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The Effect of Existential and Neurotic Anxiety Level on Sexual Life During the COVID-19 Lockdown Period

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Abstract

Background: Extraordinary situations such as pandemics are unexpected, sudden, and life-threatening, a period of uneasy feelings and thoughts. The anxiety experienced by the social distance measures and curfews applied during the COVID-19 can lead to deterioration in the quality of sexual functions and relationships.

Aim: This study aimed to examine the effects of existential anxiety and neurotic anxiety experiences on the sexual lives of individuals during the early stage of the COVID-19 pandemic.

Methods: The sample of the descriptive and cross-sectional study conducted with 412 married individuals aged 18 and over. Data were collected online using the Personal Information Form, Existential Anxiety Scale, State-Trait Anxiety Scale, and Golombok-Rust Sexual Satisfaction Scale between 01 April and 31 May 2020 analyzed through IBM SPSS Statistics 25 program.

Results: The mean age of the participants was 33.28 ± 6.72; 63.8% of the participants were women. During the days staying at home due to the COVID-19 pandemic, 13.3% of the participants stated a positive change in their sexual intercourse, and 20.4% had a negative change. It was observed that the Existential Anxiety Scale death anxiety, State-Trait Anxiety Scale, Golombok-Rust Sexual Satisfaction Scale communication, satisfaction, avoidance, touch, and total scores of women were statistically significantly higher than men. According to multiple linear regression analyzes, it was determined that freedom in women predicted communication and touch. Trait anxiety predicted all sexual intercourse qualities and functions except communication and vaginismus. In males, death anxiety predicted touch, impotence, and premature ejaculation, and continuous anxiety affected all areas of sexual intercourse except premature ejaculation.

Conclusion: In the process of curfews implemented within the scope of COVID-19 measures, it can be said that individuals experience moderate existential anxiety and neurotic anxiety, and sexual functions and relationship quality deteriorate due to these anxieties.

Keywords: COVID-19, existential anxiety, neurotic anxiety, sexual dysfunction, sexual life

Introduction

Disasters and epidemics have come up from time to time and affect the lives of societies since the existence of humanity started. The new type of Coronavirus (COVID-19), which took over the whole world and our country by making its mark in 2020, has created significant changes in people's feelings, thoughts, and lifestyles. To prevent the spread of the COVID-19 virus, authorities in all countries of the world take restriction and sanction decisions. In Türkiye, on March 13, 2020, the Ministry of Interior sent a "Lockdown Circular" to all Provincial Governorships within the scope of combating the COVID-19 pandemic. Within the scope of this circular, restrictions or regulations have been introduced in many sectors such as banks, transportation, markets, food, cleaning, and medicine in a way to minimize the effect of lockdowns/prohibitions on daily life.[1] Due to these restrictions and regulations, there have been sudden and significant changes in most people's daily lives; therefore, encountering such a life-threatening situation has brought with it intense anxiety states. Lippi et al[2] reported severe physical and mental problems in lockdown due to factors such as physical inactivity, weight gain, behavioral addictions, inadequate exposure to sunlight, and social isolation.

Social distancing measures and lockdowns have also affected human relations. In the literature, it has been reported that the frequency of anxiety, depressive symptoms,

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sleep quality deterioration,[3] anger symptoms,[4] and post-traumatic stress disorder has increased in relation to COVID-19.[3,5] In addition, studies show that the quality of sexual functions and relationships is impaired with the anxiety experienced during this process.[6–9]

Such global events, which are unexpected, very sudden and life-threatening, and also full of obscurities, lead people to existential questioning. According to existential psychotherapy, awareness of existential facts causes anxiety in the individual, and defense mechanisms are activated.[10] When faced with an existential stressor, the individual can choose either the way of coping with it or the inauthentic way of being. The second option can protect the individual from existential anxiety but may cause neurotic anxiety. The inauthentic response of the individual to the inevitable sources of existential anxiety is neurotic anxiety.[11] Neurotic anxiety arises mostly from the responses of people to existential anxiety.[12] In other words, existential anxieties can emerge as neurotic anxiety in specific situations and circumstances.

In this period that we are faced with an extraordinary situation involving life threats, we need to guarantee our existence and take measures against the elements that threaten our existence. The most important of these measures is the reproductive function. Human beings prefer to exist over extinction according to existential philosophy. The fact that people want to leave some permanent elements in this world is due to the need to guarantee their existence. Reproductive physiology, one of the most basic human needs, is one of the most important mechanisms serving this system.

In this context, our study aimed to examine the effects of existential anxiety experienced by individuals in the early period of the COVID-19 pandemic on their sexual lives. In the context of the pandemic, this perspective will help clinicians and health educators understand the importance of sexuality and sexual experience in times of social crisis, evaluate individual barriers for healthy sexual experiences, and find solutions to problems in sexual relations.

Accordingly, answers were sought to the following research questions:

1. What are the participants' experiences of staying at home and sexual life during the COVID-19?
2. Are there any differences in terms of continuous, state and existential anxiety and sexual satisfaction according to gender in the time period when curfews are applied?
3. Does constant, state, and existential anxiety have an effect on the quality of sexual intercourse and sexual functions in women?
4. Do men's trait, state, and existential anxiety have an effect on the quality of sexual intercourse and sexual functions?

Materials and Methods

Type of the Research

The research was planned in descriptive and cross-sectional type.

Data Collection Tools

Sample

The universe of the study consisted of married individuals aged 18 and over. The sample size was calculated as a minimum of 176 due to the power analysis performed under the assumptions of Type I error (α) = 0.05, power = 0.95, effect size = 0.05. Considering the study subject's individual difference and cultural dimension. It was reached 352 participants.

Personal Information Form

It consists of 19 open and closed-ended questions that include age, marital status, educational status, monthly economic income, occupation, how the participants feel emotionally during the curfew, and their sexual lives.

Existential Anxiety Scale

The Existential Anxiety Scale (EAS), developed by Yikilmaz (2016),[13] is a 5-point Likert-type scale and consists of 25 items and 4 sub-dimensions. The sub-dimensions are death anxiety (5 items), meaninglessness anxiety (10 items), freedom anxiety (5 items), and isolation anxiety (5 items). In the EAS, 11 items are scored reversely, and the score obtained is between 25 and 125. A high score on the scale means that the existential anxiety level is high. As a result of the statistical analysis performed to test the scale's reliability, the Cronbach's Alpha internal consistency coefficient was calculated as $\alpha = 0.85$. When the sub-dimensions of the scale are examined, the internal consistency coefficient of the death anxiety sub-dimension is calculated as $\alpha = 0.79$, of the meaninglessness anxiety as $\alpha = 0.87$, of the freedom anxiety as $\alpha = 0.071$, of the isolation anxiety as $\alpha = 0.70$.[13] This study showed that the Cronbach's Alpha internal consistency coefficient ranged from 0.77 to 0.89.

State-Trait Anxiety Inventory

State-Trait Anxiety Inventory, which was developed by Spielberger et al in 1964 to determine the state and trait anxiety levels of individuals, is a type of self-assessment tool. The scale includes 40 items, and the 20-item state anxiety scale and the 20-item trait anxiety scales are independent of each other. Items 1, 2, 5, 8, 10, 11, 15, 16, 19, and 20 in the state anxiety scale, and items 21, 26, 27, 30, 33, 36, and 39 in the trait anxiety scale are the reverse items. All items are scored between 1 and 4, and the total score obtained ranges from 20 to 80. A high score indicates a high level of anxiety, and a low score indicates a low level of anxiety. The Turkish reliability and validity studies of the scale were conducted by Oner and Le Compte (1983).[14] In this study, the Cronbach's Alpha internal consistency coefficient was 0.88 and 0.90 for the state and trait anxiety scale, respectively.

Golombok-Rust Sexual Satisfaction Scale

Rust and Golombock developed Golombok-Rust Sexual Satisfaction Scale (GRSSS) to evaluate the quality of sexual intercourse and sexual functions. The scale consists of 2 forms, consisting of 28 items and 7 sub-dimensions prepared for men and women. The sub-dimensions of the women's form are frequency, communication, satisfaction, avoidance, touching, vaginismus, and anorgasm. The sub-dimensions of the men's form are frequency, communication, satisfaction, avoidance, touching, erectile dysfunction, and premature ejaculation. Answers to the items are scored as 0-1-2-3-4, respectively, through the options "never," "rarely," "sometimes," "mostly," and "always." Both total scores and scores obtained from sub-dimensions can be used in the evaluation of the scale. High scores indicate deterioration in sexual functions and the quality of the intercourse. The total score obtained gives a general idea about the quality of the intercourse, while the sub-dimension scores reveal more detailed information about various aspects of the intercourse.

Table 1. Descriptive Characteristics of the Participants

		Female		Male		Total	
		$\bar{x} \pm \sigma$	Min-Max	$\bar{x} \pm \sigma$	Min-Max	$\bar{x} \pm \sigma$	Min-Max
		33.28 ± 6.72	20-66	36.57 ± 7.75	25-65	34.47 ± 7.28	20-66
Variable	Age	n	%	n	%	n	%
Educational Status	Elementary school	41	15.6	19	12.8	60	14.6
	High school	80	30.4	54	36.2	134	32.5
	University	124	47.1	63	42.3	187	45.4
	Postgraduate	18	6.8	13	8.7	31	7.5
Occupation	Not working/Housewife	154	58.6	12	8.1	166	40.3
	Self-employed	10	3.8	28	18.8	38	9.2
	Private sector	20	7.6	42	28.2	62	15.0
	Laborer. driver	3	1.1	24	16.1	27	6.6
	Healthcare professional	25	9.5	3	2.0	28	6.8
	Civil servant*	51	19.4	40	26.9	91	22.1
Working during COVID-19**	Working	77	70.6	121	88.3	198	80.5
	Not working	32	29.4	16	11.7	48	19.5
Monthly Income	2400 TRY or below	81	30.8	41	27.5	122	29.6
	2400 TRY - 3600 TRY	80	30.4	46	30.9	126	30.6
	3601 TRY - 4200 TRY	42	16.0	23	15.4	65	15.8
	4201 TRY or above	60	22.8	39	26.2	99	24.0
Change in sexual intercourse during the COVID-19	Became more frequent	62	23.6	49	32.9	111	26.9
	Decreased	83	31.6	43	28.9	126	30.6
	Sometimes often and sometimes less	5	1.9	10	6.7	15	3.6
	No change	113	43.0	47	31.5	160	38.8
Fear of the Future	Yes	199	75.7	89	59.7	288	69.9
	No	64	24.3	60	40.3	124	30.1
The importance of sexuality for the individual	Important	107	40.7	113	75.8	220	53.4
	Not important	21	8.0	6	4.0	27	6.6
	Partially important	126	47.9	29	19.5	155	37.6
	I do not know/I have no idea	9	3.4	1	0.7	10	2.4
Total		263	100	149	100	412	100

*Teacher. accountant. mechanical engineer. non-commissioned officer. police etc. **The number and percentages of employees working in a job during the COVID-19 were given. $\bar{x}$: Average; σ: standard deviation.

The Turkish validity and reliability study of GRSSS was conducted by Tuğrul et al (1993).[15] In this study, the Cronbach's Alpha internal consistency coefficient was 0.92 for the women's form and 0.88 for the men's form.

Data Collection Process

The data collection form was created online through Google form and shared on social media communication tools (Facebook, Instagram, WhatsApp, etc.), and data were collected from 502 people between April 1 and May 31, 2020. The participants were informed that the participation was voluntary and that they could leave the study at any time before sending the data to the researcher, and their consent was obtained. The online data collection form was set to require participants to answer all questions before proceeding to the next question/form, thus avoiding missing data. Each participant answered the questions in the data collection form in an average of 13-15 min. Ninety participants were excluded from the study because they did not meet the inclusion criteria, and 412 (82%) people made study sample.

Table 2. Participants' Experiences in the COVID-19 Process*

	n	%
The reason for going out of the house		
Work	90	21.8
Shopping	291	70.6
Walking	8	1.9
Bank, Documents, Cargo	41	9.9
Pharmacy, Health	28	6.8
I do not go out	39	9.5
How does it feel to be at home?		
-Positive aspects of being at home	190	46.1
1. Productive time	8	1.9
2. Nice, wonderful, good, pleasant, peaceful	122	29.6
3. Spending time as a family, spending time with your spouse, making time for home	43	10.4
4. Getting used to being home	9	2.2
5. Resting, it is relaxing, comfortable	21	5.1
6. Understanding and realizing the value of life, personal development, being alone with ourselves, resting our heads give peace.	10	2.4
7. It is safe.	12	2.9
-Negative aspects of being at home	270	65.5
1. Boring, gloomy, overwhelming, bad, awful, unhappy	200	48.5
2. Physical activity and freedom restriction, feeling like trapped and in prison	27	6.6
3. Challenging, tiring,	43	10.4
4. Stressful	9	2.2
5. Worrying, terrifying	16	3.9
6. Financial difficulty	5	1.2
7. Staying away from loved ones	7	1.7
8. The feeling of emptiness	1	0.2
9. Strange, different	3	0.7
10. Constantly arguing with the household	2	0.5
-No change	31	7.5
-I have not been at home (I am working)	2	0.5
How the intercourse with the spouse was affected in this process		
It is closer; it was affected in a good way, it increased (positively), we began to spend more time,	196	47.6
It was not affected, normal,	143	34.7
We cannot see each other (health care professional)	6	1.5
We have come to understand each other better (communication)	11	2.7
We see each other every day; we are bored	3	0.7
Bad, adverse effect (unspecified)	63	15.3
The kind of the change in sexual life		

Continued

Table 2. Participants' Experiences in the COVID-19 Process* (*Continued*)

	n	%
Positive change	55	13.3
1. We can make time for ourselves; it is in order	15	3.6
2. More frequent intercourse	16	3.9
3. The performance is great	1	0.2
Negative change	84	20.4
1. Intercourse dwindled	23	5.6
2. Not wanting to be in close contact	10	2.4
3. Decrease in desire	5	1.2
4. No contact at all, not being able to see each other, isolation	5	1.2
5. Inability to spare time because of the housework and children	2	0.5
No change, same	242	58.7
There was a change (it is not specified what kind of a positive/negative change occurred)	31	7.5
How they felt themselves spiritually, what they experienced in this process		
Worry, anxiety	187	45.4
Fear	66	16.0
No change	83	20.1
Stressed	22	5.3
Increase in smoking/alcohol use	32	7.8
Panic attack, feeling panic	19	4.6
Depressed, tired, sad, lonely, overwhelmed, hopeless	57	13.8
Sleep disorders	98	23.8
Increase in appetite, disorder/change in eating habits	78	18.9
Stomach problems	3	0.7

*Participants marked more than one option.

Data Analysis

Transferred to IBM SPSS Statistics package version 25 (IBM SPSS Statistics for Windows, Armonk, NY, USA) software program, data were analyzed in the computer environment. While evaluating the normal distribution suitability was checked with Shapiro–Wilk test, and due to the skewness and kurtosis indices of the unsuitable parameters being close to 0 within ± 1.96 limits and the sample average distribution getting closer to normal distribution according to numerical variables, Law of Large Numbers for $n \to \infty$,[16] parametric tests were used, evaluating the normal distribution as evidence. While evaluating the data, frequency distribution for categorical variables, descriptive statistics (mean and standard deviation) for numerical variables, multiple linear regression analysis to determine the effect between dependent and independent variables, and Cronbach's Alpha values for scale reliability were used. For the statistical significance, $P < .05$ was accepted.

Ethical Principles

To conduct the study, approval was obtained from the Ethics Committee of the Faculty of Medicine of Sakarya University (Approval Nu: 71522473/050.01.04/173, Date: 14.04.2020) and the participants' consent was obtained for participation in the study. While collecting the data, the Helsinki Declaration Principles were considered.

Findings

This study had 263 participants (63.8%) women and 36.2% (n = 149) were men. The average age of women was 33.28 ± 6.72 (min = 20, max = 66), 47.1% were university graduates, 29.36% of those who had a profession do not work during the COVID-19, 30.4%'s average monthly income was between 2400 TL and 3600 TL. The average age of men was 36.57 ± 7.75 (min = 25, max = 65), 42.3% of them were university graduates, 88.32% of them work in a job, and 27.5% had a monthly income of 2400 TL or below (Table 1).

During the days of staying at home due to the COVID-19 pandemic, 70.6% of the participants went out shopping, while 46.1% stated the positive aspects of staying at home (as nice, wonderful, pleasant [29.6%], like spending time with family/spouse), 65.5% gave negative statements (boring, gloomy, bad, awful, unhappy [48.5%], challenging, tiring [10.5%], restricted physical activity, lack of freedom, feeling

Table 3. Distribution of Mean Scale Scores by Gender

Scale	Female (n: 263)		Male (n: 149)		Total (n: 412)			
Existential anxiety scale	Min. -Max.	$\bar{x} \pm \sigma$	Min. -Max.	$\bar{x} \pm \sigma$	Min. -Max.	$\bar{x} \pm \sigma$	t	*P*
Meaninglessness anxiety	10-50	22.02 ± 7.63	10-50	21.27 ± 7.41	10-50	21.75 ± 7.55	0.970	.333
Death anxiety	5-25	10.81 ± 4.82	5-23	9.83 ± 4.25	5-25	10.46 ± 4.64	2.072	.039*
Isolation anxiety	5-25	11.71 ± 4.82	5-25	11.27 ± 4.53	5-25	11.55 ± 4.72	0.922	.357
Freedom anxiety	5-25	11.10 ± 4.49	5-25	10.81 ± 4.04	5-25	10.99 ± 4.33	0.661	.509
Total	32-107	57.44 ± 14.43	31-87	55.43 ± 12.60	31-107	56.71 ± 13.81	1.419	.157
State anxiety scale	26-76	42.66 ± 10.18	26-67	40.62 ± 9.17	26-76	41.92 ± 9.87	2.025	.044*
Trait anxiety scale	23-76	45.46 ± 10.04	22-67	40.84 ± 8.38	22-76	43.79 ± 9.72	4.755	.001*
Golombok–rust sexual satisfaction scale								
Frequency	0-8	3.78 ± 1.92	0-8	3.47 ± 1.83	0-8	3.67 ± 1.89	1.581	.115
Communication	0-8	3.43 ± 2.34	0-8	2.59 ± 2.00	0-8	3.12 ± 2.26	3.825	.001*
Satisfaction	0-16	5.16 ± 3.49	0-14	4.30 ± 3.03	0-16	4.85 ± 3.35	2.602	.010*
Avoidance	0-16	3.56 ± 3.40	0-14	1.89 ± 2.43	0-16	2.95 ± 3.18	5.792	.001*
Touching	0-15	3.86 ± 3.48	0-11	2.30 ± 2.60	0-15	3.30 ± 3.27	5.152	.001*
Vaginismus/impotence[1]	0-16	6.00 ± 3.15	0-11	3.32 ± 2.48	-	-	-	-
Anorgasmia/premature ejaculation[2]	0-16	5.14 ± 3.39	0-14	4.95 ± 2.87	-	-	-	-
Total	7-92	35.79 ± 17.91	4-64	26.3 ± 13.02	4-92	32.35 ± 16.93	6.181	.001*

[1]Vaginismus for women; impotence for men. [2]Anorgasmia for women; premature ejaculation for men. *$P < .05$; *t*, independent sample *t*-test; $\bar{x}$, average; σ, standard deviation.

like trapped, and in prison [6.6%]). The participants stated mostly (47.6%) that their relationship with their spouse was "closer, affected in a good way, increased (positively)" and/or that they "spent more time" during the days they stayed at home. In this process, 13.3% of the participants stated a positive change in their sexual intercourse, 20.4% stated that there was a negative change, and 58.7% stated that there was no change. In addition, 45.4% of individuals experienced worry, anxiety, 23.8% of them experienced sleep disturbance, and 18.9% of them experienced deterioration in eating habits/increase in appetite (Table 2).

Considering the average scores of the participants from the measurement tools, female participants got higher scores from all measurement tools. Considering the participants' mean scores from the measurement tools, it was seen that compared to men, female participants got higher scores in all types of scores of the EAS, State-Trait Anxiety Scale, and GRSSS (Table 3).

According to multiple linear regression analyses, it was determined that freedom anxiety in women predicted GRSSS communication (β = 0.094, *P* = .000) and touch (β = 0.126, *P* = .000). It was seen that trait anxiety, on the other hand, predicted all sexual intercourse qualities and functions except GRSSS communication and vaginismus (Table 4). In males, on the other hand, it was found that death anxiety predicted GRSSS total (β = .231, *P* = 0.000), touching (β = 0.337, *P* = .000), impotence (β = 0.203, *P* = .000), and premature ejaculation (β = 0.263, *P* = .000). It was found that trait anxiety affected all areas of GRSSS except premature ejaculation (Table 5).

Discussion

In life-threatening out of ordinary situations such as epidemics, pregnancy, sexual and gender-based violence, and some sexual and reproductive health problems such as sexually transmitted infections are among other health emergencies. Experts report that more problems are encountered in the event of an epidemic.[17,18] In the study, the state-trait anxiety and existential anxiety levels of married individuals during lockdown period due to COVID-19 were identified and their effects on their sexual lives were examined.

Li et al (2020) found in a sample of 270 men and 189 women in Chinese at the ages of 18-45 that 61% of the participants' sexual desires did not change. It was observed that 25% of those with a change in sexual desire had less of a sexual desire and only 14% (18% of men and 8% of women) had an increase in sexual desire.[19] In our study, a small part of the participants stated that during the period of curfew, there was a positive change in their sexual relationship, one-fifth of them said that there was a negative change, and more than half of them did not. Ballester-arnal et al (2020) determined in the study, in which they examined the effect of curfews on sexual health in Spain, that the sexual lives of approximately half of the participants (47.7%) did not change.[8] Our study findings are similar to the results of this study. On the other hand, Ibarra et al (2020) emphasized in the study, where they examined the effect of the COVID-19 pandemic on sexual behavior, that the individual's sexual desire toward their partner would decrease due to negative feelings they experience such as depression or anxiety.[20] Participants in our study experienced

Table 4. Multiple linear regression analysis results for the effect of trait, state, and existential anxiety on the quality of sexual intercourse and sexual functions in women

Dependent Variable	Independent Variable	β	Standard Error	Beta	t	P	VIF	F	Model (P)	R*	Durbin Watson
GRSSS total	(Constant)	4.470	4.721		0.947	0.345		28.002	0.001	0.171	1.899
	Trait anxiety	0.540	0.132	0.303	4.085	0.001	1.736				
	Isolation anxiety	0.578	0.275	0.156	2.100	0.037	1.736				
Frequency	(Constant)	0.520	0.510		1.019	0.309		42.734	0.001	0.137	2.149
	Trait anxiety	0.072	0.011	0.375	6.537	0.001	1.000				
Communication	(Constant)	0.933	0.526		1.776	0.077		12.084	0.001	0.078	1.879
	Meaninglessness anxiety	0.066	0.018	0.215	3.615	0.001	1.007				
	Freedom anxiety	0.094	0.031	0.180	3.029	0.003	1.007				
Satisfaction	(Constant)	-0.229	0.940		-0.244	0.807		34.407	0.001	0.113	2.064
	Trait anxiety	0.118	0.020	0.341	5.866	0.001	1.000				
Avoidance	(Constant)	-1.995	0.947		-2.106	0.036		18.151	0.001	2.049	0.116
	Trait anxiety	0.063	0.029	0.188	2.173	0.031	2.210				
	State anxiety	0.063	0.029	0.188	2.172	0.031	2.210				
Touching	(Constant)	-0.436	0.953		-0.457	0.648		13.766	0.001	0.089	1.701
	Trait anxiety	0.064	0.025	0.184	2.506	0.013	1.549				
	Freedom anxiety	0.126	0.057	0.162	2.212	0.028	1.549				
Vaginismus	(Constant)	2.741	0.808		3.394	0.001		11.012	0.001	0.071	1.951
	Isolation anxiety	0.107	0.047	0.164	2.271	0.024	1.466				
	State anxiety	0.047	0.022	0.152	2.111	0.036	1.466				
Anorgasmia	(Constant)	0.757	0.932		0.812	0.418		23.212	0.001	0.082	1.996
	Trait anxiety	0.096	0.020	0.286	4.818	0.001	1.000				

GRSSS: Golombok-rust sexual satisfaction scale.

anxiety, anxiety, sleep disturbance, and deterioration in eating habits/increased appetite. Considering this situation, the negative changes in basic vital functions such as anxiety, sleep, and eating as a result of the restrictions applied in the early stages of COVID-19 can be associated with sexual experiences.

As the results of numerous studies show, COVID-19 has had adverse effects on physiological and psychological health in the general population around the world.[3,21,22] Studies conducted in the early stages of the COVID-19 pandemic found that women experienced more anxiety, stress, and depression due to the pandemic compared to men.[23,24] In a study conducted in Iraq during the COVID-19 pandemic, women's depression and anxiety levels were high.[25] When we look at our study findings, we can say in line with the literature that women's state-trait and existential anxiety levels are higher than men on quarantine days.

The COVID-19 pandemic can cause feelings of fear, anxiety, and panic due to the effects, it has on the individual's life. Sometimes these feelings can turn into negative psychological reactions such as anxiety, depression, and sexual behavior changes.[26] These possible mood swings may be related to decreased sexual interest in couples.[27] Studies in the literature report higher rates of sexual dysfunction in patients with anxiety disorders than control groups. In addition, it seems that the loss of sexual interest is associated with anxiety disorder. In a study conducted in Italy, 7.6% of the participants reported lower levels of satisfaction in their sexual intercourse than before quarantine.[7] In a study conducted with 764 female patients in Poland, while the rate of sexual dysfunction before the pandemic was 15.3%, this rate increased to 34.3% during the curfews.[28] In addition, it was observed that the anxiety level was higher in women compared to men. Schiavi et al (2020) determined that "knowing people who have COVID-19-positive acquaintances" is an important determinant of sexual dissatisfaction in women.[7] As a result of the findings in our study, we think that the deterioration in sexual functions and the quality of intercourse is higher in women than men, and that this may be related to the pandemic-based anxiety they experience during the COVID-19.

How the individual perceives existential dynamics (meaninglessness, death, isolation, and freedom) is highly influential on the lifestyle. According to May (2012), existential anxiety is "the subjective state

Table 5. Multiple linear regression analysis results for the effect of trait, state, and existential anxiety on the quality of sexual intercourse and sexual functions in men

Dependent Variable	Independent Variable	β	Standard error	Beta	t	P	VIF	F	Model (P)	R*	Durbin Watson
Grcdö total	(Constant)	-10.472	4.781		-2.190	0.030		23.730	0.001	0.315	2.169
	Trait anxiety	0.523	0.122	0.337	4.296	0.001	1.328				
	Meaninglessness anxiety	0.397	0.121	0.226	3.271	0.001	1.029				
	Death anxiety	0.709	0.238	0.231	2.975	0.003	1.307				
Frequency	(Constant)	1.070	0.722		1.481	0.141		11.499	0.001	0.066	1.754
	Trait anxiety	0.059	0.017	0.269	3.391	0.001	1.000				
Communication	(Constant)	-1.268	0.830		-1.528	0.129		11.865	0.001	0.128	1.775
	Trait anxiety	0.062	0.019	0.261	3.349	0.001	1.028				
	Meaninglessness anxiety	0.062	0.021	0.229	2.939	0.004	1.028				
Satisfaction	(Constant)	-3.056	1.125		-2.717	0.007		22.380	0.001	0.302	2.234
	Isolation anxiety	0.253	0.061	0.379	4.122	0.001	1.789				
	Meaninglessness anxiety	0.076	0.029	0.187	2.621	0.010	1.076				
	Trait anxiety	0.071	0.034	0.196	2.106	0.037	1.834				
Avoidance	(Constant)	-2.512	0.925		-2.717	0.007		23.571	0.001	0.132	1.843
	Trait anxiety	0.108	0.022	0.372	4.855	0.001	1.000				
Touching	(Constant)	-1.447	0.709		-2.040	0.043		16.410	0.001	0.172	2.198
	Death anxiety	0.206	0.046	0.337	4.486	0.001	1.011				
	Meaninglessness anxiety	0.081	0.026	0.231	3.065	0.003	1.011				
Impotence	(Constant)	-1.495	0.919		-1.628	0.106		17.303	0.001	0.181	1.968
	Trait anxiety	0.089	0.025	0.302	3.551	0.001	1.306				
	Death anxiety	0.119	0.050	0.203	2.386	0.018	1.306				
Premature ejaculation	(Constant)	3.197	0.575		5.556	0.001		10.964	0.001	0.063	1.991
	Death anxiety	0.178	0.054	0.263	3.311	0.001	1.000				

GRSSS: Golombok-rust sexual satisfaction scale.

of the individual who realizes that existence can be destroyed, that they can lose themselves and their worlds, and that they may be non-entities and are the struggle of a living being against extinction."[29] Existential freedom is a dynamic closely related to death. It also carries the terrifying terror of the responsibility for existence. Freedom in the existential aspect means the absence of an external structure.[30] The absence of external structure means that people are responsible for their deeds, which causes anxiety in individuals.[13] Sudden and profound changes have occurred in the lives of individuals due to the restrictions and measures taken during the COVID-19.[31] In this context, as a result of our study findings, it can be assumed that due to these changes, there may be an increase in women being responsible for their behaviors and actions in protection from COVID-19, and accordingly, they experience existential freedom anxiety. It can also be said that this experienced freedom anxiety affects the areas of communication and touching in women's sexual lives.

According to the study results examining the effects of COVID-19 lockdowns on sexual life, it is reported that the stress and decrease in sexual desire are more in women than men.[8,32] In a study conducted in Spain, the causes of low sexual frequency were discovered as anxiety, stress, reluctance, and lockdowns. In addition, it was observed that the sexual life of women was affected more negatively than men, and the frequency of having sexual intercourse decreased during the curfews.[8] Our study findings showed that trait anxiety affected frequency, satisfaction, avoidance, touching, and anorgasmia. On the other hand, it is reported in the results of the research carried out during the COVID-19 that anxiety and depression rates are higher in women.[32,33] Accordingly, it can be said that the presence of trait anxiety in women in lockdown affects their sexual life in many qualitative and quantitative ways. In addition, it can be thought that the neurotic anxiety experiences of women, as a result of the existential anxiety they experience, have negatively affected their sexual lives.

One of the areas of existential anxiety faced by humans due to their existential characteristics is death anxiety. According to Yalom and Josselson (2008), death is one of the main anxiety sources. Death

anxiety dominates one's life and makes individuals worry about whether or not they live a meaningful life.[30] Death is a clear consequence of the threat of "non-existence" existentially.[34] It includes the threat of non-existence as well as a biological termination. Therefore, when people realize that their life ends in death, they experience existential anxiety.[10] In this period that we are faced with an extraordinary situation involving threats to life, we need to guarantee our existence and take measures against the elements that threaten our existence. The most important of these measures is the reproductive function. Looking at the studies examining sexual life during the COVID-19, it is seen that being a male is associated with a decrease in sexual satisfaction and sexual activity, high levels of anxiety, and an increase in the COVID-19 risk perception.[6] In our study, it can be said that the existential death anxiety experienced by men in lockdown during the COVID-19 negatively affects touching, impotence, and premature ejaculation, which are among the sexual functions and characteristics of intercourse. In a study examining the sexual behavior and experiences associated with the COVID-19 anxiety with American adults, it was reported that the frequency of hugging, kissing, masturbating/touching each other's genitals, oral sex, and penile-vaginal intercourse between spouses decreased.[9] Neurotic anxiety arises when the person's ego is unable to take on the existential anxiety experienced.[35] In our study, it is thought that in situations where the egos of men cannot cope with the existential anxiety they have experienced, all areas of their sexual life, except premature ejaculation, are affected by experiencing trait anxiety.

Limitations

Looking at the limitations of this study, the relatively small number of our sample size due to the difficulties in reaching individuals due to the management of the process and some factors that cannot be intervened, and the fact that the men and women participating in the study were not each other's spouses can be counted. The fact that the study was carried out online within a country by sharing on Facebook, Instagram, WhatsApp, etc. in a short period is another limitation. Furthermore, since the measurement tools used were based on the participants' self-reports, the results reflected only the participants' perceptions, attitudes, and behaviors.

Conclusion

In the period of lockdowns implemented within the scope of COVID-19 measures, it can be said that individuals experience moderate existential and neurotic anxiety, and there are deteriorations in sexual functions and quality of intercourse due to this anxiety. The future studies may be suggested to examine the phenomenon in more detail with qualitative research to determine its all main factors.

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Informed Consent: Written informed consent was obtained from the patient who agreed to take part in the study.

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