedure of the study. No awards were given for participation. No personally identifiable information was requested. Study data were collected from a total of 212 individuals (120 health care professionals and 92 individuals from the society) who were accessed online between 24 July 2020 and 25 October 2020. The inclusion criteria for participating in the study were as follows: (a) being between 18-65 years of age, (b) being internet literate enough to access and take an online survey, and (c) having consented to participate in the study. The participants were not provided any awards or incentives for participating in the study. The University Ethics Committee and the Ministry of Health approved the study.

### Data collection

The data were collected using the "Personal Information Form (PIF)", "Health Anxiety Inventory (HAI)" and the "World Assumptions Scale (WAS)".

### Personal Information Form (PIF)

The studies created the Personal Information Form (PIF), which included 19 questions related to the socio-demographic characteristics of the participants and their attitudes towards the isolation measures that have been applied after the epidemic, their views about the world and their own lives.

### *The Health Anxiety Inventory (HAI)*

The scale is an 18-item scale established by Salkovskis et al. This is a self-report scale with a 0-3 scale for each item. Aydemir et al. conducted the scale's validity and reliability tests in 2013 [29]. The scale's Cronbach alpha is 0.81. The scale's Cronbach alpha was found to be 0.81 for this investigation.

### *World Assumptions Scale (WAS)*

Janoff-Bulman (1989) developed the World Assumptions Scale (WAS) to measure the basic world assumptions of people who have and have not experienced traumatic life events (36). Yilmaz translated the scale into Turkish (2008). There are 32 items and 6 sub-dimensions on the 6-point Likert-type scale. The rising score suggests that the assumptions are becoming more optimistic. The Cronbach alpha reliability coefficient for the total scale was .81, whereas it ranged from .63 to .85 for sub-scales. The Cronbach alpha reliability coefficient for the whole "World Assumptions Scale" was calculated to be .87, whereas it ranged from .61 to .89 for sub-dimensions.

### Study Questions:

1. What is the level of health anxiety of health care professionals and individuals from the society throughout the COVID-19 pandemic?
2. What is the level of world assumption of health care professionals and individuals from the society throughout the COVID-19 pandemic?
3. Is there any correlation between the level of health anxiety and the level of world assumption of health care professionals and individuals from the society throughout the COVID-19 pandemic?
4. What are the factors affecting the level of health anxiety and the level of world assumption of health care professionals and individuals from the society throughout the COVID-19 pandemic?

### *Statistical analysis*

IBM SPSS 25.0 program was used for statistical analysis of the data. In the analysis of the research, descriptive statistics were used for the distribution of sociodemographic characteristics of health workers and individuals from the community and the averages. Kruskal Wallis test statistic, One-way analysis of variance test statistic, Mann-Whitney U test statistic, and Independent two-sample t-test statistic were used to compare the total scores and sub-dimensions of the scale with sociodemographic characteristics. Pearson correlation analysis and linear regression analysis were used to determine the effect of demographic characteristics on the scale score. Before the analysis, the normality of the items and the scale were checked. The Kolmogorov-Smirnov and Shapiro-Wilk tests were used to determine whether the data had a normal distribution.

## Results

### *Characteristics of the participants*

A total of 212 participants enrolled in this study, where 120 were healthcare professionals and 92 were general people. Details about the description of the socio-demographic

variables can be found in Table 1. However, no statistically significant difference was observed between health care professionals and individuals from the society in the context of distributions of other demographic variables ( $p > 0.050$ ). But, attitudes concerning visiting dining venues ( $p = 0.014$ ) and shopping venues ( $p = 0.018$ ) after the pandemic had a significant difference in terms of the two group participants, i.e., healthcare professionals and general people. Again, attitudes concerning wearing masks ( $p = 0.004$ ) revealed a statistically significant difference between the two groups (Table 1).

### *Mean scores for assumptions about the world and health anxiety*

The mean score of health anxiety was  $16.16 \pm 6.29$  for the total sample, whereas it was  $16.42 \pm 6.21$  and  $15.96 \pm 6.37$ , for general people and healthcare professionals, respectively. Again, the world assumptions' mean score was  $108.46 \pm 20.84$  for the total sample, but a little higher score was found for healthcare professionals ( $109.27 \pm 19.84$  vs.  $107.40 \pm 22.15$  for general people). It is worth noting that the difference between health anxiety and world assumption mean score was not significantly different in terms of the two groups. Again, there was no statistically significant difference concerning the distributions of world assumption sub-dimension scores concerning the type of participants (Table 2). In Table 3, the distribution of the sub-dimension of world assumptions of the total sample was given.

### *Mean difference between assumptions about the world and health anxiety*

Male participants had significantly higher world assumptions, although females reported significantly higher scores for health anxiety. World assumptions' total score significantly differed based on marital status and educational background. There was a significant difference ( $p < 0.05$ ) between the score of health anxiety concerning attitudes concerning visiting dining venues, making grocery shopping, visiting shopping venues, house cleaning, social distancing habits, changes in lifestyles at the end of the COVID-19 pandemic, and the changes in the world after the COVID-19 pandemic (Table 4).

### *Correlations between health anxiety and assumptions about the world*

There was a statistically significant, negative relationship between health anxiety and world assumptions scores ( $p = 0.04$ ;  $r = -0.118$ ). However, of the sub-dimensions of world assumptions, a statistically significant negative relationship of luck (fortune) ( $p = 0.038$ ;  $r = -0.119$ ), and self-worth ( $p < 0.001$ ;  $r = -0.199$ ) was found.

### *Factors associated with assumptions about the world*

The linear regression model, established to examine the effect of studied variables on the world assumptions, was found to be statistically significant ( $F = 4.180$ ;  $p < 0.001$ ). Attitudes concerning online shopping, visiting shopping venues, as usual, wearing masks, changes in lifestyles, and the changes in the world after the COVID-19 pandemic

**Table 1.** Distribution of data on sociodemographic variables of the study participants.

Variables		General people n (%)	Healthcare worker n (%)	Total sample n (%)	X <sup>2</sup> test statistic and p value
Gender	Man	23 (25)	31 (25.8)	54 (25.5)	X <sup>2</sup> =0.019, p=0.890
	Woman	69 (75)	89 (74.2)	158 (74.5)	
Marital status	Single	54 (58.7)	70 (58.3)	124 (58.5)	X <sup>2</sup> =0.003, p=0.958
	Married	38 (41.3)	50 (41.7)	88 (41.5)	
Chronic disease	Yes	9 (9.8)	14 (11.7)	23 (10.8)	X <sup>2</sup> =0.191, p=0.662
	No	83 (90.2)	106 (88.3)	189 (89.2)	
Education status	Licence	48 (52.2)	81 (67.5)	129 (60.8)	X <sup>2</sup> =7.272, p=0.064
	Graduate	25 (27.2)	23 (19.2)	48 (22.6)	
	High school	4 (4.3)	7 (5.8)	11 (5.2)	
	Associate degree	15 (16.3)	9 (7.5)	24 (11.3)	
Region you live in	Mediterranean	2 (2.2)	1 (0.8)	3 (1.4)	X <sup>2</sup> =4.348, p=0.630
	Eastern Anatolia Region	5 (5.4)	8 (6.7)	13 (6.1)	
	Aegean Region	6 (6.5)	4 (3.3)	10 (4.7)	
	Southeast	0 (0)	2 (1.7)	2 (0.9)	
	Central Anatolia	4 (4.3)	7 (5.8)	11 (5.2)	
	Black Sea	32 (34.8)	48 (40)	80 (37.7)	
	Marmara	43 (46.7)	50 (41.7)	93 (43.9)	
When this epidemic is over, will you go to places to eat (such as cafe, restaurant, ...)?	I will go less.	34 (37)	46 (38.3)	80 (37.7)	X <sup>2</sup> =12.472, p=0.014
	I will go further.	0 (0)	5 (4.2)	5 (2.4)	
	I will go as before.	19 (20.7) <sup>a</sup>	40 (33.3) <sup>b</sup>	59 (27.8) <sup>ab</sup>	
	I will never go.	7 (7.6)	4 (3.3)	11 (5.2)	
	If I have to, I will go.	32 (34.8) <sup>a</sup>	25 (20.8) <sup>b</sup>	57 (26.9) <sup>ab</sup>	
How will you do the grocery shopping?	I will go as before and never order online.	37 (40.2)	36 (30)	73 (34.4)	X <sup>2</sup> =3.389, p=0.335
	I will order less online.	13 (14.1)	22 (18.3)	35 (16.5)	
	I will be ordering more online.	40 (43.5)	61 (50.8)	101 (47.6)	
	I will order completely online.	2 (2.2)	1 (0.8)	3 (1.4)	
It's about going to the places you go for shopping (shopping mall, bazaar, market..)	I will go less.	61 (66.3)	66 (55)	127 (59.9)	X <sup>2</sup> =10.103, p=0.018
	I will go further.	1 (1.1)	5 (4.2)	6 (2.8)	
	I will go as before.	19 (20.7)	43 (35.8)	62 (29.2)	
	I will never go.	11 (12)	6 (5)	17 (8)	
About online shopping	I will shop less.	23 (25)	23 (19.2)	46 (21.7)	X <sup>2</sup> =4.703, p=0.195
	I will shop more.	33 (35.9)	38 (31.7)	71 (33.5)	
	I will shop as much as before.	36 (39.1)	55 (45.8)	91 (42.9)	
	I will never shop.	0 (0)	4 (3.3)	4 (1.9)	
About washing your hands	I wash less.	0 (0)	4 (3.3)	4 (1.9)	X <sup>2</sup> =4.166, p=0.125
	I wash more.	73 (79.3)	85 (70.8)	158 (74.5)	
	I wash as much as before.	19 (20.7)	31 (25.8)	50 (23.6)	
About cleaning your home	I clean less.	0 (0)	2 (1.7)	2 (0.9)	X <sup>2</sup> =1.694, p=0.429
	I clean more.	50 (54.3)	61 (50.8)	111 (52.4)	
	I clean as before.	42 (45.7)	57 (47.5)	99 (46.7)	
About wearing a mask	I wear less.	23 (25)	35 (29.2)	58 (27.4)	X <sup>2</sup> =13.344, p=0.004
	I wear more.	42 (45.7)	35 (29.2)	77 (36.3)	
	I wear it as before.	23 (25)	27 (22.5)	50 (23.6)	
	I never wear it.	4 (4.3)	23 (19.2)	27 (12.7)	
Regarding social distancing	I will pay less attention.	5 (5.4)	10 (8.3)	15 (7.1)	X <sup>2</sup> =3.435, p=0.329
	I will generally pay attention.	36 (39.1)	51 (42.5)	87 (41)	
	I will always pay attention.	50 (54.3)	54 (45)	104 (49.1)	
	I will not pay any attention.	1 (1.1)	5 (4.2)	6 (2.8)	
About what the pandemic has changed in your life	It will change completely.	4 (4.3)	2 (1.7)	6 (2.8)	X <sup>2</sup> =2.359, p=0.501
	There will be no change.	13 (14.1)	12 (10)	25 (11.8)	
	Little will change.	34 (37)	48 (40)	82 (38.7)	
	So many things will change.	41 (44.6)	58 (48.3)	99 (46.7)	
In the World after the Covid-19 outbreak	Some things will change.	28 (30.4)	43 (35.8)	71 (33.5)	X <sup>2</sup> =2.864, p=0.413
	So many things will change.	35 (38)	42 (35)	77 (36.3)	
	Everything will change completely.	5 (5.4)	2 (1.7)	7 (3.3)	
	Nothing will be the same.	24 (26.1)	33 (27.5)	57 (26.9)	
		1099			

**Table 2.** Comparison of health anxiety and world assumptions scores of individuals with and without health workers.

	General people		Healthcare professional		Total sample		Test statistics	p
	Mean $\pm$ S.D.	Median (min - max)	Mean $\pm$ S.D.	Median (min - max)	Mean $\pm$ S.D.	Median (min - max)		
Goodness	19.20 $\pm$ 7.43	19.00 (6.00 - 35.00)	20.78 $\pm$ 6.72	21.00 (6.00 - 36.00)	20.09 $\pm$ 7.06	20.00 (6.00 - 36.00)	t=-1.62	0.107
Justice	25.51 $\pm$ 8.74	25.50 (8.00 - 46.00)	25.95 $\pm$ 7.21	26.00 (8.00 - 39.00)	25.76 $\pm$ 7.89	26.00 (8.00 - 46.00)	t=-0.391	0.696
Luck (fortune)	13.93 $\pm$ 5.82	15.00 (3.00 - 24.00)	13.58 $\pm$ 5.30	13.00 (4.00 - 24.00)	13.74 $\pm$ 5.52	13.50 (3.00 - 24.00)	t=0.459	0.647
Coincidence	20.25 $\pm$ 4.77	20.00 (12.00 - 34.00)	19.71 $\pm$ 4.07	20.00 (8.00 - 29.00)	19.94 $\pm$ 4.38	20.00 (8.00 - 34.00)	t=0.891	0.374
Self worth	17.96 $\pm$ 4.11	18.00 (7.00 - 24.00)	18.14 $\pm$ 4.17	19.00 (7.00 - 24.00)	18.06 $\pm$ 4.13	19.00 (7.00 - 24.00)	t=-0.323	0.747
Control	10.55 $\pm$ 3.54	11.00 (4.00 - 17.00)	11.11 $\pm$ 3.24	11.00 (3.00 - 18.00)	10.87 $\pm$ 3.38	11.00 (3.00 - 18.00)	t=-1.185	0.237
World assumptions	107.40 $\pm$ 22.15	110.50 (65.00 - 146.00)	109.27 $\pm$ 19.84	108.50 (59.00 - 148.00)	108.46 $\pm$ 20.84	109.00 (59.00 - 148.00)	t=-0.645	0.520
Health anxiety	16.42 $\pm$ 6.21	17.00 (2.00 - 30.00)	15.96 $\pm$ 6.37	16.00 (2.00 - 38.00)	16.16 $\pm$ 6.29	17.00 (2.00 - 38.00)	t=0.533	0.595
Age	30.63 $\pm$ 6.97	29.00 (23.00 - 55.00)	29.34 $\pm$ 7.63	26.50 (20.00 - 56.00)	29.90 $\pm$ 7.36	27.50 (20.00 - 56.00)	U=4468.5	0.017

concerning educational background were found statistically significant by the analysis performed using the backward method ( $p < 0.05$ ) (Table 5).

#### Factors associated with health anxiety

The linear regression model, established to examine the effect of studied variables on health anxiety, was found to be statistically significant ( $F=6.458$ ;  $p < 0.001$ ). Attitudes concerning visiting dining venues, doing grocery shopping, online shopping habits, frequently washing hands, house cleaning, maintaining social distance, and changes in lifestyles after the COVID-19 pandemic were found statistically significant by the analysis performed using the backward method ( $p < 0.05$ ) (Table 6).

Again, the linear regression model in Table 7, established to examine the effect of world assumptions sub-dimension score on health anxiety, was found to be statistically significant ( $F=3.399$ ;  $p=0.003$ ). Accordingly, the anxiety score decreases by 0.327 as the self-worth score increases by one unit ( $p=0.001$ ). In addition, the linear regression model, established to examine the effect of world assumptions total score on health anxiety, was found to be statistically significant ( $F=4.256$ ;  $p=0.040$ ) (Table 7).

#### Discussion

The pandemic, which is both a biological and a social process that has affected both the world and Turkey and is still ongoing, has had effects on various physical, social, economic, and moral aspects [40-42]. However, in this study, the level of and factors associated with health anxiety and world assumptions were investigated concerning two groups: healthcare professionals and general people. Before discussing the findings of this study, some limitations are worth mentioning. One of the limitations is that

it was made during the COVID-19 pandemic. Another is that it covers only healthcare professionals and individuals from the general population. One of the most important limitations is that the findings are based on self-report.

In this study, the mean health anxiety score of health care professionals ( $15.96 \pm 6.37$ ) was found to be lower than that of individuals from the society ( $16.42 \pm 6.21$ ) and there is no significant difference between them ( $p > 0.05$ ) (Table 2). For a study conducted with medical staff and medical students throughout the COVID-19 pandemic, the mean psychological distress of medical staff ( $6.77 \pm 5.04$ ) was found to be lower than that of medical students ( $5.48 \pm 8.66$ ) [43]. A comparative study conducted in China in the initial stages of the pandemic revealed that the prevalence of anxiety among health professionals working in medical institutions ( $n=927$ ) was higher than that of individuals who did not work in the medical field ( $n=1255$ ) (BTW 13%-8.5%;  $p < 0.001$ ) and that there is a significant difference between them [44]. Furthermore, a comparative study conducted in Italy indicated that the mean anxiety score of the participants before the quarantine was  $5.21 \pm 3.23$ , however, this score increased to  $6.51 \pm 4.03$  throughout the quarantine and the prevalence of anxiety (36%) also increased [19]. In addition, various studies conducted in the early stages of the COVID-19 pandemic have determined that the virus increases anxiety, depression, and stress levels in individuals [24,45,46]. These findings have been affected by the fact that the severity of negative perception and concern for the contagiousness and life-threatening nature of COVID-19 was at a higher level at the beginning of the epidemic; however with the development of the vaccine later in the epidemic, the measures executed and the treatments administered, the uncertainty in question decreased, became more controllable

**Table 3.** Comparison of WAS sub-dimension scores according to demographic characteristics.

		Goodness	Justice	Luck	Coincidence	Self-worth	Control
Gender	Man	20.68 ± 6.23	28.67 ± 7.74	14.14 ± 5.01	21.17 ± 4.13	17.68 ± 4.01	11.36 ± 3.36
	Woman	19.71 ± 7.04	25.36 ± 8.07	13.02 ± 5.62	19.65 ± 4.50	17.81 ± 4.06	10.72 ± 3.46
	Test statistic /p	t=1.03/0.304	t=3.019/0.003	t=1.497/0.135	t=2.513/0.012	t=-0.233/0.816	t=1.362/0.174
Area	Karadeniz	19.52 ± 6.37	25.14 ± 8.02	13.15 ± 5.17	20.08 ± 4.49	17.94 ± 3.86	10.14 ± 3.17 <sup>a</sup>
	Marmara	20.47 ± 7.34	25.96 ± 8.30	13.29 ± 5.66	19.94 ± 4.45	17.34 ± 4.21	11.09 ± 3.42 <sup>ab</sup>
	Other	19.78 ± 6.95	27.82 ± 7.76	13.43 ± 5.81	19.95 ± 4.48	18.18 ± 4.06	11.66 ± 3.71 <sup>b</sup>
	Test statistic /p	F=0.581/0.560	F=2.565/0.079	F=0.061/0.940	F=0.037/0.963	F=1.14/0.321	F=4.96/0.008
Marital status	Single	19.41 ± 6.76	25.71 ± 8.29	12.75 ± 5.54	20.22 ± 4.56	17.23 ± 4.15	10.76 ± 3.27
	Married	20.93 ± 7.00	26.87 ± 7.71	14.29 ± 5.31	19.56 ± 4.25	18.84 ± 3.61	11.08 ± 3.77
	Test statistic /p	t=-1.851/0.065	t=-1.185/0.237	t=-2.342/0.020	t=1.234/0.218	t=-3.362/0.001	t=-0.737/0.462
Education status	Licence	19.77 ± 6.55 <sup>a</sup>	25.57 ± 8.10	12.72 ± 5.51 <sup>ab</sup>	20.48 ± 4.51 <sup>b</sup>	17.78 ± 4.11	10.79 ± 3.33
	Graduate	20.19 ± 6.82 <sup>a</sup>	26.73 ± 7.25	14.92 ± 5.08 <sup>bc</sup>	19.81 ± 4.09 <sup>b</sup>	18.00 ± 4.09	10.95 ± 3.50
	High school	24.77 ± 7.27 <sup>b</sup>	30.62 ± 8.94	17.15 ± 4.85 <sup>c</sup>	20.00 ± 4.06 <sup>b</sup>	16.92 ± 4.70	11.92 ± 3.50
	Associate degree	17.79 ± 7.29 <sup>a</sup>	25.64 ± 9.11	10.86 ± 4.86 <sup>a</sup>	17.11 ± 4.49 <sup>a</sup>	17.50 ± 3.32	10.61 ± 3.87
	Test statistic /p	F=3.272/0.022	F=1.816/0.144	F=7.215/0.000	F=4.844/0.003	F=0.307/0.820	F=0.51/0.676
Working status	Yes	20.09 ± 7.06	25.76 ± 7.89	13.74 ± 5.52	19.94 ± 4.38	18.06 ± 4.13	10.87 ± 3.38
	No	19.57 ± 6.44	26.89 ± 8.56	12.23 ± 5.33	20.12 ± 4.65	17.15 ± 3.77	10.86 ± 3.61
	Test statistic /p	t=0.604/0.546	t=-1.13/0.259	t=2.218/0.027	t=-0.314/0.754	t=1.829/0.068	t=0.015/0.988
Will you go to places to eat when this epidemic is over?	I will go less.	20.11 ± 7.10	26.08 ± 7.39	12.50 ± 5.18 <sup>a</sup>	19.61 ± 4.30	17.46 ± 3.87	11.00 ± 3.41
	I will go as long as before	19.73 ± 6.80	25.80 ± 7.12	14.47 ± 5.57 <sup>ab</sup>	19.38 ± 4.05	18.42 ± 4.44	10.66 ± 2.82
	I will never go.	18.90 ± 7.85	28.43 ± 12.73	15.19 ± 5.20 <sup>b</sup>	21.10 ± 4.24	15.90 ± 4.32	10.19 ± 3.57
	If I have to, I will go.	19.74 ± 6.38	25.42 ± 8.36	12.38 ± 5.41 <sup>a</sup>	20.81 ± 4.87	17.87 ± 3.75	10.77 ± 3.82
	Test statistic /p	F=0.198/0.898	F=0.399/0.754	F=3.721/0.012	F=2.235/0.084	F=2.385/0.069	F=0.391/0.759
How will you do the grocery shopping?	I will never order online.	20.72 ± 7.48	26.75 ± 8.50	14.57 ± 5.61 <sup>a</sup>	19.59 ± 4.87	18.89 ± 3.83 <sup>a</sup>	10.95 ± 3.60
	I will order less online.	19.34 ± 6.97	26.23 ± 8.93	12.55 ± 4.91 <sup>b</sup>	20.26 ± 3.38	17.96 ± 4.18 <sup>ab</sup>	10.81 ± 3.82
	I will be ordering more online.	19.35 ± 6.24	25.32 ± 7.27	12.46 ± 5.44 <sup>b</sup>	20.18 ± 4.49	16.98 ± 3.96 <sup>b</sup>	10.77 ± 3.19
	Test statistic /p	F=1.426/0.242	F=1.042/0.356	F=5.184/0.006	F=0.659/0.518	F=7.347/0.001	F=0.083/0.921
About going to places to go shopping	I will go less.	19.67 ± 6.49 <sup>cb</sup>	26.27 ± 7.91	12.54 ± 5.24	19.91 ± 4.22 <sup>b</sup>	17.65 ± 3.65	11.04 ± 3.46 <sup>ab</sup>
	I will go further.	11.50 ± 8.00 <sup>a</sup>	24.75 ± 10.47	13.25 ± 10.08	17.13 ± 6.08 <sup>a</sup>	17.88 ± 7.20	12.38 ± 4.96 <sup>ab</sup>
	I will go as before.	22.28 ± 6.92 <sup>c</sup>	26.45 ± 7.29	14.82 ± 5.37	19.69 ± 4.40 <sup>ab</sup>	18.43 ± 4.46	11.07 ± 3.10 <sup>ab</sup>
	I will never go.	17.89 ± 6.54 <sup>b</sup>	24.41 ± 10.76	14.41 ± 5.17	22.30 ± 5.12 <sup>b</sup>	16.93 ± 4.39	8.63 ± 3.00 <sup>a</sup>
	Test statistic /p	F=8.361/0.000	F=0.537/0.657	X <sup>2</sup> =10.021/0.018	F=3.736/0.012	F=0.900/0.454	F=4.714/0.003
About washing your hands	I wash more.	19.50 ± 7.08	26.00 ± 8.19	12.88 ± 5.55	20.00 ± 4.45	17.64 ± 3.89	10.82 ± 3.48
	I wash as much as before.	21.62 ± 6.00	26.85 ± 7.78	14.71 ± 5.14	19.95 ± 4.47	18.03 ± 4.50	11.05 ± 3.28
	Test statistic /p	t=-2.307/0.022	t=-0.785/0.433	t=-2.501/0.013	t=0.084/0.933	t=-0.711/0.478	t=-0.499/0.618
About wearing a mask	I wear less.	20.01 ± 5.87	26.21 ± 8.85	13.82 ± 5.21	18.95 ± 4.06 <sup>a</sup>	17.73 ± 4.30	10.27 ± 3.35
	I wear more.	20.53 ± 7.43	26.67 ± 8.42	13.15 ± 5.78	20.86 ± 4.53 <sup>b</sup>	17.52 ± 3.85	11.01 ± 3.47
	I wear it as before.	19.29 ± 6.47	25.33 ± 7.24	12.87 ± 4.89	19.92 ± 4.40 <sup>ab</sup>	17.99 ± 3.81	10.85 ± 3.53
	I never wear it.	18.97 ± 7.64	25.56 ± 7.18	13.44 ± 6.39	19.26 ± 4.72 <sup>ab</sup>	18.41 ± 4.70	11.65 ± 3.31
	Test statistic /p	F=0.755/0.520	F=0.48/0.697	F=0.407/0.748	F=3.297/0.021	F=0.52/0.669	F=1.377/0.250
About social distancing	I'll be careful though.	21.25 ± 7.66	27.83 ± 6.85	15.21 ± 4.55	18.13 ± 4.72	19.38 ± 4.17	11.58 ± 3.30
	I will generally pay attention.	19.68 ± 6.14	26.41 ± 8.19	13.36 ± 5.06	19.44 ± 4.09	17.46 ± 3.94	10.84 ± 3.14
	I will always pay attention.	20.09 ± 7.02	25.80 ± 8.10	13.02 ± 5.73	20.70 ± 4.53	17.86 ± 3.85	10.77 ± 3.58
	I will not pay any attention.	16.00 ± 11.39	22.14 ± 10.38	11.00 ± 9.04	20.00 ± 5.60	15.86 ± 7.73	11.14 ± 5.79
Test statistic /p	F=0.580/0.634	F=1.053/0.369	F=1.578/0.220	F=3.399/0.018	X <sup>2</sup> =7.363/0.061	F=0.407/0.750	
About what the pandemic has changed in your life	It will change completely.	15.25 ± 5.04	30.88 ± 9.58 <sup>b</sup>	16.00 ± 4.96 <sup>b</sup>	18.25 ± 4.46 <sup>ab</sup>	17.38 ± 4.44	11.75 ± 2.87
	There will be no change.	19.94 ± 8.27	24.84 ± 9.17 <sup>a</sup>	15.71 ± 6.43 <sup>ab</sup>	17.55 ± 4.72 <sup>a</sup>	20.77 ± 3.44	10.68 ± 3.94
	Little will change.	20.48 ± 6.73	27.88 ± 8.35 <sup>ab</sup>	13.36 ± 5.22 <sup>ab</sup>	19.87 ± 4.31 <sup>ab</sup>	17.65 ± 4.21	11.16 ± 3.15
	So many things will change.	19.75 ± 6.71	24.71 ± 7.27 <sup>a</sup>	12.56 ± 5.39 <sup>a</sup>	20.70 ± 4.35 <sup>b</sup>	17.28 ± 3.77	10.62 ± 3.59
	Test statistic /p	F=1.536/0.205	F=4.699/0.003	F=3.628/0.013	F=4.968/0.002	X <sup>2</sup> =24.041/0.000	X <sup>2</sup> =2.404/0.493

and negative perceptions and the severity of anxiety gradually diminished [1]. Therefore these findings, reveal that the anxiety experienced by health care professionals later in the epidemic has decreased compared to the first periods of the epidemic.

In this study; the mean score of WAS, well-being, fair-

ness, self-worth, and control, which predict the cognition of individuals from society, was lower compared to health professionals. The mean scores of the total and the sub-dimensions for both groups were below average and there was no significant difference between them (p>0.05) (Table 2). A study using the WAQ (World Assump-

**Table 4.** Comparison of world assumptions and health anxiety total scores.

		World Assumptions	Health Anxiety
Gender	Man	113.71 ± 17.89	14.35 ± 5.91
	Woman	106.28 ± 21.14	16.93 ± 6.39
	Test statistic /p	t=2.654/0.008	t=-3.006/0.003
Marital status	Single	106.07 ± 20.20	16.49 ± 6.45
	Married	111.56 ± 21.14	16.08 ± 6.22
	Test statistic /p	t=-2.22/0.027	t=0.542/0.588
Education status	Licence	107.11 ± 20.39 <sup>ab</sup>	16.09 ± 6.63
	Graduate	110.59 ± 18.96 <sup>b</sup>	16.12 ± 5.45
	High school	121.38 ± 20.17 <sup>c</sup>	20.00 ± 6.18
	Associate degree	99.50 ± 21.18 <sup>a</sup>	16.07 ± 5.81
	Test statistic /p	F=4.104/0.007	F=1.606/0.188
When this epidemic is over, will you go to places to eat (such as cafe, restaurant, ...)?	I will go less.	106.76 ± 20.26	16.99 ± 6.09 <sup>b</sup>
	I will continue to go as before.	108.46 ± 19.58	14.57 ± 5.96 <sup>b</sup>
	I will never go	109.71 ± 26.90	19.62 ± 7.00 <sup>a</sup>
	I will go if I have to	106.99 ± 19.94	16.40 ± 6.59 <sup>b</sup>
	Test statistic /p	F=0.203/0.894	F=4.266/0.006
How will you do the grocery shopping?	I will go as before. I will never order online.	111.47 ± 22.19	15.06 ± 6.63 <sup>a</sup>
	I will order less online than before	107.15 ± 22.81	15.96 ± 6.02 <sup>ab</sup>
	I will order more online than before	105.05 ± 18.04	17.19 ± 5.97 <sup>b</sup>
	Test statistic /p	F=3.038/0.052	X <sup>2</sup> =10.646/0.005
About going to places to go shopping	I will go less.	107.08 ± 20.48	16.83 ± 6.35 <sup>b</sup>
	I will go further.	96.88 ± 24.28	13.50 ± 9.43 <sup>ab</sup>
	I will go as before.	112.74 ± 20.07	14.65 ± 5.83 <sup>a</sup>
	I will never go.	104.56 ± 20.87	18.37 ± 6.00 <sup>b</sup>
Test statistic /p	F=2.49/0.060	X <sup>2</sup> =13.387/0.004	
About cleaning your home	I clean more	107.36 ± 21.99	17.40 ± 6.59
	I clean as before.	109.34 ± 18.75	15.10 ± 5.95
	Test istatistiği/p	t=-0.839/0.402	t=3.168/0.002
Regarding social distancing	I will take care of social distancing a little.	113.38 ± 17.45	17.38 ± 7.31 <sup>b</sup>
	I will generally observe social distancing.	107.18 ± 19.95	15.98 ± 5.96 <sup>b</sup>
	I will always pay attention to social distancing	108.23 ± 21.26	16.74 ± 6.39 <sup>b</sup>
	I will not pay any attention to social distancing.	96.14 ± 26.76	10.14 ± 6.74 <sup>a</sup>
	Test statistic /p	F=1.383/0.248	F=2.801/0.040
About what the pandemic has changed in your life	My life will change completely.	109.50 ± 21.85	16.13 ± 6.31 <sup>ab</sup>
	There will be no change in my life.	109.48 ± 23.94	13.45 ± 7.59 <sup>a</sup>
	Very little will change in my life.	110.41 ± 20.29	15.69 ± 5.96 <sup>ab</sup>
	So many things will change in my life.	105.62 ± 20.11	17.48 ± 6.20 <sup>b</sup>
Test statistic /p	F=1.264/0.287	F=4.267/0.006	
In the world after the Covid-19 outbreak	Some things will change.	110.41 ± 21.18	14.46 ± 5.99 <sup>b</sup>
	So many things will change.	108.83 ± 18.80	17.39 ± 5.87 <sup>a</sup>
	Everything will change completely.	111.70 ± 15.61	15.40 ± 5.54 <sup>ab</sup>
	Nothing will be the same.	103.72 ± 22.52	17.13 ± 7.07 <sup>ab</sup>
Test statistic /p	F=1.853/0.138	X <sup>2</sup> =13.219/0.004	

tions Questionnaire) scale revealed the mean scores of the WAQ subscales of young adults as follows: controllability of events 19.22±3.75; controllability and predictability of individuals 14.76±4.13; reliability and well-being of peo-

ple 20.97±4.38 and for security 14.90±3.78 [47]. Another study indicated that 27% of health care professionals have experienced anxiety about their existence [48]. A study conducted in Italy with 1215 participants to examine the

**Table 5.** Examination of the effect of studied variables on world assumptions by linear regression analysis.

	Beta	S. Error	Standardized Beta (95% CI)	t	p	r1	r2	VIF
Constant	136.74	11.586	(113.284 - 160.195)	11.802	<0.001			
Gender male	9.819	4.871	0.229 (-0.041 - 19.68)	2.016	0.051	-0.019	0.311	1.244
Education Status (High School)								
Associate degree	-32.771	10.977	-0.469 (-54.993 - -10.549)	-2.985	0.005	-0.215	-0.436	2.382
Licence	-21.979	8.895	-0.587 (-39.986 - -3.973)	-2.471	0.018	0.057	-0.372	5.442
Graduate	-22.732	9.139	-0.555 (-41.233 - -4.231)	-2.487	0.017	-0.079	-0.374	4.801
How will you do the grocery shopping? (I will go as before. I will never order online)								
I will order less online than before	-12.299	5.008	-0.294 (-22.438 - -2.161)	-2.456	0.019	-0.14	-0.37	1.381
It's about going to places to go shopping (I'll go less)								
I will go as before	14.268	4.548	0.381 (5.062 - 23.474)	3.138	0.003	0.096	0.454	1.422
It's about wearing a mask (I never wear it)								
I wear less	20.194	5.399	0.539 (9.264 - 31.124)	3.74	0.001	0.117	0.519	2.005
I wear more	20.246	8.731	0.348 (2.571 - 37.921)	2.319	0.026	-0.075	0.352	2.168
I wear it as before	31.022	6.137	0.741 (18.599 - 43.446)	5.055	<0.001	0.256	0.634	2.074
Regarding what the pandemic has changed in your life (A lot of things will change in my life)								
My life will change completely	29.246	11.473	0.302 (6.019 - 52.472)	2.549	0.015	0.157	0.382	1.354
There will be no change in my life	-15.206	6.975	-0.345 (-29.326 - -1.086)	-2.18	0.036	-0.119	-0.333	2.414
Very little will change in my life	-17.653	5.516	-0.478 (-28.819 - -6.486)	-3.2	0.003	-0.105	-0.461	2.154
In the World after the COVID-19 pandemic (Nothing will be the same as before)								
Some things will change.	-15.111	5.723	-0.409 (-26.697 - -3.525)	-2.64	0.012	-0.043	-0.394	2.312
So many things will change.	-24.795	6.44	-0.592 (-37.833 - -11.758)	-3.85	<0.001	-0.066	-0.53	2.284

F=4.180. p<0.001. R2=0.606. Adjusted R2=0.461. \*BackWard method was used to include the independent variables in the model. (reference category). r1: Zero-order correlation. r2: Partial correlation.

cognitive and moral changes caused by COVID-19 quarantine indicated that the mean subjective cognitive complaint score before the quarantine was  $19.99 \pm 5.79$  while this figure increased to  $21.13 \pm 7.45$  and that there was a significant difference between them ( $p < 0.001$ ) [19]. These results reveal that the epidemic process negatively affects the cognition of the well-being of the world and that individuals from society have had worse assumptions (negative cognition) later in the epidemic.

Attitudes towards isolation measures (visiting dining and shopping venues, wearing masks) vary between health professionals and individuals from society ( $p < 0.05$ ). (Table 1). The first study on the subject, conducted in Wuhan, with the participation of healthcare professionals revealed that the epidemic caused mental disorders at the sub-threshold level in 36.9% of healthcare professionals, mild mental disorders in 34.4%, moderate mental disorders in 22.4%, and severe mental disorders in 6.2% of health care professionals and 17.5% of the health care professionals stated that they received counseling/psychotherapy support. In addition, it has been determined that factors such as exposure to infected people and receiving psychological support are effective on trends in the mental disorder levels of health professionals [49]. These results may be because health care professionals have a high risk of developing the disease, the strictness of measures taken to prevent

the transmission of the disease, the intensity and pressure of the working environment, and the deep effect of all these facts on their daily lives. Accordingly, health care professionals are pointed out as the most affected individuals in the first months of the pandemic [50]. However, this effect is observed to be decreasing in the following months and the average scores have been found to approach the rates of individuals from the society.

This study showed no difference in health anxiety scores of both groups. (Table 2). Another study conducted on the subject determined that the mean health anxiety scores of health care professionals (35.2%) were higher than individuals from the society (23.6%) and that there was a significant difference between them ( $p < 0.05$ ) [51]. This difference is believed to be caused by the fact that this study was conducted at a later stage of the epidemic.

In this study, it was concluded that health anxiety scores differed statistically depending on age and gender variables ( $p < 0.05$ ). In addition, health anxiety scores are statistically different concerning attitudes concerning visiting dining venues, making grocery shopping, and visiting shopping venues ( $p < 0.05$ ) (Table 4). A study conducted in China on the current subject during the initial months of the epidemic within the scope of the general population indicated that the COVID-19 Peritraumatic Distress Index (CPDI) score of individuals is correlated with



**Table 6.** Analysis of the effect of demographic characteristics on health anxiety score by linear regression analysis.

	Beta	S. Error	Standardized Beta (95% CI)	t	p	r1	r2	VIF
Constant	19.535	1.844	(15.813 - 23.257)	10.593				
Will you go to places to eat when this epidemic is over? (I will go less)								
I will continue to go as before	-5.961	1.344	-0.481 (-8.673 - -3.249)	-4.436	<0.001	-0.278	-0.565	1.251
How will you do the grocery shopping? (I will go as before. I will never order online)								
I will order less online than before	4.661	1.659	0.333 (1.313 - 8.009)	2.809	0.008	0.163	0.398	1.496
I will be ordering more online than before	6.163	1.866	0.479 (2.397 - 9.93)	3.302	0.002	0.154	0.454	2.241
About online shopping online (I will shop less)								
I will shop more	-7.338	1.918	-0.546 (-11.209 - -3.467)	-3.825	<0.001	0.034	-0.508	2.169
More hand washing (I wash as much as before)	-0.067	0.035	-0.276 (-0.137 - 0.003)	-1.939	0.059	0.015	-0.287	2.159
I clean the house more (I clean as before)	0.151	0.048	0.461 (0.055 - 0.247)	3.164	0.003	0.107	0.439	2.266
Regarding social distancing (I will not pay any attention to social distancing)								
I will take care of social distancing a little	5.275	1.726	0.306 (1.793 - 8.757)	3.057	0.004	0.312	0.427	1.067
Regarding what the pandemic has changed in your life (A lot of things will change in my life)								
My life will change completely	-14.746	3.594	-0.455 (-22 - -7.492)	-4.102	<0.001	-0.15	-0.535	1.312
There will be no change in my life	-7.598	1.915	-0.515 (-11.462 - -3.733)	-3.968	<0.001	-0.301	-0.522	1.796
Little will change in my life	-3.622	1.612	-0.293 (-6.876 - -0.369)	-2.247	0.030	0.002	-0.328	1.817

F=6.458. p<0.001. R2=0.606. Adjusted R2=0.512. \*BackWard method was used to include the independent variables in the model. (reference category). r1: Zero-order correlation. r2: Partial correlation.

gender, age, education, profession, and region variables. The psychological distress scores of female participants (24.87±15.03) were found to be significantly higher compared to their male colleagues (21.41±15.97) (p<0.001) (24). A study conducted in China in February 2020 with 2858 participants revealed the incidence of post-traumatic stress symptoms to be 22.2%. Exposure to traumatic news more than 5 times a day has been determined to significantly augment the symptoms of PTSD and it was further determined that risk perception mediates these findings [16]. Studies conducted on the subject during the pandemic outbreak revealed that more than 70% of health professionals have suffered psychological problems such as insomnia, anxiety, and depression and that the risk of developing these problems is higher in health care professionals compared to the general population [44,46]. A study conducted with the participation of individuals from the society, who have been exposed to the COVID-19 virus in China, similarly revealed that women (29.7%) more frequently experience anxiety compared to men (22.4%) and there is a significant difference between them (p<0.05) [51]. These findings indicate that women are more responsive to anxiety than men and accordingly they are much more affected mentally.

This study revealed that there was no statistically significant difference between regions in terms of health anxiety (p>0.05). A study on the subject indicated that individuals who live in urban regions (30.6%) more often experience anxiety compared to individuals who live in rural areas (22%) and that this difference is statistically significant (p<0.05) [51]. The reason for this difference is

thought to be the population density of the cities and the higher risk of infection.

The linear regression model, established to examine the effect of demographic characteristics on the Health Anxiety score, was found to be statistically significant (F=6.458; p<0.001). Attitudes concerning visiting dining venues, making grocery shopping, online shopping habits, frequently washing hands, house cleaning, maintaining social distance, and changes in lifestyles after the COVID-19 pandemic were found statistically significant by the analysis performed using the backward method (p<0.05) (Table 6). A study conducted on the subject indicated that the anxiety level of individuals in society throughout the COVID-19 outbreak is affected by gender, marital status, and income (p<0.05) [51].

There is a statistically significant, negative relationship between Health Anxiety and luck (fortune) scores (p=0.038; r=-0.119), self-worth scores (p<0.001; r=-0.199) and WAS total scores (p=0.04; r=-0.118) (Table 7). A study conducted on the subject found a significant relationship between interaction anxiety and world appraisal (r=0.35, p<0.01) [51]. Another study conducted with young adults revealed a significant relationship between the WAS controllability sub-scale (r=0.28, p<0.01), WAS reliability and well-being of people sub-scale (r=0.25, p<0.01), WAS security (r=0.28, p<0.01) sub-scales and depressive symptoms (PHQ-9: depressive symptoms) [47]. A further study conducted on the subject revealed a positive correlation between subjective cognition and mental health (r=.34; p<0.001) and changes in anxiety (r=.38; p<0.001) moods [19]. These results have revealed that perceptions of health

**Table 7.** Examination of the effect of world assumptions sub-dimension scores on health anxiety.

	Beta (%95 CI)	S. Error	Standardized Beta	t	p	r1	r2	VIF
Constant	25.177 (19.942 - 30.413)	2.660		9.464	<0.001			
Goodness	0.061 (-0.062 - 0.184)	0.062	0.066	0.982	0.327	-0.022	0.057	1.451
Justice	-0.095 (-0.217 - 0.026)	0.062	-0.121	-1.542	.124	-0.080	-0.089	1.971
Luck	-0.077 (-0.232 - 0.078)	0.079	-0.066	-0.975	0.330	-0.119	-0.056	1.479
Coincidence	-0.15 (-0.315 - 0.014)	0.084	-0.105	-1.798	0.073	-0.047	-0.103	1.094
Self-worth	-0.327 (-0.513 - -0.141)	0.094	-0.208	-3.461	0.001	-0.199	-0.196	1.149
Control	0.209 (-0.059 - 0.478)	0.137	0.113	1.533	0.126	0.013	0.088	1.745
Constant	20.259 (16.463 - 24.056)	1.929		10.501	<0.001			
World assumptions	-0.036 (-0.071 - -0.002)	0.018	-0.118	-2.063	0.040	-0.118	-0.118	1

F=3.399 for sub-dimensions. p=0.003. R2=0.064. Adjusted R2=0.045. r1: Zero-order correlation. r2: Partial correlation F=4.256 for WAS total. p=0.040. R2=0.014. Adjusted R2=0.011. r1: Zero-order correlation. r2: Partial correlation.

anxiety and epidemic (luck,...) are effective.

This study has indicated that there is no statistically significant difference between individuals from the society (107.40±22.15) and health professionals (109.27±19.84) in terms of mean world assumptions scores (p>0.050). In a study conducted with 494 Israeli adults, which revealed that an increase in scale scores pointed out to more negative assessments, the mean score on the world appraisals scale was found to as 8.84±3.01 [52]. These findings have revealed that the positive world appraisals of individuals in society are at a moderate level.

A linear regression model was established to examine the effect of WAS sub-scale scores on anxiety (F=3.399; p=0.003) and the linear regression model was used to examine the effect of the WAS total score (F=4.256; p=0.040) were both found to be statistically significant. Accordingly, the anxiety score decreases by 0.327 as the self-worth score increases by one unit (p=0.001) (Table 7). Regression analysis, which was established in another study conducted on the subject, revealed that WAS sub-dimensions of the controllability of events (r=-0.037, p<0.01) and the controllability and reliability of people (r=-0.028, p<0.01) had a significant effect on depressive symptoms [47]. Another study concluded that the world appraisals score affected interactive anxiety (r=-0.23, p<0.01) and self-assessment anxiety (r=-0.23, p<0.01) [52]. These findings have revealed that world assumptions about the well-being of the world affect mental symptoms such as anxiety.

## Conclusion

The strength of the study is attributable to the study sample comprising of health care professionals working in clinics in Turkey throughout the COVID-19 pandemic as well as individuals from the society. This study holistically reveals that the changes brought about by the COVID-19 pandemic among health professionals and societies affect the perceptions, attitudes, and assumptions of individuals. To the findings of this study, which was conducted in the latter stages of the epidemic, it has been observed that health anxiety has decayed relatively slightly and there is no significant difference in terms of health anxiety between health professionals and non-health professionals individuals, however, the mental effects on daily life prevail. The

literature review indicated that the effects of epidemics are maybe long-term. In addition, a high level of self-worth and world assumptions of individuals has been concluded to be effective in reducing health anxiety. Therefore, periodically monitoring the mental effects of the epidemic and interventions related to maintaining a high level of individuals' self-worth and world assumptions would be important in reducing health anxiety.

It has been observed that there are differences in terms of the attitudes of health care professionals and individuals from the society concerning changes encountered in their daily lives after the epidemic and isolation/distancing measures. Therefore, to maintain physical/mental well-being against the effects of the epidemic, it would be essential to develop a comprehensive crisis prevention and response system through group and mass communication. In addition, conducting strategic planning and coordination activities throughout the country, and potentially expanding telemedicine and e-mental health practices are suggested.

## Ethics approval

After receiving approval from the Ordu University Clinical Study Ethics Committee (decision dated 23/07/2020 and numbered 153-KAEK 126) and the necessary legal permits from the Ministry of Health of the Republic of Turkey (decision dated 25/05/2020 and numbered 2020-05-24T19 37 13), study data were voluntarily collected. People were first informed about the study's goal at the start of the online data collection form. Participants were required to complete an informed consent form online before completing the questionnaire as evidence of their willingness to participate. People were notified that they could withdraw from the study at any time and that the "principle of respect for autonomy," "principle of confidentiality and protection of privacy," and "principle of non-harm/usefulness," as well as other ethical criteria, had been met.

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