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RESEARCH ARTICLE

An evaluation on coping with stress of Selcuk University Faculty of Veterinary Medicine students: Covid-19 pandemic process

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Selçuk Üniversitesi Veteriner Fakültesi öğrencilerinin stresle başa çıkma durumları üzerine bir değerlendirme: Covid-19 pandemi süreci

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Öz

Amaç: Dünya Sağlık Örgütü tarafından 11 Mart 2020 tarihinde pandemi olarak ilan edilen Covid-19, insanlarda fiziksel sorunlar ile birlikte önemli derecede psikolojik endişeleri de gündeme getirdi. Bu çalışma ile Selçuk Üniversitesi Veteriner Fakültesi öğrencilerinin stresle başa çıkma yöntemlerinin; sosyodemografik özellikleri, Covid-19 pandemi sürecindeki deneyimler ve mesleki kariyer endişeleri ile olan ilişkisinin değerlendirilmesi amaçlandı.

Gereç ve Yöntem: Araştırmanın örneklemini 2019-2020 eğitim-öğretim döneminde Selçuk Üniversitesi Veteriner Fakültesinde eğitim-öğretime devam eden ve araştırmaya katılmayı kabul eden 1- 5. sınıf öğrencilerinden toplam 644 öğrenci oluşturdu. Araştırma, 14-22 Aralık 2020 tarihleri arasında katılımcıların cep telefonlarına gönderilen anket formunun gönüllülük esasına göre doldurulması ile gerçekleştirildi. Anket formu, sosyo-demografik özellikleri, mesleki kariyer endişelerini ve Covid-19 ile ilgili deneyimlerini belirleyen ve stresle başa çıkma tarzını ölçen toplam dört bölümden oluştu.

Bulgular: Selçuk Üniversitesi Veteriner Fakültesi öğrencilerinin stresle baş etme stratejilerinden en fazla "kendine güvenli yaklaşım" (%27), en az olarak da "sosyal destek arama" (%13) alt faktörlerini kullandığı, kadın öğrencilerin (%22) erkek öğrencilere kıyasla (%21) "çaresiz yaklaşım" puanlarının daha yüksek olduğu, beşinci sınıf öğrencilerinin "çaresiz yaklaşım" puanlarının diğer sınıflara göre düşük olduğu ve üçüncü sınıf öğrencilerinin ise diğer sınıflara kıyasla "boyun eğici yaklaşım" puanlarının daha yüksek olduğu belirlendi.

Öneri: Sonuç olarak Selçuk Üniversitesi Veteriner Fakültesi öğrencilerinin kullandıkları başa çıkma stratejilerinin daha çok probleme dayalı aktif tarzlar olduğu, duygulara yönelik pasif tarzları ise daha az kullandıkları, ayrıca Co-vid-19 pandemisi gibi stresli durumlar ile başa çıkma becerileri geliştirmelerinin oldukça önemli olduğu söylenebilir.

Anahtar kelimeler: Covid-19, öğrenciler, stresle başa çıkma, veteriner fakültesi.

Abstract

Aim: Declared as a pandemic by the World Health Organization on March 11, 2020, Covid-19 has raised significant psychological concerns and physical problems in humans. This study aimed to evaluate the relationship between the methods of coping with stress of the SUFVM students with socio-demographic characteristics, experiences during the Covid-19 pandemic process, and professional career concerns.

Materials and Methods: The research sample consisted of 644 students from the 1st-5th grades who continued their education at SUFVM in the 2019-2020 academic year and agreed to participate in the research. The research was carried out by filling in the questionnaire form sent to the participants' mobile phones between 14-22 December 2020 voluntarily. The questionnaire consisted of four parts in total, which determined socio-demographic characteristics, professional career concerns, and experiences with Covid-19, and measuring the style of coping with stress.

Results: It was determined that SUFVM students used the most "self-confident approaches" (%27) and the least "seeking social support" (%13) sub-factors among the strategies to cope with stress, female students had higher "helpless approaches" scores (%22) than male students (%21), and fifth-grade students had "helpless approaches" scores were lower than the other classes, and the third-grade students had higher "submissive approaches" scores compared to other classes.

Conclusion: It can be said that the coping strategies SUFVM students use are mostly problem-based active styles, and they use passive styles related to emotions less, also it is very important for them to develop skills to cope with stressful situations such as the Covid-19 pandemic.

Keywords: Coping with stress, Covid-19, students, veterinary medicine



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Introduction

Covid-19, a pandemic caused by the coronavirus, was declared a pandemic by the World Health Organization on March 11, 2020 (WHO 2020). It is reported that this pandemic causes significant psychological effects (Luo et al 2020, Sheroun et al 2020) as well as physical (health, economy, etc.) problems worldwide (Salman et al 2020). In general, it is known that in the majority of people, it triggers emotions such as fear and anxiety and increases the levels of stress and depression (Bekaroğlu and Yılmaz 2020, Wang et al 2020, Zhou et al 2020, Kar et al 2021). It is stated that scientific studies on the causes of stress, strategies for coping with stress, and the elimination of the constant stress factor can contribute to the learning of students and thus to an increase in lifelong learning tendencies. It is also reported that variables such as academic competence, social competence, and continuous stress effectively plan the future (Demirsöz et al 2021).

It is reported that the Covid-19 pandemic has compelling effects on students in many ways (Sheroun et al 2020), one of the most affected groups is university students (Duman 2020), and this situation affects all areas of their lives (health, education, social life, etc.) (Cohen et al 2020, Ereş and Doğuş 2020). It is also stated that university students experience anxiety due to some demographic variables (living in the countryside and family income level) (Cao et al 2020).

It is reported that the pandemic creates health problems such as stress and anxiety at different degrees in university students (Rogowska et al 2020, Yang et al 2021), and the global economic recession caused by the pandemic may have significant effects on the careers of new graduates (Sahu 2020).

It is stated that during the university years, which is a period when students make important decisions for their professional future, the uncertainties during and after the pandemic cause negative situations such as hopelessness, loss of motivation, and decrease in future expectations in students (Almaçık et al 2021). It is reported that this situation also affects the faculty of veterinary medicine students (Marino 2020) and causes high levels of anxiety, depression, and stress (Jawad 2020). It is also stated that the Covid-19 pandemic harms the academic and social performance of faculty of veterinary medicine students (Jawad 2020) and that students should cope with stress against different stressors (Collins and Foote 2005).

This study aimed to evaluate the relationship between the methods of coping with stress of the Selcuk University Faculty of Veterinary Medicine (SUFVM) students with sociodemographic characteristics, experiences during the Covid-19 pandemic process, and professional career concerns.

Material and Methods

The population of this study consisted of all students (total 1103) who continued their education at SUFVM in the 2019-2020 academic year, and the sample consisted of 644 (58.4%) students who voluntarily agreed to participate in the research.

The research was carried out between 14-22 December 2020 during the Covid-19 pandemic process. Undergraduate students who could not continue their formal education due to the pandemic were informed by the mass message method. The questionnaire form was sent to the mobile phones of the participants. Through the questionnaire, participants have directed questions consisting of a total of four parts, which determine their socio-demographic characteristics (six questions), professional career concerns (11 questions), and their experiences with Covid-19 (21 questions) and measuring the style of coping with stress (30 questions).

To determine the professional career concerns of the participants, a 5-point Likert-type section with 11 questions was created by utilizing various references (Erdoğmuş Zorver 2011, Çetin Gündüz and Nalbantoğlu Yılmaz 2016, Ulaş and Kızıldağ 2018). The 21 questions directed about their experience with Covid-19 were prepared to utilize the study of Main et al (2011).

"The Styles of Coping with Stress Scale", developed by Folkman and Lazarus (1980), was used to measure the style of coping with stress, utilizing the study of Ergin et al (2014). In this scale, which measures two main styles of coping with stress (problem-oriented/active, emotional/passive), active styles are "seeking social support (SSS)" (1st, 9th, 29th, and 30th items), "optimistic approaches (OA)" (2nd, 4th, 6th, 12th, and 18th items) and "self-confident approaches (SCA)" (8th, 10th, 14th, 16th, 20th, 23rd, and 26th items), while passive styles are "helpless approaches (HA)" (3rd, 7th, 11th, 19th, 22nd, 25th, 27th, and 28th items) and "submissive approaches (SA)" (5th, 13th, 15th, 17th, 21st, and 24th items) subscales. High scores on the scale indicate that the individual "uses that coping style more" (Sahin and Durak 1995).

SPPS 25 (IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.) statistical package program was used to evaluate the data. In the study, descriptive statistics (mean, standard deviation, median value, minimum, maximum, number, and percentile) were given for categorical and continuous variables. In addition, the homogeneity of the variances, which is one of the prerequisites of the parametric tests, was checked with the Levene test. Normality assumption was checked with the "Shapiro-Wilk" test. To evaluate the differences between the two groups, "Student's t-test" was used when the parametric test prerequisites were met, and the "Mann-Whitney - u test" was used



when they did not. One-way Analysis of Variance (ANOVA) and Tukey HSD test from multiple comparison tests was used to compare three or more groups. If not, the Kruskal Wallis and Bonferroni-Dunn test, one of the multiple comparison tests, was used. (p<0.05) and (p<0.01) levels were considered statistically significant.

Limitations of the Study

The fact that the study population was limited to only SUFVM students and that the data were obtained approximately nine months after the first appearance of the Covid-19 pandemic in Turkey can be expressed as the limited aspects of this research. In addition, a pilot study could not be carried out due to the completion of the research in a limited time.

Results

Socio-demographic data of the participants (n=644) were presented in Table 1. It was determined that the 21-23 age

group made up 50% of the participants; male students (59%) more than female students (41%); the participation rate of first graders was at the highest level with 27%; 72% of their mothers were not working; 64% of their fathers worked and 63% of them lived in the city center.

The levels of participation in judgments about Covid-19 were presented in Table 2.

The levels of participation in judgments regarding professional career concerns were presented in Table 3.

The distribution of the participants' data on the subcategories of the scale of coping with stress according to their average score was presented in Table 4.

The distribution of the mean scores of the scale of coping with stress styles according to the socio-demographic data of the participants was presented in Table 5.

Table 1. Distribution of participants by socio-demographic data				
	Category	n (%)		
	18-20 years 21-23 years	246 (38%) 322 (50%)		
Age group	24 years and older	76 (12%)		
	Female	263 (41%)		
Gender	Male	381 (59%)		
	1st	176 (27%)		
Crada	2nd	96 (15%)		
	3rd	156 (24%)		
uruue	4th	125 (19%)		
	5th	91 (14%)		
	Yes	142 (22%)		
Mother's working status	No	463 (72%)		
	Retired	39 (6%)		
Father's working status	Yes	412 (64%)		
	No	63 (10%)		
	Retired	169 (26%)		
	Province	406 (63%)		
Settlement	County	140 (22%)		
	Village	98 (15%)		

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Table 2. Distribution of participation in judgments about Covid-19				
	Yes n (%)	No n (%)		
A member of your family has had Covid-19-like symptoms.	207 (32%)	437 (68%)		
A member of your family is suspected of having Covid-19.	131 (20%)	513 (80%)		
A member of your family has been quarantined.	178 (28%)	466 (72%)		
A member of your family has been diagnosed with Covid-19 and is receiving treatment.	156 (24%)	488 (76%)		
A member of your family has died from Covid-19.	22 (3%)	622 (97%)		
A close friend of yours has had Covid-19-like symptoms.	354 (55%)	290 (45%)		
A close friend of yours is suspected of having Covid-19.	281 (44%)	363 (56%)		
A close friend of yours has been quarantined.	401 (62%)	243 (38%)		
A close friend of yours has been diagnosed with Covid-19 and is receiving treatment.	342 (53%)	302 (47%)		
A close friend of yours has died from Covid-19.	18 (3%)	626 (97%)		
Someone you know (other than your family or a close friend) has had Covid-19-like symptoms.	473 (73%)	171 (27%)		
Someone you know (other than your family or a close friend) is suspected of having Covid-19.	378 (59%)	266 (41%)		
Someone you know (other than your family or a close friend) has been quarantined.	513 (80%)	131 (20%)		
Someone you know (other than your family or a close friend) has been diagnosed with Covid-19 and is receiving treatment.	494 (77%)	150 (23%)		
Someone you know (other than your family or a close friend) has died from Covid-19.	306 (48%)	338 (52%)		
You have had Covid-19-like symptoms.	140 (22%)	504 (78%)		
You are suspected of having Covid-19.	77 (12%)	567 (88%)		
You have been quarantined.	115 (18%)	529 (82%)		
You have been diagnosed with Covid-19 and you are receiving treatment.	61 (9%)	583 (91%)		
You have heard others talk about the seriousness and contagiousness of Covid-19.	555 (86%)	89 (14%)		
You had to cancel your trip or vacation due to the Covid-19 pandemic.	439 (68%)	205 (32%)		

Table 3. Distribution of participants' data on professional career concerns					
	Strongly disagree	Disagree	Undecided	Agree	Agree strongly
I had some concerns about my professional career.	70 (11%)	92 (14%)	88 (14%)	190 (30%)	204 (32%)
The difficulty of the working conditions of my profession worried me.	87 (14%)	153 (24%)	102 (16%)	183 (28%)	119 (18%)
I get restless when I think about my professional future.	92 (14%)	124 (19%)	103 (16%)	176 (27%)	149 (23%)
I had hesitations about practicing the veterinary profession in the future.	170 (26%)	202 (31%)	109 (17%)	79 (12%)	84 (13%)
I am worried that I will not be able to pursue the veterinary profession in the future.		201 (31%)	106 (16%)	66 (10%)	64 (10%)
I'm worried about going into a high-risk profession.		208 (32%)	106 (16%)	104 (16%)	62 (10%)
When I think about the risks that may come my way in the process of reaching my professional ideals, I feel bored.		163 (25%)	106 (16%)	150 (23%)	110 (17%)
The risk of contracting zoonotic diseases during professional practice bothers me.	116 (18%)	143 (22%)	120 (19%)	158 (25%)	107 (17%)
It seems impossible for good things to happen in my career.	212 (33%)	250 (39%)	94 (15%)	49 (8%)	39 (6%)
The thought of making a career change does not seem appropriate.		87 (14%)	114 (18%)	177 (27%)	169 (26%)
I do not think that I can overcome the possible risks that may come my way in my career.	247 (38%)	200 (31%)	91 (14%)	51 (8%)	55 (9%)

Table 4. Distribution of the mean scores of the sub-categories of the scale of coping with stress			
Scale subcategories	Mean±SD [Median (MinMax.)]		
Self-Confident Approaches (SCA)	26,52±6,03 [27 (7-35)]		
Helpless Approaches (HA)	21,38±6,27 [21 (8-40)]		
Optimistic Approaches (OA)	18,27±4,32 [19 (5-25)]		
Submissive Approaches (SA)	13,49±3,63 [14 (5-25)]		
Seeking Social Support (SSS)	12,67±2,87 [13 (4-20)]		
Total Score	92,33±15,17 [94 (29-145)]		

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*(p<0,05) **(p<0,01) #Willcoxon test; Kruskal Wallis; a.b.c: Different letters in the same column indicate statistically significant difference (p<0.05)

Socio-demographic data		Self-Confident	Optimistic	Helpless	Seeking Social	Submissive	Total Score
		Approacties			12 42+2 72	12 (2) 2 50	02.00+14.04
Age group	18-20 years	27,01±6,05	18,41±4,25	21,39±5,99	12,43±2,73	13,63±3,50	92,89±14,94
		[28 (7-35)]	[19 (5-25)]	[21 (8-37)]	[12 (4-20)]	[13,5 (5-24)]	[94 (37-131)]
	21-23 years	26,19±5,99	18,10±4,29	21,70±6,53	12,85±2,81	13,50±3,75	92,34±15,43
		[27 (7-35)]	[19 (5-25)]	[22 (8-40)]	[13 (4-20)]	[14 (5-25)]	[94 (29-145)]
	24 years	26,36±6,11	18,55±4,69	19,99±5,95	12,63±3,48	12,99±3,47	90,51±14,81
	and older	[28 (7-35)]	[20 (5-25)]	[19 (8-36)]	[13 (4-20)]	[13 (5-23)]	[93 (29-123)]
Critical Value		4,889	2,936	3,894	4,010	1,801	2,057
(p)¥		(0,087)	(0,230)	(0,143)	(0,135)	(0,406)	(0,358)
	E	26,77±5,18	18,33±3,98	22,32±6,19	12,90±2,79	13,60±3,50	93,93±13,41
Candan	remate	[27 (7-35)]	[19 (5-25)]	[22 (8-40)]	[13 (4-20)]	[14 (5-25)]	[94 (39-145)]
Gender	N 1	26,35±6,55	18,23±4,55	20,73±6,25	12,51±2,92	13,41±3,72	91,23±16,19
	Male	[28 (7-35)]	[19 (5-25)]	[21 (8-40)]	[12 (4-20)]	[14 (5-24)]	[94 (29-132)]
Critical Value		-0,531	-0,744	-2,944	-1,647	-0,057	-1,309
(p) ^ψ		(0,595)	(0,457)	(0,003) **	(0,100)	(0,954)	(0,191)
		26,67±6,45	18,35±4,28	21,01±5,94	12,24±2,76	13,34±3,51	91,61±15,29
	1st	[28 (7-35)]	[19 (5-25)]	[20 (9-40)] ^{ab}	[12 (4-20)]	[13 (5-22)] ^a	[93 (39-140)]
		26,64±5,95	18,00±4,51	22,22±5,69	12,71±2,75	13,18±3,35	92,74±13,66
	2nd	[27 (7-35)]	[19 (5-25)]	[23,5 (9-35)]¢	[13 (5-20)]	[13 (5-20)]ª	[96 (37-122)]
		26.53±5.35	18.39±3.92	22.03±6.40	12.76±2.94	14.25±3.72	93.96±15.57
Grade	3rd	[27 (7-35)]	[19 (5-25)]	[22 (8-40)] ^{bc}	[13 (4-20)]	[15 (5-24)]b	[95.5 (29-132)]
		25 79+6 30	18 08+4 71	21.62+6.96	12.95+2.97	13 62+3 89	92.06+15.04
	4th	[27 (7-35)]	[19 (5-25)]	[21 (8-40)]bc	[13 (4-20)]	[14(5-25)]a	[94 (29-145)]
		27 11+6 03	18/6+//36	19 78+6 06	12 80+2 92	12 65+2 41	00.80+15.04
	5th	[28 (7-35)]	[19 (5-25)]	[10 (8-28)]	[12,09±2,92	$[12,05\pm3,\pm1]$	[02 (20-120)]
Critical Value		5 275	1 290	12 718	8 242	12 221	4.471
(n)¥		(0.260)	(0.863)	(0.012) **	(0.083)	(0.016) **	(0.346)
(P)		26 71+6 22	18 68+4 41	21 79+7 22	12 46+3 23	13 70+4 03	03 25+15 82
	Yes	[27 (7 25)]	[20 (5 25)]	[21,7,9±7,22	[12,40±3,23	13,70±4,03	[04 (20 14E)]
		[27 (7-33)]	[20 (3-23)]	[21 (8-40)]	[12 (4-20)]	[14 (3-23)]	[94 (29-143)]
Mother's working status	No	20,40±0,14	10,1114,50	21,11±0,01	12,00±2,01	13,30±3,35	91,00±15,57
		[27 (7-35)]	[19(5-25)]	[21 (8-40)]	[13 (4-20)]	[14 (5-24)]	[93 (29-140)]
	Retired	27,31±3,47	18,74±2,98	23,03±5,48	13,51±1,96	14,03±2,91	96,62±7,89
		[28 (20-34)]	[20 (11-24)]	[23 (13-35)]	[14 (10-17)]	[13 (11-22)]	[96 (78-122)]
Critical Value		0,172	3,121	3,792	3,896	0,409	3,648
(p)¥		(0,917)	(0,210)	(0,150)	(0,143)	(0,815)	(0,161)
	Yes	26,60±6,06	18,36±4,39	21,16±6,19	12,47±2,93	13,51±3,71	92,11±15,61
		[27,5 (7-35)]	[19 (5-25)]	[21 (8-40)]	[13 (4-20)]	[14 (5-25)]	[94 (29-145)]
Father's working status	No	25,25±7,56	17,76±4,88	22,76±6,61	12,81±2,93	13,71±3,99	92,30±18,72
		[26 (7-35)]	[19 (5-25)]	[23 (8-36)]	[13 (4-18)]	[14 (5-23)]	[96 (29-123)]
	Retired	26,79±5,24	18,25±3,93	21,40±6,33	13,09±2,66	13,36±3,27	92,89±12,42
		[27 (7-35)]	[19 (5-25)]	[22 (8-40)]	[13 (4-20)]	[13 (5-24)]	[93 (29-140)]
Critical Value		1,666	1,491	4,189	3,540	0,719	1,003
(p)¥		(0,435)	(0,475)	(0,123)	(0,170)	(0,698)	(0,606)
	Province	26,61±6,18	18,13±4,47	20,85±6,19	12,63±2,93	13,39±3,59	91,61±15,78
		[28 (7-35)]	[19 (5-25)]	[20 (8-40)]	[13 (4-20)]	[13 (5-25)]	[93 (29-145)]
Settlement	County	26,42±5,60	18,52±4,16	21,91±6,28	12,51±2,78	13,85±3,38	93,21±13,62
		[27 (7-35)]	[19 (5-25)]	[22 (8-39)]	[13 (4-18)]	[14 (5-24)]	[95 (29-126)]
	Village	26,30±6,03	18,49±3,91	22,81±6,39	13,06±2,75	13,41±4,11	94,06±14,59
		[27 (7-35)]	[19 (5-25)]	[23 (8-40)]	[13 (4-20)]	[13 (5-24)]	[94,5 (29-140)]
Critical Value		1,085	0,350	3,162	0,001	1,860	1,107
(p) ¥		(0,298)	(0,554)	(0,075)	(0,982)	(0,173)	(0,293)



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Discussion

This study includes evaluating the relationship between the methods of coping with stress of the students who continue their education at SUFVM during the Covid-19 pandemic, with socio-demographic characteristics, experiences during the Covid-19 pandemic process, and professional career concerns. It was determined that the participants used the SCA method the most among the styles of coping with stress (Table 4). When the distribution of the participation in the judgments about Covid-19 is evaluated, the high percentage of "no" answers to the questions "16th, 17th, 18th and 19th" (78, 88, 82, 91, respectively; Table 2) can be explained by the fact that the negative situations caused by Covid-19 directly related to them are quite low. The fact that they used the SCA method the most may be related to the fact that they did not personally encounter the negative stress situations caused by this disease or it can also be considered as a requirement of having a more realistic character in health sciences.

In a study conducted by Kaya et al (2007) on medical school and health school students, it was reported that the participants used the SCA method the most and the SA method the least, among the sub-categories of the scale of coping with stress. In the studies conducted by Sen et al (2012) for specialist physicians and by Ergin et al (2014) for medical school students, it was stated that the participants used the SCA method the most and the SSS method the least. In the study, in parallel with Kaya et al (2007), it was found that among the coping with stress styles of the participants, SCA was the most used method and SSS was the least used method (Table 4), similar to the study data of Şen et al (2012) and Ergin et al (2014). Also, considering the relatively high selfconfidence levels of veterinary students according to Zenner et al (2005), it can be said that the common reason for the participants to use the SCA method more may be that they are health personnel candidates.

Coping is defined as cognitive and behavioural strategies for managing negative life events that cause stress, forcing or exceeding one's resources, and conflicts between them (Lazarus 1991). When the distribution of the participants' data on professional career concerns (Table 3) is evaluated, it was determined that the answers given to the 4th, 5th, 6th, 9th, and 11th questions with the highest percentage value are respectively "strongly disagree" as 26, 32, 25, 33, 38 % and "disagree" as 31, 31, 32, 39, 31% (Table 3). At the same time, it was determined that the answers given to the 10th question were "agree strongly" as 26%, and "agree" as 27% (Table 3). Therefore, this situation can be explained by the fact that the method most used by the participants in coping with stress is SCA (Table 4).

According to a study measuring depression and anxiety among medical school students in Iran during the Covid-19

pandemic, it was reported that the prevalence of depression and anxiety among medical students did not change significantly during the pandemic. However, the anxiety was more common (p<0.001) in women than in men (Nakhostin-Ansari et al 2020). In a study conducted in Saudi Arabia, it was determined that during the Covid-19 pandemic, there was high and moderate stress among Arabic-speaking students over the age of 12, while women and university students showed higher stress levels (AlAteeq et al 2020). In a study investigating the psychological problems experienced by dentistry students during the Covid-19 pandemic in Saudi Arabia, it was determined that female students were statistically significantly more depressed, anxious, and stressed than male students (Hakami et al 2020). Relatives or acquaintances infected with Covid-19 have been identified as a risk factor for the increase in anxiety levels of university students. It has also been reported that living in urban areas and family income stability are protective factors against anxiety (Cao et al 2020). In the study, it is thought that the high SCA and OA scores of female and male students and that there was no significant difference between them are thought to be since the study was carried out approximately nine months after the positive case caused by the pandemic was first seen in Turkey, and the pressure created by the pandemic on individuals decreased during this period. In line with the findings of Nakhostin-Ansari et al (2020), Hakami et al (2020), and AlAteeq et al (2020), it was determined that women were more affected by adverse conditions caused by Covid-19 compared to men. Considering the fact that 63% (n=406) of the participants live in the province and 64% (n=412) reported their "father's working status" as "yes" (Table 1), and the distribution of their participation in judgments about Covid-19, it was determined that the percentages of "no" answers given to the judgments (questions 1-10) about "family member" and "close friends" were higher (Table 2). This suggests that in parallel with the study data of Cao et al (2020), family income stability, living in urban areas, and family and close friends with low Covid-19 risk may have functioned as protective factors against anxiety. Therefore, it can be evaluated that this situation is reflected in the high SCA and OA scores.

According to Gelberg and Gelberg (2005), strengthening students' stress management skills helps them focus on professional development and maintain their motivation by avoiding burnout. Good stress management especially contributes to increasing problem-solving, decision-making, and learning skills; and paves the way for them to be happier and more productive. In the study conducted by Ergin et al (2014) on medical school students, it was determined that the final grade students' HA scores were significantly lower than those of other classes. In the study, it was determined that the first-grade students had lower HA scores (p<0.01) compared to the second-grade students, and the fifth-grade students compared to the second, third, and fourth-grade students (Table 5). The higher HA scores of 1st-4th grades compared to seniors can be explained by the pressure of performing well enough to graduate due to the intensive course curriculum, anxiety about passing the course and grade, and uncertainty about the future. It was determined that the low HA scores of the final grade students compared to the other classes were similar to the study data of Ergin et al (2014). In this period, the significantly lower score of the HA subcategory, which is a passive style, can be associated with the current situation in the school when the students reach their last grade, the reduction of intense stress load such as passing the course and the necessity of attendance, being better equipped in terms of knowledge and skills related to veterinary medicine compared to the lower classes, and the intensification of their efforts to survive on their own because they are at the stage of starting their professional life.

The veterinary profession has gained a masculine structure by being gendered in many ways (Irvine and Vermilya 2010). When the rates of female students continuing their education at the university in science and social sciences are examined as of 2016-2017, it is seen that the rates in fields such as engineering (21.8%), architecture and construction (32.9%), and veterinary medicine (30.6%) are low compared to social sciences (68.6% educational sciences, 63.3% handicrafts) (Ministry of Development 2018). In a study conducted by Şen et al (2012) for specialist physicians, it was determined that the gender factor and age ranges did not create a statistically significant difference between the total score of coping with stress styles and the subgroup scores. Gelberg and Gelberg (2005) reported that in cases where animal death occurs due to euthanasia, illness, etc., stress is more common, especially in women. For this reason, it has been stated that students experience intense stress during the process of being exposed to these situations until they develop effective coping and communication skills with such stresses. In a study by Pelit et al (2018) in which they examined the effect of emotional intelligence on communication skills, it was determined that female students had higher emotional intelligence levels than male students. The fact that the style of coping with stress used in the study did not differ in terms of age ranges was similar to the study data of Sen et al (2012), but when it was evaluated in terms of gender, a non-significant difference was found in HA scores. The fact that female students have higher HA sub-category scores compared to male students (p>0.05; Table 5) can be interpreted as the gender dualism (duality) in the social structure in the performance of the profession may have adversely affected the individual motivation of women. Stress can be seen more common in women due to various situations (emotional, etc.).

In studies examining the psychological effects of social isolation on individuals, it was determined that isolated individuals felt feelings such as limitation, imprisonment, stigma, anger, depression, anxiety, low self-esteem, and lack of control (Lewis et al 1999, Davies and Rees 2000). In a study conducted through the British Equine Veterinary Medical Association (BEVA) membership database, it has been reported that veterinarians whose normal working practices were restricted during the Covid-19 pandemic had lower mental health levels compared to veterinarians who continued to work during the restrictions. In comparison, veterinary students who were restricted had lower mental health levels compared to both groups (Mair et al 2021). In the study, in parallel with the above research data, students who could not continue formal education due to the restrictions applied due to the Covid-19 pandemic in Turkey, who had to switch to an isolated lifestyle with the mandatory curfew, and who canceled their travel or vacation due to the pandemic (68%; Table 2), it can be said that the students' feeling of being restricted, imprisoned and limited in this period may have contributed to the high HA and SA scores (Table 4).

In a study conducted by Taşdemir Yiğitoğlu et al (2019) for nursing students, there was a statistically significant difference in the mean scores of the SA subscales according to the grades, and the SA scores of the third-grade students were high. In another study conducted by Güler and Çınar (2010) for nursing students, it was reported that the SA scores of the third-grade students were found to be significantly lower than those in other classes. In the study, no significant difference was found between the students' grades in terms of SCA, OA, and SSS scores (p>0.01), while there was a significant difference (p<0.01) between SA and HA scores (Table 5). Contrary to the study data of Güler and Çınar (2010), it can be stated that the significantly higher SA scores of thirdgrade students are in line with the study data of Taşdemir Yiğitoğlu et al (2019). It can be said that, as in nursing faculties, students in veterinary faculties concentrate on applied courses (clinical, laboratory, etc.) when they reach their third-grade, therefore they have difficulty in coping with stress due to the intense curriculum content, and they prefer the passive style of SA.

Conclusion

As a result, it was determined that the participants who were able to cope with stress used the "self-confident" and "optimistic" approaches more, while those who had difficulty in coping preferred the "helpless" approaches. It can be said that SUFVM students have high "self-confident approaches" scores and low "seeking social support" scores; the coping strategies they use are mostly problem-based active styles, and they use passive styles related to emotions less.

Considering that students who have difficulty in coping with stress during the Covid-19 pandemic have high "helpless approaches" scores, it can be said that it is very important for veterinarians, who are the guarantors of animal and human health, to develop skills to cope with stressful situations such as the Covid-19 pandemic while they are still students. The-

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se skills can be developed through hands-on study programs on personal stress management to be conducted by faculties. In this context, it can be said that information about adaptive coping mechanisms and methods that encourage the use of these mechanisms should be developed. In this direction, various announcements can be posted on student notice boards, and workshops can be organized, the subject can be included in orientation programs and other course materials (such as textbooks, videos, and presentations). In addition, in case of failure in coping mechanisms caused by the Covid-19 pandemic, it is important to develop skills and other professional skills (such as communication skills, consultation, and remuneration) against situations that may be stressful in the clinic. It is thought by the authors that providing online counseling, educational support services and professional stress management programs for these situations will help students reduce their stress and develop a range of skills.

Conflict of Interest

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During this study, any pharmaceutical company which has a direct connection with the research subject, a company that provides and / or manufactures medical instruments, equipment and materials or any commercial company may have a negative impact on the decision to be made during the evaluation process of the study or no moral support.

References

- AlAteeq DA, Aljhani S, AlEesa D, 2020. Perceived stress among students in virtual classrooms during the COVID-19 outbreak in KSA. J Taibah Univ Medical Sci, 15(5), 398-403.
- Alnıaçık E, Of M, Balkaş J, Tülemez S, et al., 2021. Pandemi sürecinde üniversite öğrencilerinin psikolojik dayanıklılıkları ve umutsuzluklarının kariyer geleceği algısı üzerindeki etkileri. BMIJ, 9(1), 248-266.
- Bekaroğlu E, Yılmaz T, 2020. COVID-19 ve psikolojik etkileri: Klinik psikoloji perspektifinden bir derleme. Nesne, 8(18), 573-584.
- Cao W, Fang Z, Hou G, Han M, et al., 2020. The psychological impact of the COVID-19 epidemic on college students in China. Psychiatry Res, 287, 112934.
- Cohen AK, Hoyt LT, Dull B, 2020. A Descriptive study of COVID-19-related experiences and perspectives of a national sample of college students in spring 2020. J Adolesc Health, 67(3), 369-375.
- Collins H, Foote D, 2005. Managing stress in veterinary students. JVME, 32(2), 170-172.

Çetin Gündüz H, Nalbantoğlu Yılmaz F, 2016. Lise öğrencile-

rinin kariyer kaygılarını belirlemeye yönelik ölçek geliştirme çalışması. Mersin Üniversitesi Eğitim Fakültesi Dergisi, 12(3), 1008-1022.

- Davies H, Rees J, 2000. Psychological effects of isolation nursing (1): mood disturbance. Nurs Stand, 14(28), 35.
- Demirsöz M, Özel Z, Yonar H, Tekin ME, et al., 2021. Structural determination of the relationship between trait anxiety and personal indecisiveness for undergraduates of the faculty of veterinary medicine: The case of Selcuk University. Vet Hekim Der Derg, 92(1), 60-75.
- Duman N, 2020. Üniversite öğrencilerinde COVID-19 korkusu ve belirsizliğe tahammülsüzlük. TJSS, 4(8), 426-437.
- Erdoğmuş Zorver C, 2011. Kariyer uyumu ve iyimserliği ölçeği'nin geliştirilmesi. Yüksek Lisans Tezi, Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Ergin A, Uzun SU, Bozkurt Aİ, 2014. Tıp fakültesi öğrencilerinde stresle başa çıkma yöntemleri ve bu yöntemlerin sosyodemografik özelliklerle ilişkisi. Firat Med J, 19(1), 31-37.
- Ereş F, Doguş Y, 2020. Covid-19 salgını: Lisans öğrencileri üzerindeki etkileri. İzmir Demokrasi Üniversitesi 2. Uluslararası Eğitim Araştırmaları Kongresi, Tam Metin Bildiri Kitabı 4-6 Aralık / 2020 / İzmir.
- Folkman S, Lazarus RS, 1980. An analysis of coping in a middle-aged community sample. JHSB, 21(3), 219-239.
- Gelberg S, Gelberg H, 2005. Stress management interventions for veterinary students. JVME, 32(2), 173-181.
- Güler Ö, Çınar S, 2010. Hemşirelik öğrencilerinin algıladıkları stresörler ve kullandıkları başetme yöntemlerinin belirlenmesi. Maltepe Üniversitesi Hemşirelik Bilim ve Sanatı Dergisi Sempozyum Özel Sayısı, 1, 253-261.
- Hakami Z, Khanagar SB, Vishwanathaiah S, Hakami A, et al., 2020. Psychological impact of the coronavirus disease 2019 (COVID-19) pandemic on dental students: A nation-wide study. J Dent Educ, 85, 494-503.
- Irvine L, Vermilya JR, 2010. Gender work in a feminized profession: The case of veterinary medicine. Gender & Society, 24(1), 56-82.
- Jawad H, 2020. Wellbeing of veterinary and medical students during COVID-19 pandemic. Acta Sci Vet Sci, 2(7), 31-34.
- Kar N, Kar B, Kar S, 2021. Stress and coping during COVID-19 pandemic: Result of an online survey. Psychiatry Res, 295, 113598.
- Kaya M, Genç M, Kaya B, Pehlivan E, 2007. Tıp fakültesi ve sağlık yüksekokulu öğrencilerinde depresif belirti yaygınlığı, stresle başa çıkma tarzları ve etkileyen faktörler. Türk Psikiyatr Derg, 18(2), 137-146.
- Lazarus RS, 1991. Emotion and adaptation. Oxford, UK: Oxford University Press.
- Lewis AM, Gammon J, Hosein I, 1999. The pros and cons of isolation and containment. JHI, 43(1), 19-24.
- Luo M, Guo L, Yu M, Wang H, 2020. The psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and general public-A systematic review and meta-analysis. Psychiatry Res, 291, 113190.
- Main A, Zhou Q, Ma Y, Luecken LJ, et al., 2011. Relations of

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SARS-related stressors and coping to Chinese college students' psychological adjustment during the 2003 Beijing SARS epidemic. J Couns Psychol, 58(3), 410-423.

- Mair TS, Mountford DR, Radley R, Lockett E, et al., 2021. Mental wellbeing of equine veterinary surgeons, veterinary nurses and veterinary students during the COVID-19 pandemic. EVE, 33(1), 15-23.
- Marino A, 2020. The effects of COVID-19 on the education of veterinary medical students. J of Avian Medicine and Surgery, 34(4), 416-421.
- Ministry of Development (2018). On Birinci Kalkınma Planı (2019-2023): Kadının Kalkınmadaki Rolü, Özel İhtisas Komisyonu Raporu, Ankara. Erişim Adresi: https://www.sbb. gov.tr/wp-content/uploads/2020/04/KadininKalkinmadakiRoluOzelIhtisasKomisyonuRaporu.pdf Erişim Tarihi: 27.03.2021
- Nakhostin-Ansari A, Sherafati A, Aghajani F, Khonji MS, et al., 2020. Depression and anxiety among Iranian Medical Students during COVID-19 pandemic. Iran J Psychiatry, 15(3), 228.
- Pelit E, Karaçor M, Kılıç İ, 2018. Duygusal zekânın iletişim becerilerine etkisi: Turizm öğrencileri üzerinde bir araştırma. DEÜ SBE Dergisi, 20(1), 85-107.
- Rogowska AM, Kuśnierz C, Bokszczanin A, 2020. Examining anxiety, life satisfaction, general health, stress and coping styles during COVID-19 pandemic in Polish sample of university students. Psychol Res Behav Manag, 13, 797-811.
- Sahu P, 2020. Closure of universities due to coronavirus disease 2019 (COVID-19): Impact on education and mental health of students and academic staff. Cureus, 12(4), e7541.
- Salman M, Asif N, Mustafa ZU, Khan TM, et al., 2020. Psychological impact of COVID-19 on Pakistani university students and how they are coping. Medrxiv.
- Sheroun D, Wankhar D, Devrani A, Lissamma PV, et al., 2020. A study to assess the perceived stress and coping strategies among B.Sc. nursing students of selected colleges in pune during COVID-19 pandemic lockdown. IJSHR, 5(2), 280-288.
- Şahin NH, Durak A, 1995. Stresle başaçıkma tarzları ölçeği: Üniversite öğrencileri için uyarlanması. Türk Psikol Derg, 10(34), 56-73.
- Şen H, Toygar M, Türker T, İnce N, et al., 2012. Bir grup hekimin stresle başa çıkma tekniklerinin değerlendirilmesi. TAF Prev Med Bull, 11(2), 211-218.
- Taşdemir Yiğitoğlu G, Turan T, Korkmaz Aslan G, Kartal A, 2019. Hemşirelik öğrencilerinin stresle başetme durumları ve madde kullanım öykülerinin belirlenmesi. Pam Tıp Derg, 12(3), 371-385.
- Ulaş Ö, Kızıldağ S, 2018. Kariyer engelleri ölçeği'nin (KEÖ) geliştirilmesi. H U Journal of Education, 34(1), 182-196.
- Wang X, Hegde S, Son C, Keller B, et al., 2020. Investigating mental health of US college students during the COVID-19 pandemic: Cross-sectional survey study. J Med Internet Res, 22(9), e22817.
- World Health Organisation (WHO) (2020). Erişim Tarihi: 31.03.2021, Erişim Adresi: https://www.who.int/director-general/speeches/detail/who-director-general-s-

opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

- Yang C, Chen A, Chen Y, 2021. College students' stress and health in the COVID-19 pandemic: The role of academic workload, separation from school, and fears of contagion. Plos One, 16(2), e0246676.
- Zenner D, Burns GA, Ruby KL, DeBowes RM, et al., 2005. Veterinary students as elite performers: Preliminary insights. JVME, 32(2), 242-248.
- Zhou SJ, Zhang LG, Wang LL, Guo ZC, et al., 2020. Prevalence and socio-demographic correlates of psychological health problems in Chinese adolescents during the outbreak of COVID-19. ECAP, 29(6), 749-758.

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Ethical Approval

This study was carried out with the approval of Selcuk University Faculty of Veterinary Medicine, Experimental Animal Production and Research Center Ethics Committee (SÜVDA-MEK) dated 11.06.2020 and numbered 2020/54.

Due to the fact that the study was related to Covid-19, a scientific research application was made to the Ministry of Health and approval was obtained from the ministry on 02.06.2020 (Approval Status: It has been approved by our Ministry to carry out this study).

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