

# Analysis of nursing students' obsessive and coping behaviors during the COVID-19 pandemic

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## Abstract

**Purpose:** This study was conducted to examine the obsessive behaviors and coping behaviors of nursing students during the coronavirus disease 2019 (COVID-19) pandemic.

**Design and Methods:** This descriptive study was conducted between October 4 and October 17, 2020.

**Findings:** In this study, it was found that nursing students had a mean total COVID-19 Obsessive Compulsive Scale score of  $3.88 \pm 3.02$  and a mean total Ways of Coping Inventory (WCI) score of  $47.05 \pm 11.68$ . When the subscales of the WCI were examined, mean scores were found to be  $13.64 \pm 4.85$  for the self-confident approach,  $8.91 \pm 3.35$  for the optimistic approach,  $7.25 \pm 2.24$  for the seeking social support approach,  $10.97 \pm 4.43$  for the helpless approach, and  $6.24 \pm 3.20$  for the submissive approach.

**Practice Implications:** Nursing students have low levels of obsession with COVID-19 and moderate levels of coping behaviors. For this reason, it is very important to recognize the psychological symptoms of today's nursing students—the health workforce of the future—and to determine priorities for their solution.

## KEYWORDS

coping behaviors, COVID-19, nursing students, obsessive behavior

## 1 | INTRODUCTION

Pneumonia cases of unknown cause were reported by the World Health Organization (WHO) in the city of Wuhan, China, on December 31, 2019. Chinese authorities defined the cause of the cases as a novel coronavirus (coronavirus disease 2019 [COVID-19]).<sup>1</sup> On January 20, 2020, this novel coronavirus, which spread rapidly, was declared an emergency by the WHO.<sup>1</sup> Later, on March 11, 2020, it was declared a pandemic by the WHO. At the beginning of the pandemic period, a large number of governments had to take important decisions and measures that radically changed social and/or business life, such as isolation, social distancing rules, curfews, and changes in the working hours of workplaces.<sup>1,2</sup>

As COVID-19 infection continues to increase around the world, conditions such as high infection, increasing deaths, and COVID-19-related social isolation have caused many people's lives to get worse.<sup>2</sup> Studies have shown that a great majority of individuals have begun to experience psychological symptoms such as moderate to high levels of depression, fear, anxiety, somatization, insomnia, psychoticism, and obsession during this pandemic.<sup>3–12</sup>

Obsession is one of the defense mechanisms used by our minds; it is defined as thoughts constantly repeating in the mind that occurs when we are mentally stressed, restless, and helpless.<sup>13,14</sup> During this pandemic, television, newspapers, and social media frequently emphasize that measures such as washing hands, wearing a mask, not entering a house wearing shoes, and washing things brought

from outside should be taken. For some individuals, this situation goes too far, and they become stressed and worried, causing the occurrence of various obsessive situations.<sup>13,15</sup> These obsessive situations include obsession with contamination and being infected, obsession with getting news about the disease, being unable to stop watching TV, obsession with following the news on the internet, obsession with being in control, which causes the individual to show excessive control to protect themselves and those around them from the disease, and compulsive hoarding, which causes the individual to stockpile food or cleaning products in the house.<sup>13</sup>

The COVID-19 pandemic has not only affected people's psychological symptoms, but also has caused coping behaviors to be affected.<sup>16</sup> Coping is a dynamic process in which the individual and the environment interact with and affect each other to control the negative effects of a series of stressful cognitive and behavioral events or situations.<sup>17</sup> Stress can be eliminated if the symptoms of stress are dealt with, but when coping mechanisms are ineffective, various negative feelings and psychological symptoms may occur.<sup>18</sup>

Healthcare professionals are considered a high-risk group in terms of psychological symptoms during the COVID-19 pandemic.<sup>19,20</sup> It is very important to understand the psychological effects of the COVID-19 pandemic and to analyze coping behaviors to maintain the psychological well-being of healthcare professionals.<sup>21</sup> Considering that the majority of healthcare professionals consists of nurses,<sup>22–24</sup> the aim of the present study was to analyze the obsessive behaviors and coping behaviors of nursing students, who are the nurses of the future and who will work on the frontline during the COVID-19 pandemic.

## 2 | MATERIALS AND METHODS

### 2.1 | Study design

The present study used a cross-sectional study design.

### 2.2 | Population and sample

The study was conducted between October 4 and October 17, 2020. A nonrandom sampling method, the snowball sampling method, was used in the study. Data-collection forms prepared with the Google Docs program were sent online (email, WhatsApp) to students studying in nursing departments in Turkey, and they were asked to fill in the forms and share them with people around them. Twelve hundred students were reached with this questionnaire. Of those reached, 48% did not agree to participate in the study (52% participation). Six-hundred twenty-eight nursing students who answered the questionnaire were included in the study. In the literature review, the total sample size found using the G\*POWER program was calculated as  $n = 628$ , with a 0.13150 effect size, 95% power, and a 0.05 error margin, based on the percentage measurement values for

the methods to be studied. Power analysis showed that the data collected was sufficient.

## 2.3 | Data-collection tools

The data were collected using a personal information form, the Obsession with COVID-19 Scale (OCS), and the Ways of Coping Inventory (WCI).

### 2.3.1 | Personal information form

This form, which was prepared by the researchers in line with the literature, included information about the nursing students' age, gender, marital status, and information about COVID-19.

### 2.3.2 | Obsession with COVID-19 Scale (OCS)

This scale has been developed to help effectively identify COVID-19-related thought patterns and individuals with impaired functionality. Each item of the OCS is rated on a 5-point scale from 0 (not at all) to 4 (almost every day) based on their experience over the past 2 weeks. A total OCS score  $\geq 7$  indicates dysfunctional thinking associated with COVID-19. High scores on a particular item or a high total scale score ( $\geq 7$ ) indicate that an individual's problematic symptoms may require a more advanced assessment and/or treatment.<sup>5</sup>

### 2.3.3 | Ways of Coping Inventory (WCI)

This scale was developed by Folkman and Lazarus.<sup>25</sup> The scale, which was adapted into Turkish and shortened by Şahin and Durak,<sup>26</sup> consists of 30 items.<sup>26</sup> It includes five subscales: the self-confident approach subscale (seven items), the optimistic approach subscale (five items), the helpless approach subscale (eight items), the submissive approach subscale (six items), and the seeking social support approach subscale (four items). The scale is answered on a 4-point scale, from 0 (*not at all suitable*) to 3 (*very suitable*). However, items 1 and 9 are reverse coded. High scores from the subscales mean that individuals use the related approach more. Cronbach's  $\alpha$  coefficients of the scale were found to be between 0.62 and 0.80 for the self-confident approach, between 0.49 and 0.68 for the optimistic approach, between 0.64 and 0.73 for the helpless approach, between 0.47 and 0.72 for the submissive approach, and between 0.45 and 0.47 for the seeking social support approach.<sup>26</sup> In the present study, Cronbach's  $\alpha$  coefficients of the scale were found to be 0.91 for the self-confident approach, 0.82 for the optimistic approach, 0.74 for the helpless approach, 0.65 for submissive approach, and 0.48 for the seeking social support approach. The total Cronbach's  $\alpha$  coefficient of the scale was found to be 0.85.

## 2.4 | Data assessment

In this study, descriptive statistics of the variables were given as number, percentage, arithmetic mean, and standard deviation. An independent samples *t* test was used to compare two independent groups, while the Mann–Whitney *U* test was used when the numerical variables were not normally distributed. Analysis of variance (ANOVA) was used to compare more than two independent groups, while the Kruskal–Wallis test was used when the numerical variables were not normally distributed. Spearman's correlation coefficient was used to analyze the correlation between numerical variables. Statistical analyses were conducted with SPSS version 25, and level of significance was taken to be 0.05 (*p* value).

## 2.5 | Ethical considerations

Approval was obtained from the Ethics Committee (number 2020/09) of a university before starting the study. The form as well as necessary explanations about the purpose and application method of the study were sent online to students and their consent was taken. This study was conducted in accordance with the ethical standards of the Declaration of Helsinki. Participants included in the study were volunteers and their personal information was kept confidential.

## 3 | RESULTS

The mean age of participants in the study was  $20.99 \pm 2.14$ , 76.4% were female, 35.4% were in their first year, 75.3% had a nuclear family, 45.7% were living in the Eastern Anatolia Region, 71.5% had sufficient information about COVID-19, 51.6% thought COVID-19 measures were sufficient, and 77.5% stated that they did not have anyone around them diagnosed with COVID-19 (Table 1)

In this study, it was found that the nursing students had a mean total OCS score of  $3.88 \pm 3.02$  and a mean total WCI score of  $47.05 \pm 11.68$ . When the subscales of the WCI were analyzed, it was found that the self-confident approach subscale had a mean score of  $13.64 \pm 4.85$ , the optimistic approach subscale had a mean score of  $8.91 \pm 3.35$ , the social support approach subscale had a mean score of  $7.25 \pm 2.24$ , the helpless approach subscale had a mean score of  $10.97 \pm 4.43$ , and the submissive approach subscale had a mean score of  $6.24 \pm 3.20$  (Table 2).

When nursing students' descriptive features and their mean OCS and WCI scale scores were compared, a statistically significant difference was found between the WCI total and the WCI seeking social support and helpless approach subscale scores in terms of gender ( $p < 0.05$ ). While no significant difference was found between the mean total OCS and mean total WCI scores, a statistically significant difference was found between the mean OCS and the WCI seeking social support approach subscale scores in terms of family type ( $p < 0.05$ ). A statistically significant difference was found between the mean total WCI score and the WCI self-confidence and

**TABLE 1** Distribution of descriptive features of nursing students

Descriptive features	N	%
Gender		
Female	480	76.4
Male	148	23.6
Year of study		
1st year	222	35.4
2nd year	138	22.0
3rd year	179	28.5
4th year	89	14.2
Type of family		
Nuclear family	473	75.3
Extended family	140	22.3
Broken family	15	2.4
Region nurses lived in		
Eastern Anatolia Region	287	45.7
South-eastern Anatolia Region	226	36
Central Anatolia Region	34	5.4
Marmara Region	15	2.4
Mediterranean Region	44	7
Black Sea Region	22	3.5
The state of having sufficient information about COVID-19		
Yes	449	71.5
No	37	5.9
Undecided	142	22.6
The state of thinking that COVID-19 measures are sufficient		
Yes	324	51.6
No	136	21.7
Undecided	168	26.8
The state of having someone around diagnosed with COVID-19		
Yes	141	22.5
No	487	77.5
Mean age	20.99 ± 2.14	

Abbreviation: COVID-19, coronavirus disease 2019.

optimistic approach scores in terms of the region that nursing students were living in ( $p < 0.05$ ). A statistically significant difference was found between mean WCI self-confidence, optimistic, and social support approach subscale scores in terms of having sufficient information about COVID-19 ( $p < 0.05$ ). A statistically significant difference was found between the mean total OCS score and the WCI self-confident, optimistic, helpless, and submissive approach subscale scores in terms of thinking that COVID-19 measures were sufficient ( $p < 0.05$ ). A statistically significant difference was found between

**TABLE 2** Distribution of mean OCS and WCI scores of nursing students

Scales	Min. score	Max. score	X ± SD
WCI Total	3	82	47.05 ± 11.68
WCI Subscales			
Self-confident approach	0	21	13.64 ± 4.85
Optimistic approach	0	15	8.91 ± 3.35
Social support approach	0	12	7.25 ± 2.24
Helpless approach	0	24	10.97 ± 4.43
Submissive approach	0	18	6.24 ± 3.20
OCS Total	0	16	3.88 ± 3.02

Abbreviations: OCS, Obsession with COVID-19 Scale; WCI, Ways of Coping Inventory.

the mean total OCS score and the WCI submissive approach subscale scores in terms of having someone around them being diagnosed with COVID-19 ( $p < 0.05$ ; Table 3).

In this study, a positive significant correlation was found between nursing students' mean OCS score and the WCI helpless approach and submissive approach subscale scores, while a negative significant correlation was found between their mean OCS score and the WCI self-confident approach score ( $p < 0.05$ ; Table 4).

## 4 | DISCUSSION

In this section, the results obtained were discussed in light of the literature.

It was found that the nursing students in the study had moderate coping skills. The coping skill students used the most was the self-confident approach, while the one they used the least was the submissive approach. A study by Ergin et al.<sup>27</sup> analyzed the association between methods of coping and sociodemographic features in university students and found that students had higher level of ways of coping with stress. Similar to the results of our study, they found that the coping mechanism students used the most was the self-confident approach. In a study conducted on medical faculty and health college students by Kaya et al.<sup>28</sup> and in a study conducted on university students by Gürdil<sup>29</sup> it was found that the coping mechanism students used the most was the self-confident approach, while they used the submissive approach the least. The finding that students have similar ways of coping with stress may result from the fact that their educational backgrounds are similar, that they have opportunities to make use of the innovations of the age, and that they find the solutions with the self-confidence they have.

In our study, when the descriptive features of nursing students and their Ways of Coping Inventory (WCI) mean scores were compared, it was found that female students had higher mean WCI total scores, as well as higher social support and submissive approach

subscale scores ( $p < 0.05$ ). When the literature was examined in terms of ways of coping with stress, it was found that gender was a significant factor, and female and male students used different methods in coping with stress.<sup>30–32</sup> Matud<sup>33</sup> found that women had higher emotionally-focused and avoidance coping style scores. It has been stated that being a woman triggers the experience of more stress and creates different reactions in terms of ways of coping.<sup>31,34</sup> In a study conducted on nursing students, Güler and Çınar<sup>30</sup> found that male students had higher submissive approach scores. Ergin et al.<sup>27</sup> found that men had higher self-confident approach and optimistic approach subscale scores. In a study conducted on nursing students, Yılmaz et al.<sup>35</sup> found that female student nurses had higher seeking social support approach scores than male students. This may be due to social and cultural reasons. In other words, the fact that our society is a male-dominated society may cause males to have an optimistic approach in stressful situations, to have self-confidence and to have material and spiritual strength. Similarly, the fact that our society has the potential to attribute stress and responsibility to women, to show women less tolerance about self-confidence or coping and to lead them to receive social support for their efforts to cope may have caused these results. In parallel with the results obtained and information from the literature, it can be inferred that during the pandemic, female students may experience increased stress levels due to factors such as school responsibilities, housework, anxiety about catching the disease, and providing hygienic conditions, and as a result, they will resort more to social support.

In the study, it was found that students with nuclear families had higher mean social support approach scores ( $p < 0.05$ ). In a study conducted on university students by Kara,<sup>36</sup> students with extended families stated that they coped better with stress because of the social support they received from their families. Considering the number of people, children living in extended families can consult with and share things with, this situation is normal. However, it can be seen that this situation is reversed during the pandemic. Home quarantines during epidemics mean that people have only immediate family members to share things with or to do things with. This is a time when families, especially parents, can play a greater role in shaping their children and caring for their children. The power of the family can be used to create psychological well-being and a focus of inner control. The pandemic is a remarkable time to strengthen family bonds, to spend quality time with family members, to share love and respect, to encourage and appreciate, to teach family values, rituals and traditions, and to concentrate on a child's development.<sup>37</sup> At the same time, because students have returned to their homes due to online education and have had to live in the same houses with their families for a long time because of quarantines and curfews, social isolation may have caused them to have limited access to social support or to find ways to cope within their families. With the effect of modernization, Turkish society has become more individually-based with the transition from an extended family structure to a nuclear family structure. It can be inferred that when individuals who are influenced by their culture encounter a problem, they will seek help from their immediate environment to solve it.

TABLE 3 Comparison of mean OCS and WCI scores of nursing students in terms of their descriptive features (n = 628)

Descriptive features	WCI total and subdimensions					WCI Total
	OCS Total (Mean ± SD)	Self-confident approach	Optimistic approach	Social support approach	Helpless approach	
Gender						
Female	4.00 ± 3.00	13.69 ± 4.64	8.95 ± 3.31	7.42 ± 2.24	11.38 ± 4.31	47.75 ± 10.95
Male	3.50 ± 3.07	13.48 ± 5.48	8.79 ± 3.49	6.71 ± 2.16	9.66 ± 4.58	44.77 ± 13.56
Test and significance	U = 31.687.00 p = 0.04	U = 34.981.000 p = 0.77	U = 34.771.500 p = 0.69	U = 29.219.000 p = 0.001	U = 28.122.000 p = 0.000	U = 31,191.500 p = 0.002
Year of study						
1st year	3.51 ± 2.81	13.41 ± 4.87	8.83 ± 3.33	7.18 ± 2.28	11.30 ± 4.75	46.91 ± 11.51
2nd year	4.38 ± 3.31	14.31 ± 4.55	9.21 ± 3.29	7.16 ± 2.18	10.94 ± 3.95	47.92 ± 9.39
3rd year	3.85 ± 2.97	13.69 ± 4.87	8.94 ± 3.40	7.21 ± 2.30	10.75 ± 4.28	46.86 ± 12.17
4th year	4.10 ± 3.11	13.11 ± 5.15	8.60 ± 3.39	7.68 ± 2.13	10.68 ± 4.66	46.39 ± 14.15
Test and significance	KW = 6.206 p = 0.102	KW = 4.084 p = 0.253	KW = 1.656 p = 0.647	KW = 4.208 p = 0.240	KW = 1.922 p = 0.589	KW = 0.592 p = 0.898
Family type						
Nuclear family	3.88 ± 3.04	13.94 ± 4.58	9.09 ± 3.23	7.36 ± 2.19	10.95 ± 4.30	47.63 ± 11.03
Extended family	3.80 ± 2.33	11.86 ± 5.18	8.40 ± 3.08	5.80 ± 2.80	12.46 ± 4.27	45.06 ± 7.37
Broken family	3.90 ± 3.04	12.82 ± 5.55	8.39 ± 3.71	7.07 ± 2.30	10.88 ± 4.89	45.29 ± 13.84
Test and significance	KW = 0.077 p = 0.962	KW = 5.120 p = 0.077	KW = 4.092 p = 0.129	KW = 6.611 p = 0.037	KW = 1.985 p = 0.371	KW = 2.423 p = 0.298
Region nurses lived in						
South-eastern Anatolia Region	3.95 ± 3.15	13.27 ± 4.95	8.92 ± 3.38	7.14 ± 2.30	10.82 ± 4.32	46.33 ± 12.04
Eastern Anatolia Region	3.98 ± 3.06	14.21 ± 4.73	9.12 ± 3.38	7.33 ± 2.17	11.18 ± 4.56	48.19 ± 11.11
Mediterranean Region	3.29 ± 2.49	14.20 ± 4.70	9.15 ± 3.07	7.34 ± 2.36	11.34 ± 4.69	48.43 ± 12.02
Marmara Region	3.93 ± 3.01	13.86 ± 5.54	9.06 ± 3.82	7.86 ± 2.23	12.80 ± 4.32	50.73 ± 12.95
Central Anatolia Region	3.50 ± 2.72	11.67 ± 5.05	7.73 ± 3.20	7.08 ± 2.39	9.11 ± 4.31	41.41 ± 13.11
Black Sea Region	3.63 ± 2.73	11.81 ± 3.60	7.50 ± 2.54	7.18 ± 2.17	10.77 ± 2.95	42.90 ± 7.26
Test and significance	KW = 2.281	KW = 17.641	KW = 13.054	KW = 3.056	KW = 9.691	KW = 19.396

TABLE 3 (Continued)

Descriptive features	WCI total and subdimensions					WCI Total
	OCS Total (Mean ± SD)	Self-confident approach	Optimistic approach	Social support approach	Helpless approach	
	$p = 0.809$	$p = 0.003$	$p = 0.023$	$p = 0.691$	$p = 0.084$	$p = 0.002$
The state of having sufficient information about COVID-19						
Yes	3.86 ± 3.04	14.11 ± 4.70	9.19 ± 3.21	7.40 ± 2.19	10.85 ± 4.32	47.69 ± 11.34
No	4.59 ± 3.89	11.10 ± 5.70	7.56 ± 3.85	6.51 ± 1.96	12.21 ± 5.55	44.54 ± 15.24
Undecided	3.76 ± 2.07	12.83 ± 4.81	8.38 ± 3.51	7.00 ± 2.42	11.05 ± 4.46	45.66 ± 11.55
Test and significance	KW = 1.003	KW = 15.770	KW = 10.895	KW = 8.675	KW = 3.242	KW = 4.928
	$p = 0.606$	$p = 0.000$	$p = 0.004$	$p = 0.013$	$p = 0.198$	$p = 0.085$
The state of thinking that COVID-19 measures are sufficient						
Yes	3.64 ± 2.95	14.14 ± 4.73	9.31 ± 3.15	7.32 ± 2.15	10.49 ± 4.18	47.11 ± 11.15
No	4.45 ± 3.52	13.02 ± 5.18	8.37 ± 3.60	7.04 ± 2.44	11.55 ± 5.11	46.50 ± 13.07
Undecided	3.88 ± 2.68	13.19 ± 4.72	8.58 ± 3.43	7.30 ± 2.25	11.45 ± 4.23	47.36 ± 11.53
Test and significance	KW = 6.246	KW = 7.333	KW = 9.058	KW = 1.550	KW = 7.986	KW = 0.044
	$p = 0.044$	$p = 0.026$	$p = 0.011$	$p = 0.461$	$p = 0.018$	$p = 0.978$
The state of having someone around diagnosed with COVID-19						
Yes	4.76 ± 3.51	13.86 ± 4.77	8.86 ± 3.18	7.06 ± 2.26	10.90 ± 4.10	47.37 ± 10.84
No	3.63 ± 2.82	13.58 ± 4.88	8.93 ± 3.40	7.31 ± 2.24	11.00 ± 4.53	46.95 ± 11.91
Test and significance	U = 27,493.500	U = 33,225.500	U = 34,231.000	U = 32,617.500	U = 34,240.500	U = 32,781.500
	$p = 0.000$	$p = 0.558$	$p = 0.957$	$p = 0.360$	$p = 0.961$	$p = 0.413$

Abbreviations: OCS, Obsession with COVID-19 Scale; KW, Kruskal Wallis test; U, Mann Whitney U test; WCI, Ways of Coping Inventory.



**TABLE 4** Analysis of the relationship between nursing students' mean OCS and WCI scores

	Self-confident approach	Optimistic approach	Social support approach	Helpless approach	Submissive approach	WCI total
Total OCS	$r = -0.084^*$	$r = -0.060$	$r = -0.008$	$r = 0.232^{**}$	$r = 0.201^{**}$	$r = 0.091^*$
	$p = 0.035$	$p = 0.135$	$p = 0.844$	$p = 0.00$	$p = 0.00$	$p = 0.023$

Abbreviations: OCS, Obsession with COVID-19 Scale; WCI, Ways of Coping Inventory.

In terms of the regions nursing students were living in, it was found that the students who lived in the Marmara region had higher mean WCI total scores, while students who lived in the Eastern Anatolia region had higher mean self-confident approach scores, and students who lived in the Mediterranean region had higher mean optimistic approach scores ( $p < 0.05$ ). In Turkey, the differences between the development levels of cities are becoming evident. The fact that the level of development decreases in cities as one's vantage point moves from the West to the East shows the differences between the development levels of the regions.<sup>38</sup> This result, which is not in parallel with the literature, maybe because today young people have or do not have easier access to develop themselves in the regions they live and due to the sociocultural and geographical features of the society they are living in. In other words, it can be thought that the students living in the Eastern Anatolia region showed this attitude since they are raised with responsibilities, and as self-confident in extended families, the students living in the Mediterranean region showed this attitude since they showed moderate and optimistic attitudes to events, just like the geographical characteristics of their region, and the students living in Marmara region showed such a reaction due to the stress brought by the fast tempo of life and having to stand up on their feet. In terms of the pandemic, it was found in an epidemiological study in which individuals from all age groups in Turkey participated, it was found that the highest anxiety due to COVID-19 was seen in Eastern Anatolia (50%) and Aegean (49%) regions. In the Marmara region, this rate was found to be undeniably high (43%).<sup>39</sup> This can be explained by the fact that high numbers of cases in the Marmara region affect anxiety-stress levels.

It was found that the students who thought they had enough information about COVID-19 had higher mean self-confident, optimistic and social support approach scores ( $p < 0.05$ ). Information will enable patients to see the risks that might be caused by COVID-19 more correctly and help them to experience anxiety unnecessarily.<sup>40</sup> Being informed about COVID-10 and being satisfied with this information may relieve stress and trauma symptoms.<sup>41</sup> In a study conducted in China by Wang et al.,<sup>10</sup> it was found that providing more detailed, up-to-date, and correct health information to individuals (e.g., about treatment and the state of the local epidemic) and taking special precautionary measures (e.g., hand hygiene, wearing mask) reduced psychological effects, stress, depression, and anxiety levels.<sup>10</sup> Individuals with sufficient level of information can have positive coping methods since they have a more precautionary approach to hygiene and have more conscious behaviors.

It was found that students who did not think that the measures taken for COVID-19 were sufficient had higher mean OCS total and WCI helpless approach subscale score, while those who thought the measures were sufficient had higher mean WCI self-confident and optimistic approach subscale scores, and those who were undecided about the measures had higher mean WCI submissive approach subscale score ( $p < 0.05$ ). Social events, technological changes, natural disasters, diseases, and globalization bring about important mental problems. This situation creates traumas, obsessions, and mental disorders outside of normal life. However, measures taken to eliminate or decrease the harms of such situations decreases the formation of these problems in individuals.<sup>42</sup> In a study conducted by Ergün et al.,<sup>43</sup> the participants had a mean score of 4.23 out of 10 in finding the measures taken at the social level regarding COVID-19 as sufficient. In the same study, a statistically significant positive low correlation was found between the adequacy level of social measures taken for COVID-19 and the adequacy of personal information regarding COVID-19.<sup>43</sup> Individuals need to feel safe and know that events are under control in general. Since this need is not met during the pandemic, the organism goes into the alarming state, the bells for anxiety ring, and the body may develop stress reactions.<sup>44</sup> It can be seen that the individuals who had information about the disease and who thought that the measures taken were sufficient were psychologically more comfortable, they did not have obsessions, they were optimistic about hygiene and the measures taken, they had the confidence that they could deal with this in any situation and that they did not feel helpless.

It was found that the nursing students had higher OCS total and WCI submissive approach subscale mean scores in terms of the state of knowing someone diagnosed with COVID-19 ( $p < 0.05$ ). Considering the context of the epidemic, the anxiety experienced is not limited to the individual himself/herself. The individual is anxious for his/her family, loved ones, and immediate circle as much as himself/herself and sometimes even more and may live intense feelings such as anxiety, panic, and fear. Being under the risk of catching the disease, not knowing exactly when the pandemic will end, experiencing uncertainty as to social and economic difficulties that may be experienced during the pandemic may cause intense stress and anxiety, trying to control everything all the time and taking up behaviors that may create obsession.<sup>44</sup> Although it is normal to follow the process and wonder about the developments, recurrent behaviors such as researching about only this issue for hours on the internet, following social media, and watching the TV news obsessively, and checking on the body for symptoms of the disease may be evaluated as the symptoms of an anxiety disorder.<sup>45</sup> In a study conducted by Evren

et al.,<sup>19</sup> it was found that individuals who were diagnosed with COVID-19, those who knew or lived in the same house with someone diagnosed with COVID-19, had high anxiety levels. With this finding, which is in parallel with the literature, it may be thought that all kinds of behavioral obsessions may occur in students who knew someone diagnosed with COVID-19; however, due to reasons such as changing roles, responsibilities, and future anxiety, they may show submissive approach in fighting with stress.

In the study, a positive correlation was found between nursing students' OCS and WCI total, helpless approach, and submissive approach subscale mean scores, while a negative correlation was found between their OCS and self-confident subscale mean scores ( $p < 0.05$ ).

While nursing students are expected to show a desperate and submissive approach in the face of uncontrollable situations that cause stress such as pandemic seen in this century in which technology, manpower, and economic wars are common, it is thought that it is unexpected of them to show a self-confident coping approach.

## 5 | IMPLICATIONS FOR NURSING PRACTICE

This study found that nursing students had low levels of obsession related to COVID-19 and moderate levels of ways of coping with stress. It was found that the coping method that students used most was the self-confident approach, while the method they used least was the submissive approach. A positive significant correlation was found between students' total OCS and total WCI scores and their helpless approach and submissive approach subscales mean scores, while a negative significant association was found between their OCS and self-confident approach subscale mean scores.

In line with these results, it is extremely important to determine the psychological symptoms and to determine the priorities for solving these problems in nursing students, who will constitute the health workforce of the future. It is thought that providing psychological counseling services to students will be important for nurses who fight on the frontline during disasters or epidemic diseases such as COVID-19; these services will help them to cope with stress and thus fight psychiatric problems.

### 5.1 | Limitations of the study

The limitations of the study are the fact that snapshot measurements were conducted cross-sectionally within specific dates, 48% of the students did not agree to participate in the study and obsession and coping behaviors of the students were evaluated with only self-report scales

### ACKNOWLEDGMENTS

The authors are grateful to all participants who agreed to participate voluntarily in this study.

### CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

### AUTHOR CONTRIBUTIONS

Gülcan Bahçecioğlu Turan, Semra Köse, and Meyreme Aksoy were involved in the initial conception of the study. Gülcan Bahçecioğlu Turan, Semra Köse, and Meyreme Aksoy conducted the interviews. Gülcan Bahçecioğlu Turan and Semra Köse analyzed the data. All authors interpreted the data. All authors reviewed, revised, and edited the paper. All authors read and approved the final manuscript submitted for publication.

### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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**How to cite this article:** Bahçecioğlu Turan G, Köse S, Aksoy M. Analysis of nursing students' obsessive and coping behaviours during the COVID-19 pandemic. *Perspect Psychiatr Care.* 2021; 57:1628-1636. <https://doi.org/10.1111/ppc.12728>