

ORIGINAL RESEARCH

Examination of Psychiatric Symptoms Caused by Exposure to Social Media During the COVID-19 Pandemic

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Abstract

Objective: In this study, it is aimed to examine the psychiatric symptoms that occur as a result of exposure to social media during the Covid-19 pandemic.

Methods: This study is a cross-sectional study. The study was conducted with the participation of individuals aged 18 and above living in Turkey and using social media. Individuals were invited electronically, and 532 individuals participated in the study.

Results: 57.3% of the individuals participating in the study have increased their use of social media during the COVID-19 outbreak. Depression, negative self, somatization, hostility and symptom distress index scores of individuals who were negatively affected by reading and hearing reading information, news, and stories about COVID-19 were statistically significantly higher compared to individuals who were not affected by reading and hearing information, news, and stories about COVID-19.

Conclusion: In our study, it was found that more than half of the individuals increased their use of social media during the COVID-19 outbreak. It was observed that, as the duration of social media use increased, psychiatric symptoms increased, and the increase in the use of social media during the COVID-19 outbreak, and reading and hearing information, news, and stories about COVID-19 affected the mental health of individuals negatively.

Keywords: Social Media, COVID-19, Outbreak, Psychiatric Symptoms

INTRODUCTION

The COVID-19 outbreak, which has become a widespread pandemic worldwide, continues to be a serious threat affecting the daily life at a significant level. While the information about this disease, which appeared unexpectedly in Wuhan city of Hubei province of China in December 2019, is changing from day to day, the concern and panic that have occurred due to the fast transmission of this pandemic disease and the continuous increase in the number of cases and deaths have turned into a kind of fear (1, 2). With the understanding that the pandemic is viral and highly

contagious, quarantine and social isolation measures have been resorted to at an increasing rate(3).

Our country has been trying to cope with the COVID-19 outbreak, as has been the case around the world recently. In order to be protected against this pandemic, attention is drawn to matters such as avoiding close contact, staying isolated at home, maintaining social distance in case of contact with other people, and communicating with friends of the family through voice or video calls(4). In this case, people may experience restrictions in terms of social activities while leading an isolated life at home. Although there are activities that can be carried out in home life, these activities cannot fully meet certain needs such as communication, information, news and shopping. Therefore, social media tools can be used highly by people in order to meet their needs regarding these areas, and it is thought that they can increase their social media usage levels as a result of being exposed to social media during the COVID-19 outbreak. Regularly spending time on social media causes individuals to hear the news, information and developments about COVID-19 intensively (5).

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Citation: Eren Kok H, Sagar ME. Examination of Psychiatric Symptoms Caused by Exposure to Social Media During the COVID-19 Pandemic. Psychiatry and Behavioral Sciences 2022;12(3):114-124.

Doi: 10.5455/PBS.20220405094011

Received: Apr 05, 2022

Accepted: Sep 13, 2022

As can be seen, with the increase in quarantine and social isolation due to the COVID-19 pandemic, the society has started to spend more time at home, and therefore, social media use of people has started to increase(6). Regular exposure of people to information about COVID-19 and unfounded news related to the situation on social media inevitably worry them, elevate their stress levels and negatively affect their mental health(7). A study conducted in China found that the use of social media and the state of anxiety in people increased during the COVID-19 pandemic period(8). In line with this information, it can be said that exposure to social media, which may result from the COVID-19 pandemic, which seriously affects people's lives, has effects on mental health.

The COVID 19 pandemic has taken its place among the important factors affecting mental health in the time period. Protection measures against the pandemic, social distance and quarantine processes have led individuals to stay at home and become more individualized. This situation may have increased the need for socialization of individuals. Therefore, individuals can apply to different alternatives in order to meet this need. One of these alternatives is thought to be social media. If used in moderation, it is thought that the unhealthy use of social media, which has an important place in life thanks to its different options such as socialization, communication, information and entertainment opportunities, may cause different problems by negatively affecting mental health. Therefore, determining the psychiatric problems that individuals may experience as a result of the use of social media during the COVID-19 epidemic is considered important in terms of preventive and remedial mental health studies that can be done in this regard. In addition, studies in the literature mostly focus on social media addiction and the relationship of this addiction with various variables. It is seen that the studies on the fact that an important life event such as the COVID-19 pandemic, which has gained global prevalence in recent years, can affect the exposure of individuals to social media and their psychiatric structure is quite limited. These reasons reveal the difference of this study from other studies. In addition, it makes this study an important alternative to others. In this context, the study aimed to examine the psychiatric symptoms of exposure to social media during the COVID-19 epidemic and the hypotheses determined within the scope of the research are given below.

H₁: What is the sociodemographic characteristics of individuals?

H₂: What are the individuals' Brief Symptom Inventory scores?

H₃: Do the mean scores of the Brief Symptom Inventory differ according to the sociodemographic characteristics of the individuals?

H₄: Do the mean scores of the Brief Symptom Inventory differ according to the social media usage characteristics of individuals?

H₅: Do the mean scores of the Brief Symptom Inventory differ according to the characteristics of individuals regarding COVID-19?

METHODS

In this cross-sectional study, it was aimed to examine the psychiatric symptoms that occurred as a result of exposure to social media during the Covid-19 pandemic. The study was conducted with the participation of individuals aged 18 and above living in Turkey and using social media. Since it was not possible to meet people face to face due to the pandemic, the questions were prepared in Google Forms, and the individuals were invited electronically. Therefore, the snowball sampling technique was used in the study. For the snowball sampling method, one of the units in the universe is reached in any way. Then, with the help of the contacted person, another person is contacted and then another person is contacted in the same way. Thus, the sample is enlarged in the form of a snowball effect. The researchers collected the data by sending an online questionnaire link to different chatgroups via WhatsApp, the most popular messaging app in Turkey, and Facebook. A large number of individuals were encouraged to participate in the study to ensure the diversity of the data. A large number of individuals were encouraged to participate in the study to ensure the diversity of the data. Before starting to fill out the questionnaire, the participants were informed about the scientific purposes, that the participation was voluntary and the purpose of the study. Individuals who volunteered to participate in the study were included. The inclusion criteria of the study were determined as being 18 years old and over and using social media. Data were collected between 10.05.2020-30.06.2020 Of the people meeting the research criteria, 532 participants were attended in the study. To find out the suitability of the sample size, G Power analysis was performed. The effect size was taken as 0.10 and the alpha margin of error as 0.05, and the power of the study was 0.92.

DATA COLLECTION TOOLS

The data were collected through “Personal Information Form” and “Brief Symptom Inventory (BSI)”.

Personal Information Form: The personal information form, which was developed in line with the purpose of the study, consisted of 13 questions. These questions are related to gender, age, education, marital and economic status (poor, middle and good status), having children, using social media (questions such as the years of social media usage, the duration of daily social media usage, the change in my use of social media during the pandemic period), having a psychiatric illness, and COVID-19.

Brief Symptom Inventory (BSI): It is a 53-item scale developed by Derogatis (1997) to screen various psychological symptoms, and it is scored between 0-4 (9). Turkish validity and reliability study of the scale was performed by Dağ (2001) (10). The score range is between 0-212, and a high total score obtained from the scale indicates the prevalence of the individual's symptoms. In the Turkish adaptation performed by Şahin and Durak (2002), BSI was arranged to include five sub-scales as “Anxiety”, “Depression”, “Negative Self”, “Somatization” and “Hostility”. Items in the inventory are scored between 0 and 4, which corresponds to the expressions of “none” and “too much”. *Symptom Distress Index* is obtained by dividing the sum of the sub-scales by the sum of symptoms (10). The higher the total scores obtained from the sub-scales are, the higher the mental symptoms of the individual are. The internal consistency coefficient for BSI sub-scales was calculated as 0.85 for anxiety, 0.86 for depression, 0.83 for negative self, 0.76 for somatization, and 0.73 for hostility.

Ethics committee approval

Permission was obtained from Eskişehir Osmangazi University Social and Human Sciences Scientific Research and Publication Ethics Committee on 06.05.2020 (2020-10).

Evaluation of the Data

Frequency tables and descriptive statistics were used in the interpretation of the findings. Frequency tables and descriptive statistics were used to interpret the findings. Non-parametric analyzes were performed in the evaluation of the data. In accordance with non-parametric methods, “Mann-Whitney U” test (Z-table value) for comparing the measurement values of two independent groups, “Kruskal-Wallis H” test for

comparing the measurement values of three or more independent groups (χ^2 -table value) method has been used. The notation for these non-parametric methods is “Median [Min.-Max.]”.

RESULTS

The mean age of the individuals participating in the study was found to be 24.30 ± 9.02 (years). 59.8% (318) of the individuals are women and 61.8% (239) are high school graduates. Of the individuals participating in the study, 81.6% (434) were single, 73.5% (391) had a medium economic level, and 2.6% (14) had a psychiatric diagnosis. 20.7% (110) of individuals had been using social media for 1-3 years, and 45.1% (240) for 4-6 years. 83.1% (442) of the individuals participating in the research had the opportunity to constantly connect to social media, 56.2% (299) used social media for 1-4 hours a day and 57.3% (305) increased their social media usage during the COVID-19 pandemic. 67.9% of the individuals participating in the study stated that reading and hearing information, news, and stories about COVID-19 on social media affected them negatively. It was stated that constantly reading and hearing information, news, and stories about COVID-19 on social media worried 75.2% (400) and irritated 48.7% (259) of the individuals (Table 1). The symptom distress index of the individuals was 39.75 ± 33.22 (Table 2).

In Table 3, a comparison of BSI mean scores of the individuals was made according to their sociodemographic characteristics. There is no statistically significant difference in terms of the brief symptom inventory (all subscales) scores according to the gender of the individuals. No statistically significant difference was found in terms of “Anxiety”, “Depression”, “Negative Self”, “Somatization” and “Symptom Distress Index” scores, except for the “Hostility” sub-scale, according to the educational status of the participants in the study. Hostility sub-scale scores of high school graduates were statistically significantly higher than those with undergraduate degrees. A statistically significant difference was found in terms of “Depression” and “Hostility” sub-scale scores according to the marital status of the individuals participating in the study. Depression and hostility sub-scale scores of single individuals were found to be statistically significantly higher than those of married individuals. A statistically significant difference was found in terms of brief symptom inventory (all subscales) scores according to the economic status of individuals and their status of having a psychiatric illness. The anxiety, depression, negative self,

somatization, hostility, and symptom distress index scores of those with a poor economic status were statistically significantly higher than those with a moderate and good economic status. Anxiety, depression, negative

self, somatization, hostility, and symptom distress index scores of those with a psychiatric illness were statistically significantly higher than those who did not have a psychiatric illness ($p < 0.05$).

Table 1. Descriptive features of individuals (532)

Variable		n	%
Gender	Female	318	59.8
	Male	214	40.2
Education level	High school	239	61.8
	Degree/over	203	38.2
Marital status	Married	434	81.6
	Single	98	18.4
Economic level	Bad	39	7.3
	Middle	391	73.5
	Good	102	19.2
Psychiatric diagnosis	Yes	14	2.6
	No	518	97.4
Social media usage year	< 1 year	24	4.5
	1-3 years	110	20.7
	4-6 years	240	45.1
	7-9 years	101	19.0
	> 10 years	57	10.7
Opportunity to constantly connect to social media	Yes	442	83.1
	No	90	16.9
Daily use of social media in the last month	< 1 hour	70	13.2
	1-4 hours	299	56.2
	5-8 hours	121	22.7
	> 9 hours	42	7.9
Change in the duration of social media use during the COVID-19 pandemic	Increased	305	57.3
	Decreased	29	5.5
	Unchanged	198	37.2
Contact/diagnosis with COVID-19	Yes	44	8.3
	No	488	91.7
The impact of seeing / hearing information / news / stories about COVID-19 on social media	Positive	60	11.3
	Negative	361	67.9
	It did not affect	111	20.9
Anxiety of constantly seeing / hearing information / news / stories about COVID-19 on social media	Yes	400	75.2
	No	132	24.8
Annoying to see / hear information / news / stories about COVID-19 on social media	Yes	259	48.7
	No	273	51.3

Table 2. Descriptive Statistics

Sub and Total Scale	n	X±SD	Min-Max
<i>Anxiety</i>	532	9.04±8.78	0-51
<i>Depression</i>	532	11.24±9.60	0-48
<i>Negative self</i>	532	8.83±7.53	1-38
<i>Somatization</i>	532	4.36±5.23	0-35
<i>Hostility</i>	532	6.26±5.15	0-24
<i>Symptom Distress Index</i>	532	39.75±33.22	1-193

Table 3. Comparison of the mean scores of the BSI according to the sociodemographic characteristics of the individuals

Brief Symptom Inventory						
Variable	Anxiety	Depression	Negative self	Somatizasyon	Hostility	Symptom Distress Index
Gender						
Female	6.0 [0.0-41.0]	9.0 [0.0-48.0]	7.0 [1.0-36.0]	3.0 [0.0-32.0]	5.0 [0.0-24.0]	31.0 [1.0-172.0]
Male	6.0 [0.0-51.0]	8.0 [0.0-45.0]	7.0 [1.0-38.0]	2.0 [0.0-35.0]	5.0 [0.0-24.0]	30.0 [1.0-193.0]
Statistical analysis	Z=-0.718 p=0.473	Z= -1.187 p=0.235	Z=-0.204 p=0.838	Z=-1.556 p=0.120	Z=-0.055 p=0.956	Z=-0.770 p=0.441
Education level						
High school	6.0 [0.0-39.0]	9.0 [0.0-48.0]	7.0 [1.0-36.0]	3.0 [0.0-27.0]	5.0 [0.0-24.0]	31.0 [1.0-145.0]
Degree/over	6.0 [0.0-51.0]	9.0 [0.0-45.0]	7.0 [1.0-38.0]	2.0 [0.0-35.0]	5.0 [0.0-24.0]	30.0 [1.0-193.0]
Statistical analysis	Z=-0.556 p=0.578	Z=-1.506 p=0.132	Z=-0.928 p=0.353	Z=-0.592 p=0.554	Z=-1.975 p=0.048	Z=-1.272 p=0.203
Marital status						
Married	6.0 [0.0-41.0]	9.0 [0.0-38.0]	7.0 [1.0-36.0]	3.0 [0.0-32.0]	5.0 [0.0-24.0]	31.0 [1.0-172.0]
Single	6.0 [0.0-51.0]	8.0 [0.0-48.0]	7.0 [1.0-38.0]	2.0 [0.0-35.0]	4.0 [0.0-24.0]	31.0 [1.0-193.0]
Statistical analysis	Z=-1.332 p=0.183	Z=-2.238 p=0.025	Z=-0.610 p=0.542	Z=0.228 p=0.820	Z=-2.269 p=0.023	Z=-1.500 p=0.134
Economic level						
Bad ¹	8.0 [0.0-41.0]	12.0 [0.0-48.0]	9.0 [1.0-31.0]	6.0 [0.0-32.0]	7.0 [1.0-23.0]	41.0 [4.0-172.0]
Middle ²	6.0 [0.0-39.0]	9.0 [0.0-45.0]	6.0 [1.0-36.0]	3.0 [0.0-27.0]	5.0 [0.0-23.0]	31.0 [1.0-159.0]
Good ³	6.0 [0.0-51.0]	6.0 [0.0-45.0]	6.0 [1.0-38.0]	2.0 [0.0-35.0]	5.0 [0.0-24.0]	25.0 [1.0-193.0]
Statistical analysis	$\chi^2=10.195$ p=0.006 [1-2,3]	$\chi^2= 8.273$ p=0.016 [1-2,3]	$\chi^2=6.452$ p=0.040 [1-2,3]	$\chi^2=8.574$ p=0.014 [1-2,3]	$\chi^2=8.584$ p=0.014 [1-2,3]	$\chi^2=9.223$ p=0.010 [1-2,3]
Psychiatric diagnosis						
Yes	28.0 [3.0-41.0]	24.0 [4.0-48.0]	23.5 [8.0-32.0]	12.0 [4.0-32.0]	20.0 [8.0-23.0]	106.0 [34.0-172.0]
No	6.0 [0.0-51.0]	8.0 [0.0-45.0]	6.0 [1.0-38.0]	3.0 [0.0-35.0]	5.0 [0.0-24.0]	30.0 [1.0-193.0]
Statistical analysis	Z=-4.379 p=0.000	Z=-4.150 p=0.000	Z=-4.846 p=0.000	Z=-5.200 p=0.000	Z=-5.573 p=0.000	Z=-5.074 p=0.000

There is no statistically significant difference in terms of the brief symptom inventory (all subscales) scores of the individuals participating in the study according to the years of social media usage ($p > 0.05$). A statistically significant difference was found in terms of all subscale scores, except for the somatization subscale, according to the individuals' constant social media connection in the last month ($p < 0.05$). The anxiety, depression, negative self, hostility, and symptom distress index scores of individuals who were not always able to connect to social media were statistically significantly higher than those who had the opportunity to constantly connect. A statistically significant difference was found in terms of the brief symptom inventory (all subscales) scores of the individuals included in the study compared to their daily social media use in the last month ($p < 0.05$).

Anxiety, depression, negative self, somatization, hostility and symptom distress index scores of individuals who used social media for 1-4 hours a day were statistically significantly higher than those with social media use less than 1 hour a day. Anxiety, depression, negative self, somatization, hostility and symptom distress index scores of individuals with a daily social media usage time of 1-4 hours were statistically significantly higher than individuals whose daily social media use was less than 1 hour and between 5-8 hours. Anxiety, depression, negative self, somatization, hostility and symptom distress index scores of individuals who used social media for more than 9 hours a day were statistically significantly higher than individuals with daily social media use between 5-8 hours. A statistically significant difference was found in terms of the brief symptom inventory (all subscales) scores

according to the change in the duration of social media use in the COVID process of individuals.(p<0.05). The anxiety, depression, somatization and symptom distress index scores of individuals who increased the duration of their social media use during the COVID process were statistically significantly higher than those who did not

change the duration of their social media use. Negative self and hostility scores of the individuals who increased the duration of their social media use during the COVID process were statistically significantly higher than those whose duration of social media use decreased or did not change (Table 4).

Table 4. Comparison of the mean scores of the BSI according to the Characteristics of the Individuals Using Social Media

Brief Symptom Inventory						
Variable	Anxiety	Depression	Negative self	Somatization	Hostility	Symptom Distress Index
Social media usage year						
< 1 year ¹	6.0 [0.0-35.0]	7.0 [0.0-45.0]	6.0 [1.0-31.0]	3.0 [0.0-26.0]	5.5 [0.0-22.0]	27.0 [1.0-159.0]
1-3 years ²	5.0 [0.0-41.0]	7.0 [0.0-48.0]	5.5 [1.0-30.0]	2.0 [0.0-32.0]	4.0 [0.0-24.0]	26.0 [1.0-172.0]
4-6 years ³	7.0 [0.0-38.0]	10.0 [0.0-38.0]	7.0 [1.0-31.0]	3.0 [0.0-27.0]	5.0 [0.0-23.0]	32.0 [1.0-133.0]
7-9 years ⁴	6.0 [0.0-51.0]	9.0 [0.0-45.0]	8.0 [1.0-38.0]	3.0 [0.0-35.0]	6.0 [0.0-24.0]	32.0 [1.0-193.0]
> 10 years ⁵	6.0 [0.0-26.0]	6.0 [0.0-35.0]	6.0 [1.0-36.0]	2.0 [0.0-13.0]	5.0 [0.0-20.0]	28.0 [0.0-110.0]
Statistical analysis	$\chi^2=6.305$ p=0.177	$\chi^2= 9.071$ p=0.059	$\chi^2=6.671$ p=0.154	$\chi^2=3.492$ p=0.479	$\chi^2=6.473$ p=0.167	$\chi^2=7.268$ p=0.122
Opportunity to constantly connect to social media						
Yes	6.0 [0.0-51.0]	8.0 [0.0-48.0]	6.0 [1.0-38.0]	2.5 [0.0-35.0]	5.0 [0.0-24.0]	30.0 [1.0-193.0]
No	8.0 [0.0-38.0]	11.0 [0.0-45.0]	7.0 [1.0-31.0]	4.0 [0.0-26.0]	6.0 [0.0-22.0]	38.5 [1.0-159.0]
Statistical analysis	Z=2.537 p=0.011	Z= 2.008 p=0.045	Z=1.427 p=0.000	Z=21.385 p=0.154	Z=2.326 p=0.020	Z=2.358 p=0.018
Daily use of social media in the last month						
< 1 hour ¹	6.0 [0.0-38.0]	7.5 [0.0-34.0]	6.0 [1.0-31.0]	2.0 [0.0-19.0]	4.0 [0.0-20.0]	29.0 [1.0-132.0]
1-4 hours ²	6.0 [0.0-51.0]	8.0 [0.0-48.0]	6.0 [1.0-38.0]	2.0 [0.0-35.0]	5.0 [0.0-24.0]	29.0 [1.0-193.0]
5-8 hours ³	6.0 [0.0-36.0]	9.0 [0.0-41.0]	6.0 [1.0-36.0]	3.0 [0.0-32.0]	5.0 [0.0-23.0]	29.0 [1.0-162.0]
> 9 hours ⁴	13.0 [0.0-39.0]	18.5 [0.0-38.0]	14.5 [2.0-30.0]	8.0 [0.0-22.0]	10.5 [0.0-22.0]	65.0 [8.0-145.0]
Statistical analysis	$\chi^2=17.176$ p=0.001 [1-4, 2-3, 3-4]	$\chi^2= 30.426$ p=0.000 [1-4, 2-3, 3-4]	$\chi^2=23.592$ p=0.000 [1-4, 2-3, 3-4]	$\chi^2=25.401$ p=0.000 [1-4, 2-3, 3-4]	$\chi^2=27.026$ p=0.000 [1-4, 2-3, 3-4]	$\chi^2=27.026$ p=0.000 [1-4, 2-3, 3-4]
Change in the duration of social media use during the COVID-19 pandemic						
Increased	8.0 [0.0-41.0]	11.0 [0.0-48.0]	8.0 [1.0-36.0]	3.0 [0.0-32.0]	6.0 [0.0-23.0]	35.0 [1.0-172.0]
Decreased	6.0 [0.0-21.0]	8.0 [0.0-27.0]	5.0 [1.0-25.0]	3.0 [0.0-15.0]	3.0 [0.0-13.0]	32.0 [1.0-193.0]
Unchanged	4.5 [0.0-51.0]	7.0 [0.0-45.0]	5.0 [1.0-38.0]	2.0 [0.0-35.0]	5.0 [0.0-24.0]	25.0 [1.0-193.0]
Statistical analysis	$\chi^2=27.541$ p=0.000 [1-3]	$\chi^2= 25.284$ p=0.000 [1-3]	$\chi^2=25.385$ p=0.000 [1-2,3]	$\chi^2=21.385$ p=0.000 [1-3]	$\chi^2=21.864$ p=0.000 [1-2,3]	$\chi^2=27.597$ p=0.000 [1-3]

Table 5 shows the comparison of BSI mean scores according to the characteristics of individuals related to COVID-19. A statistically significant difference was found in terms of "Anxiety", "Depression", "Somatization" and "Symptom Distress Index" scores of individuals according to the status of being diagnosed with COVID-19 or having someone diagnosed with COVID-19 in their immediate surrounding ($p < 0.05$). The anxiety, depression, somatization, and symptom distress index scores of those who were diagnosed with COVID-19 or had someone with COVID-19 diagnosis around them were statistically significantly higher than those who were not diagnosed with COVID-19 diagnosis or had someone diagnosed around them. According to the effect of constantly reading/hearing the information/news/stories about COVID-19 on social media on the participants of the research, a statistically significant difference was determined in terms of "brief symptom inventory (all subscales) scores ($p < 0.05$). Depression, negative self, somatization, hostility and symptom distress index scores of individuals who were negatively affected by reading and hearing information, news, and stories about COVID-19 were statistically significantly higher compared to individuals who were not affected by reading and hearing information, news, and stories about COVID-19. The anxiety scores of individuals who were negatively affected by reading and hearing

information, news, and stories about COVID-19 were statistically significantly higher than those who were positively affected by reading and hearing the information/news/stories about COVID-19. According to the effect of constantly reading/hearing the information/news/stories about COVID-19 on social media on the individuals, a statistically significant difference was determined in terms of brief symptom inventory (all subscales) scores ($p < 0.05$). Anxiety, depression, negative self, somatization, hostility and symptom distress index scores of individuals who were constantly concerned about reading and hearing information/news/stories about COVID-19 on social media were statistically significantly higher than those who were not worried about this situation. According to the individuals' annoyance at constantly reading/hearing the information/news/stories about COVID-19 on social media, a statistically significant difference was determined in terms of "Anxiety", "Depression", "Negative Self", "Somatization", "Hostility" and "Symptom Distress Index" scores ($p < 0.05$). The anxiety, depression, negative self, somatization, hostility and symptom distress index scores of individuals who were annoyed by reading and hearing information, news, and stories about COVID-19 on social media were statistically significantly higher than those who were not annoyed.

Table 5. Comparison of the BSI mean scores according to the characteristics of individuals related to COVID-19

Brief Symptom Inventory						
Variable	Anxiety	Depression	Negative self	Somatization	Hostility	Symptom Distress Index
Contact/diagnosis with COVID-19						
Yes	10.0 [0.0-51.0]	14.0 [0.0-45.0]	7.5 [1.0-38.0]	4.0 [0.0-35.0]	7.0 [0.0-24.0]	53.0 [1.0-193.0]
No	6.0 [0.0-41.0]	8.0 [0.0-48.0]	6.5 [1.0-31.0]	2.5 [0.0-32.0]	5.0 [0.0-24.0]	30.5 [1.0-172.0]
Statistical analysis	Z=-2.088 p=0.037	Z= -2.229 p=0.026	Z=-1.322 p=0.186	Z=-2.516 p=0.012	Z=-1.940 p=0.052	Z=-2.272 p=0.023
The impact of seeing / hearing information / news / stories about COVID-19 on social media						
Positive	5.5 [0.0-34.0]	8.0 [0.0-34.0]	5.5 [1.0-28.0]	2.5 [0.0-16.0]	4.5 [0.0-17.0]	25.0 [1.0-110.0]
Negative	7.0 [0.0-251.0]	10.0 [0.0-48.0]	7.0 [1.0-38.0]	3.0 [0.0-15.0]	6.0 [0.0-24.0]	33.0 [1.0-193.0]
It did not affect	4.0 [0.0-35.0]	6.0 [0.0-34.0]	4.0 [1.0-31.0]	2.0 [0.0-27.0]	5.0 [0.0-24.0]	22.0 [1.0-193.0]
Statistical analysis	$\chi^2=30.504$ p=0.000 [2-1,3]	$\chi^2= 23.123$ p=0.001 [2,3]	$\chi^2=18.794$ p=0.002 [2,3]	$\chi^2=15.378$ p=0.000 [2,3]	$\chi^2=8.254$ p=0.016 [2,3]	$\chi^2=22.918$ p=0.000 [2-3]
Anxiety of constantly seeing / hearing information / news / stories about COVID-19 on social media						
Yes	7.0 [0.0-51.0]	10.0 [0.0-48.0]	7.0 [1.0-38.0]	3.0 [0.0-35.0]	6.0 [0.0-24.0]	33.0 [1.0-193.0]
No	3.5 [0.0-35.0]	5.0 [0.0-34.0]	4.0 [1.0-31.0]	2.0 [0.0-27.0]	3.0 [0.0-23.0]	20.0 [1.0-133.0]
Statistical analysis	Z=-5.882 p=0.000	Z=-5.438 p=0.000	Z=-4.980 p=0.000	Z=-4.417 p=0.000	Z=-4.289 p=0.000	Z=-5.540 p=0.000
Annoying to see / hear information / news / stories about COVID-19 on social media						
Yes	9.0 [0.0-51.0]	12.0 [0.0-48.0]	9.0 [1.0-38.0]	4.0 [0.0-35.0]	6.0 [0.0-24.0]	40.0 [1.0-193.0]
No	5.0 [0.0-35.0]	6.0 [0.0-38.0]	5.0 [1.0-36.0]	2.0 [0.0-27.0]	4.0 [0.0-20.0]	24.0 [1.0-133.0]
Statistical analysis	Z=-6.729 p=0.000	Z=-7.262 p=0.000	Z=-6.178 p=0.000	Z=-6.577 p=0.000	Z=-6.380 p=0.000	Z=-7.410 p=0.000

DISCUSSION

In the study, the effects of individuals' exposure to social media during the COVID-19 pandemic process on mental health were examined. It was determined that the majority of individuals participating in the study had the opportunity to constantly connect to social media, and that more than half of them increased their use of social media during the COVID-19 outbreak. In their study, Gao et al. (2020) found that individuals were frequently exposed to social media during the pandemic process(8). Social media is one of the easy channels to keep up to date on the COVID-19 outbreak. It is expected that individuals' use of social media will increase during the pandemic period. In our study, it was revealed that constantly reading and hearing information, news, and stories about the COVID-19 pandemic on social media negatively affected and worried the individuals, and again, the majority of them experienced annoyance due to this situation. Being constantly exposed to news about the pandemic on social media negatively affected the mood of individuals. Panic spread faster than the virus on social media, increasing people's anxiety. The World Health Organization reports that misinformation and confusion about the pandemic on social media create fear in people (7).

According to the gender variable of the participants, it was concluded that there was no significant difference in terms of anxiety, depression, negative self, somatization, hostility and symptom distress index scores. In some studies conducted during the COVID-19 pandemic process, it was revealed that the female gender was under more risky in terms of psychiatric diseases (2, 3, 11). Depression and hostility scores of married individuals were found to be higher than those who were single in the current study. Married individuals have more responsibilities than single individuals. Worrying about the health of the individuals in the family other than themselves in the pandemic process may have affected them negatively (2).

Anxiety, depression, negative self, somatization, hostility and symptom distress index levels of those with poor economic status were found to be higher than those with moderate and good economic status. The pandemic process affects human life in all aspects, and one of the important dimensions it affects is economy. The bad economic situation will further affect the mental health of individuals in a difficult period such as a pandemic. Therefore, poor economy is an important risk factor in terms of mental illnesses (12). It was concluded that those with a psychiatric illness had higher anxiety,

depression, negative self, somatization, hostility, and symptom distress index scores than those without a psychiatric illness. During the pandemic, one of the risky groups in terms of mental diseases are those with psychiatric diseases(11, 13).

According to being constantly connected to social media in the last one month, it was discovered that the anxiety, depression, negative self, hostility, and symptom-distress index scores of the participants who did not have the means to constantly connect to social media were higher than those who had the opportunity to continuously connect to social media in the last month. In the meta-analysis study conducted by Hussain et al. (2020), it was seen that there was a positive relationship between social media use and depression(14). In their study in Italy, Cellini et al. (2020) reached the conclusion that individuals who were locked down in their homes due to the COVID-19 pandemic increased the frequency of their digital media use before going to bed, that the duration of staying at home and the timing of sleep changed significantly, and that people with higher symptoms of depression, anxiety and stress had more difficulty in sleeping(15). The reason for the different results obtained in this study may be due to the fact that the constant connection to social media during the pandemic period has caused people to feel lonely by reducing their sociability, and this situation may have been found risky in terms of psychiatric diseases.

According to participants' daily social media usage in the last month, anxiety, depression, negative self, somatization, hostility, and symptom distress index scores were higher in individuals that used social media for 1-4 hours a day compared to those who used social media for less than 1 hour a day. The relevant scores of individuals who used social media for 1-4 hours a day were higher than individuals whose daily social media use was less than 1 hour and between 5-8 hours, and the scores of those with a daily social media use of more than 9 hours were found to be higher than those with 5-8 hours of daily social media use. Ni et al. (2020) found that spending more than 2 hours a day on COVID-19 news via social media and close contact with individuals with COVID-19 was associated with potential anxiety and depression in adults(6). In another study carried out by Huang and Zhao (2020), it was determined that spending time focusing on the COVID-19 outbreak for 3 hours or more per day was associated with general anxiety disorder (16). Accordingly, it can be thought that psychiatric symptoms may increase as the duration of social media use increases.

According to the change in the duration of participants' social media use during the COVID-19 process, anxiety, depression, negative self, somatization, hostility and symptom distress index scores of the participants whose duration of social media use increased during the COVID-19 process were higher than those without change in the duration of social media use, and negative self and hostility scores of the individuals, whose duration of social media use increased during the COVID-19 process, were determined to be higher than those without a decrease and change in the duration of social media use. In a study conducted by Gao et al. (2020), it was found that social media use negatively affected mental health (8). During the COVID-19 pandemic process, the finding related to the change in the duration of social media use and the fact that individuals lived physically alone and distant from other people and led a more digital life may have seriously affected their mental health. It was found that the anxiety, depression, somatization, and symptom distress index scores of the participants who were diagnosed with COVID-19 or who had someone diagnosed with the disease in their surroundings were higher than those who were not diagnosed with COVID-19 or had someone diagnosed with the disease in their circles. In this context, it can be said that being diagnosed with COVID-19 or having someone diagnosed with the disease around them may lead to anxiety, depression, somatization and symptom distress.

Individuals who were negatively affected by reading and hearing information, news, and stories about COVID-19 had higher scores in terms of depression, negative self, somatization, hostility and symptom distress index compared to individuals who were not affected by reading and hearing information, news, and stories about COVID-19, and the anxiety scores of individuals who were negatively affected by reading or hearing information, news, and stories about COVID-19 were higher than the scores of the individuals who were positively affected by reading and hearing information, news, and stories about COVID-19. When the literature was reviewed, in a similar study conducted by Karadağ and Akçınar (2019), the relationship between the use of social media as a support tool and the levels of depression, somatization and obsessive-compulsive disorder was examined, and it was determined that depression, somatization and obsessive-compulsive disorder levels of those who saw social media as a support tool were higher than those who did not see it as a support tool (17). In a study conducted by Zhang and Ma (2020)

in China on the effects of the COVID-19 outbreak on mental health, it was found that this situation created stress on individuals. Accordingly, one of the reasons for the finding in the study that reading and hearing information, news, and stories about COVID-19 on social media negatively affected individuals, which may cause psychiatric symptoms in individuals, may be that the pandemic was considered serious on social media during the research.

In this study, it was found that the anxiety, depression, negative self, somatization, hostility and symptom distress index scores of individuals who were constantly concerned about reading and hearing information, news, and stories about COVID-19 on social media were higher than those who were not worried about this situation. Consistent with this result of the study, in the study conducted by Gao et al. (2020), more than 80% of the participants stated that they were involuntarily exposed to social media, and a positive correlation with high rates of anxiety was found when frequent exposure to social media and being less exposed to social media were compared. In the study conducted by Zhang and Ma (2020), it was determined that more than half of the participants were terrified and felt anxious due to the COVID-19 pandemic. In line with this information, in this study, the finding that reading and hearing information, news, and stories about COVID-19 on social media may cause anxiety, which may lead to depression, negative self, somatization, hostility and symptom distress in individuals, may have stemmed from the fact that individuals were misinformed about the severity of the COVID-19 virus on social media environments (18).

There was a significant difference in terms of anxiety, depression, negative self, somatization, hostility and symptom distress index scores of the participants according to the variable of being annoyed by reading information, news, and stories about COVID-19 on social media, and it was concluded that the anxiety, depression, negative self, somatization, hostility and symptom distress index scores of the individuals who were annoyed by reading and hearing information, news, and stories about COVID-19 on social media were significantly higher than those who did not get annoyed. When the literature was examined, no finding related to this result of the study was found; however, Sultani et al. (2018) found that Internet addiction had an impact on mental health, and the participants addicted to the Internet felt more nervous, anxious, nervous, restless and tired compared to non-addicted participants (19). In this context, the finding that the exposure to social media

used via the Internet due to COVID-19 and reading and hearing information, news, stories about COVID-19 on social media may annoy individuals, which in turn may lead to anxiety, depression, negative self, somatization, hostility and symptom distress, may result from the presentation of the COVID-19 pandemic constantly and strikingly instead of meeting the need of individuals to use social media for relaxing by focusing on different materials.

Limitations

There are some limitations to the research. The findings of the study are based on the individuals' self-reports. Therefore, the generalizability of the obtained findings can be seen as a limitation of this study. Thus, larger-scale studies can be conducted with different and larger samples or age groups similar to this study. In addition, the research group is limited to individuals over the age of 18 only. In this context, a similar research can be conducted on different research groups (adolescents, primary and secondary school students, etc.) except for individuals over the age of 18. Another limitation of this study is that it is a cross-sectional study. Therefore, this research does not reveal cause-effect relationships. In future studies, cause-effect relationships can be examined by using experimental methods. Since the data of this study were collected online during the COVID-19 pandemic, it can be said that the data are limited in terms of evaluating psychiatric symptoms. It can be thought that pandemic rules such as mask, social distance, hygiene and quarantine may make differences on the psychiatric conditions of individuals. In this regard, a similar study can be repeated after the pandemic bans are relaxed a little or after the pandemic rules are completely eliminated. The study was limited to the psychiatric symptoms of social media exposure during the COVID-19 outbreak. Undoubtedly, the COVID-19 pandemic has affected individuals in different ways. Therefore, different effects of the COVID-19 outbreak can be investigated in other studies. Although this study has some limitations stated above, it has revealed important results on the psychiatric symptoms of social media exposure during the COVID-19 epidemic. In this context, intervention programs that will reduce the psychiatric problems of individuals and increase their quality of life can be prepared and implemented. Studies can be carried out to improve the mental health of individuals by organizing training programs and seminars on this subject.

CONCLUSION

In our study, it was found that more than half of the individuals increased their use of social media during the COVID-19 outbreak. During the course of the COVID-19 pandemic, individuals who were married, had a poor economic level and had a psychiatric disease were found to be psychologically at higher risk. Psychiatric symptoms increase as the duration of social media use increases. During the COVID-19 pandemic, the increase in social media use and reading and hearing information, news, and stories about COVID-19 have negatively affected the mental health of individuals. It is important for mental health professionals to inform the public about the use of social media that may negatively affect the mental health of the society during the pandemic. During the course of the COVID-19 epidemic, individuals who were married, had a poor economic level and had a psychiatric disease were found to be more psychologically risky.

Funding: The authors received no specific funding for this work.

Data Availability: The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Compliance with Ethical Standards

Conflict of Interest: The authors declare that they have no conflict of interest.

Ethical Approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent: Informed consent was obtained from all individual participants included in the study

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