THE TURKISH JOURNAL ON ADDICTIONS
www.addicta.com.tr

ORIGINAL ARTICLE

Internet Addiction and Styles of Coping with Stress During the COVID-19 Pandemic in Turkey

Havva Gezgin Yazıcı[1], **Latife Utaş Akhan**[2]

[1]Department of Mental Health Nursing, Kütahya Health Sciences University, Faculty of Health Sciences, Kütahya, Turkey
[2]Department of Mental Health Nursing, Bandırma On Yedi Eylül University, Balıkesir, Turkey

ORCID iDs of the authors: H.G.Y. 0000-0001-8422-9686, L.U.A. 0000-0001-6423-3186.

Main Points

- Since the schools switched to distance learning because of the pandemic, university students have been pursuing online education.
- This has caused an increase in the time students are spending online.
- At the same time, it has been seen that students are unable to effectively cope with stress.
- It is expected that this will result in an increase in the rate of internet addiction among students.

Abstract

This study was conducted in descriptive and cross-sectional design to identify the status of internet addiction among university students and their styles of coping with stress during the coronavirus disease 2019 pandemic in Turkey. The study population was the total of all students ($N = 750$) enrolled at two universities in Turkey. The whole of the study universe was targeted, but the research was ultimately conducted with the 568 students who agreed to participate. The study data were collected with a Personal Data Form, the Young Internet Addiction Test-Short Form, and the Styles of Coping with Stress Scale. It was found that most of the students spent 3 – 5 hours on the internet during the weekdays and on the weekends; 83.9% connected to the internet via their cellphones, and a large majority (82.6%) used the internet for logging into social media. Among the ways the students coped with stress, the most common was by adopting a self-confident style and a "seeking social support" approach. It was seen that during the coronavirus disease 2019 pandemic, the students were moderately addicted to the internet and that among the most common styles they adopted to cope with stress was by adopting a self-confident style and seeking social support approach.

Keywords: Coping, COVID-19, internet addiction, stress, students

Corresponding Author:
Havva Gezgin Yazıcı
E-mail:
havva.gezginyazici@ksbu.edu.tr

Received: October 12, 2021
Accepted: November 23, 2021
Available Online Date: February 11, 2021

Introduction

The coronavirus disease 2019 (COVID-19) pandemic had an adverse impact on societies around the world. Because there is no effective treatment for the disease and vaccination rates are yet not at the desired level, governments are forced to take supplementary measures. These measures mainly take the form of partial or total lockdowns, isolating people and urging them to live their lives at home.

With more time spent at home, people began to make more use of technology, especially by increasing digital entertainment consumption (Dong et al., 2020). This new lifestyle has also brought with it psychological issues such as sleep disorders, anxiety, and feelings of loneliness (Cellini et al., 2020). Quarantining and spending more time at home has the potential of releasing addiction-forming behaviors (Kar et al., 2020).

As the COVID-19 pandemic began to unfold, universities all over the world suspended their face-to-face

Cite this article as: Gezgin Yazıcı, H, & Utaş Akhan, L. (2022). Internet Addiction and Styles of Coping with Stress During the COVID-19 Pandemic in Turkey. *Addicta: The Turkish Journal on Addictions*, 9(2), 204-211.

DOI: 10.5152/ADDICTA.2022.21099

academic programs and began to hold classes online. In Turkey as well, university students continued their education online when the pandemic took hold of Turkey. In this period, students used the internet to access educational materials, contact each other, and for many other purposes that included shopping and entertainment (Lin, 2020; King et al., 2020). Although reaching for the internet in such trying times can make students feel good in the short term, in the long run, this habit does not contribute to their well-being. To protect their mental health, students need to acquire the skills that will help them in their social problem-solving and in coping with stress.

Situated in the center of modern life, the internet is one of the most outstanding technologies of our time. Representing the whole of all interconnected computer networks, the internet must be utilized prudently. Global internet utilization rates are increasing, and as a result, people are facing the dangers of "internet addiction." The internet now has a prominent place in many aspects of human endeavor, and despite the ways it facilitates life, because the time spent on the internet cannot be fully kept in check, individuals are faced with not only physical problems but also issues related to social relations (Can & Tozoğlu, 2019).

Internet addiction refers to the inability of an individual to control his/her high degree of internet usage, an outcome that results in becoming subsequently unable to fulfill responsibilities and experiencing problems in social interactions (Yılmazsoy & Kahraman, 2017). Internet addiction is also known as pathological internet usage; this condition leads to psychological, social, and workplace difficulties and is detrimental to the mental and physical health of young people as well as in terms of their academic achievement and emotional adaptation to life (Chou et al., 2015; Lei et al., 2018).

Studies reveal that the frequency of internet addiction among university students ranges between 1.5% and 24%. There are studies, in fact, that show that the rate of internet addiction in China is 11% (Li et al., 2018; Shao et al., 2018). In a study conducted with students in Jordan, it was reported that the prevalence of internet addiction was 40% and that coping strategies and particularly the use of problem-solving skills helped to keep students' internet addiction at a lower level (Hasan & Jaber, 2019). Studies carried out in Turkey reveal an internet addiction rate of 14% in a study by Batıgün and Hasta (2010) and of 7.2% in a study conducted by Dalbudak et al. with 319 university students (Dalbudak et al., 2013).

Internet addiction has become a global public health issue (Chou et al., 2015), and it is asserted that university students constitute a risk group in this respect due to their excessive use of the internet and especially because of their more intensive use of the social media compared to other groups (Yussuf et al., 2013). Pathological internet usage can threaten functionality and hinder individuals in their efforts to cope with stress. Developing effective coping behavior may reduce stress, help individuals to solve their problems, and protect psychological well-being (Hall & Parsons, 2001). For this reason, examining the strategies individuals with internet addiction use in coping with stress may serve as a guidepost for future studies.

The aim of this cross-sectional study was to examine the strategies implemented by Turkish university students to cope with stress, the extent of their internet addiction, and the impacting factors. Studies previously conducted in this area are few, and therefore, we hypothesized that the strategies used to cope with internet addiction and stress would show variability among university students during the COVID-19 pandemic.

Our research questions in this context were the following:

1. What is the level of internet addiction among university students during the COVID-19 pandemic?
2. What styles of coping with stress do university students use during the COVID-19 pandemic?
3. Is there a difference between the styles used by university students to cope with stress during the COVID-19 pandemic and their inability to control their internet usage?

Methods

Study Population and Sample

The study population was the total of all students (N = 750) enrolled at two universities in Turkey. The study sample constituted 568 students agreeing to participate in the research from May 09, 2021, to June 05, 2021. The study data were collected with a Personal Data Form, the Young Internet Addiction Test-Short Form (YIAT-SF), and the Styles of Coping with Stress Scale (SCSS). The links to the questionnaires were sent via email and social media. By clicking on the links, the students were automatically guided to information about the study and to an informed consent form. After consenting to participate, the students were asked to fill out the forms. Those who were enrolled at the university and willing to provide an informed consent form were recruited into the study.

Data Collection Instruments

Personal Data Form

This form was prepared by the authors on the basis of the literature and consisted of 19 questions on the students' sociodemographic features, their purpose for using the internet, the internet packages they use, and how they spend their leisure time (Chou et al., 2015; Li et al., 2018; Pektaş & Mayda, 2018; Shao et al., 2018).

Young Internet Addiction Test-Short Form

This scale was developed by Young; its short form was devised by Pawlikowski et al. It was adapted into Turkish by Kutlu et al. Young Internet Addiction Test-Short Form consists of 12 items and is a 5-point Likert-type (1 = never, 5 = very often) scale. There is no reverse scoring in the scale. The total possible score on the scale varies between 12 and 60. The higher scores indicate higher levels of internet addiction (Kutlu et al., 2016). In this study, Cronbach's alpha was found to be .875.

Styles of Coping with Stress Scale

The original form of the SCSS was developed by Amirkhan (1990). Aysan (1994) performed the validity and reliability study of the scale in Turkey. The scale has three subscales—problem-solving, seeking social support, and avoidance—and contains 33 items. Each subscale consists of 11 statements and 3 possible responses that are scored as not at all (1 point), a

little (2 points), and very much (3 points). Each of the subscales can yield a possible minimum score of 11, a maximum of 33. Those who can effectively cope with stress are identified as having a "self-confident" or an "optimistic style"; those who cannot cope are identified as making more use of a "submissive" or a "hopeless" style. The subscales of the SCSS are scored separately, independently of each other. The higher the score, the more the individual makes use of the particular style tested. Higher scores on the problem-solving and seeking social support subscales indicate that negative coping styles are being used. Cronbach's alpha internal consistency coefficient in the problem-solving subscale is .83, .80 in the seeking social support subscale, and .73 in the avoidance subscale (Aysan, 1994). In this study, Cronbach's alpha was found to be .658.

Statistical Analysis

The Statistical Package for the Social Sciences 22.0 program was used in the statistical analysis of the data. It was seen that the data collected did not display normal distribution, and therefore, the Mann – Whitney *U* test was employed in the comparison between two groups of variables, while the Kruskal – Wallis test was used in the comparison of multiple groups. The descriptive characteristics of the participants were expressed in terms of number of people (*n*), percentages (%), means, and standard deviation. Significance was accepted as $P < .05$.

Ethical Considerations in the Study

Approval for the conduct of the study was obtained from the relevant university's Noninterventional Clinical Trials Ethics Committee (dated May 08, 2021, and numbered 2021-28), and the written consent of the students participating in the study was received via forms that were received and delivered online.

Results

Before determining the power of the SCSS subscales in terms of predicting internet addiction, the relationships between the variables were examined with correlation matrices. Then, regression analysis was performed to determine the predictive power of the independent variables in terms of the students' internet addiction.

Data on the students' sociodemographic characteristics can be found in Table 1.

Table 1.
Students' Sociodemographic Characteristics

	N	%
Gender		
Female	417	73.9
Male	147	26.1
Family type		
Living with parents	520	92.2
Parents divorced	44	7.8
Number of siblings		
No siblings	22	3.9
One sibling	212	37.6
Two siblings	155	27.5
Three or more siblings	175	31.0
Family income status		
Good	98	17.4
Average	439	77.8
Poor	27	4.8
Your mother's education		
Literate	64	11.3
Primary school	279	49.5
Middle school	85	15.1
High school	103	18.3
University	33	5.9
Your father's education		
Literate	19	3.4
Primary school	179	31.7
Middle school	126	22.3
High school	149	26.4
University	91	16.1
Place of residence		
Province	289	51.2
District	208	36.9
Village/town	67	11.9
Do you have any chronic illness?		
Yes	40	7.1
No	524	92.9

The highest rate, at 43.6%, of average time spent daily on the internet during the week was 3 – 5 hours, while the highest rate, at 41.7%, of average time spent daily on the internet over the weekend was again 3 – 5 hours. Leisure time was most commonly (50.9%) spent by reading and least commonly (2.5%) by going to the movies or theater. The rate of smoking was 20.7% ($n = 117$). A large majority (83.9%) logged into the internet via their cellphones. A large majority (82.6%) use the internet mostly for keeping up with social media. Those who said they did not read books comprised 11.2% ($n = 63$), while those who read one book a month represented the largest group (42.2%). Those participants with an internet monthly package providing a quota of 1 GB constituted only 2.5% ($n = 14$). Most (36.9%) had an internet package of 6 – 10 GB. Among the participants, 5% ($n = 28$) had a diagnosed psychiatric illness (Table 2).

Significant differences were found in the self-confident approach and the seeking social support subscales in terms of family income ($p < .05$). Those with a good income had higher scores than those at middle or poor income status. The overall SCSS score however showed only a difference between those with a good and those with a middle income; those with a good level of income displayed a higher mean score.

Table 2.
Features of the Students' Internet Usage

	N	%
Average time spent on the internet on a daily basis during the week		
Less than 1 hour	20	3.5
1 – 2 hours	119	21.1
3 – 5 hours	246	43.6
6 hours and over	179	31.7
Average time spent on the internet on a daily basis over the weekend		
Less than 1 hour	23	4.1
1 – 2 hours	90	16.0
3 – 5 hours	235	41.7
6 hours and over	216	38.3
How do you spend your leisure time?		
Reading a book	287	50.9
Doing sports	88	15.6
Going to the movies or the theater	14	2.5
Listening to music	92	16.3
Passing time on the internet	67	11.9
Watching movies	16	2.8
Do you smoke?		
Yes	117	20.7
No	447	79.3
How do you usually connect to the internet?		
Desktop	18	3.2
Laptop	70	12.4
Cellphone	473	83.9
Tablet	3	.5
What do you usually use the internet for?		
Social media	466	82.6
Online games	20	3.5
To read the news	18	3.2
To do research	17	3.0
Connecting to classes	28	5.0
To do online shopping	2	.4
To watch movies	11	2.0
Online chatting	2	.4
Your book reading frequency?		
Never	63	11.2
A book a week	131	23.2
A book a month	238	42.2
A book a year	132	23.4
How many GBs is your monthly internet quota on your telephone?		
1 GB	14	2.5
2 GB	31	5.5
3 – 5 GB	128	22.7
6 – 10 GB	208	36.9
11 GB or over	183	32.4
Do you have any diagnosed psychiatric illness?		
Yes	28	5.0
No	536	95.0

A look into the variation in scale scores according to the average amount of time spent daily on the internet during the week revealed significant differences in the self-confident style and optimistic style subscales ($p < .05$). Those who spent 3 – 5 hours on the internet had lower scores on the self-confident style subscale compared to those who spent 1 – 2 or 6 or more hours. The optimistic style subscale showed that those who spent 1 – 2 hours had higher mean scores than those who spent 3 – 5 hours.

It was seen in the differences between scale scores in terms of how much time was spent on the internet on a daily basis over the weekend that there were significant differences in the Young internet addiction, hopeless style, submissive style, and SCSS overall scores ($p < .05$). It was found in the Young internet addiction overall scores that those who spent 6 hours or more had higher scores than all the other groups. Outside of this, those who spent 1 – 2 hours were found to have significantly lower YIAT scores compared to those who were on the internet for 3 – 5 hours. In the hopeless style subscale, those who spent 6 hours or more had significantly higher scores than those who spent 1 – 2 or 3 – 5 hours. In the submissive style subscale, those who spent 6 hours or more had significantly higher scores than those who spent 1 – 2 or 3 – 5 hours. The SCSS overall score showed that those who spent 3 – 5 hours had significantly lower scores than those who spent less than 1 hour or 6 hours or more.

Table 3 displays the correlations found between the scales used in the study and their subscales. According to the table, it can be seen that only the subscale for the optimistic approach had no correlation with the submissive approach and the subscale for seeking social support subscales ($p > .05$). Outside of this finding, it was seen that there were both positive and negative correlations of different strengths between the scores. A positive correlation was found between the Young internet addiction scale and the submissive style, hopeless style, and SCSS overall scores; a negative correlation was found between the self-confident approach, the optimistic approach, and the seeking social support scores. A negative correlation was found between the subscale for the submissive approach and the self-confident style and the seeking social support scores; a positive correlation was seen between the hopeless approach and the SCSS overall scores. The correlation

Table 3.
Correlation Between YIAT-SF and SCSS

		Young Internet Addiction Total	Submissive Approach	Self-confident Approach	Optimistic Style	Hopeless Style	Seeking Social Support
Submissive style	*r*	.380**	1				
	p	.000					
Self-confident style	*r*	−.198**	−.153**	1			
	p	.000	.000				
Optimistic style	*r*	−.150**	−.007	.609**	1		
	p	.000	.860	.000			
Hopeless style	*r*	.395**	.504**	−.203**	−.116**	1	
	p	.000	.000	.000	.006		
Seeking social support	*r*	−.173**	−.310**	.281**	−.009	−.268**	1
	p	.000	.000	.000	.837	.000	
SCSS Total	*r*	.157**	.495**	.619**	.581**	.501**	.143**
	p	.000	.000	.000	.000	.000	.001

Test Spearman's rho, * $p < .05$; ** $p < .001$.
SCSS = Styles of Coping with Stress Scale; YIAT-SF = the Young Internet Addiction Test-Short Form.

between the subscale for the self-confident style and the optimistic style, seeking social support, and the SCSS overall score was positive; the correlation with the hopeless approach was negative. A negative correlation was found between the optimistic approach and the hopeless approach, but a positive correlation was found with the SCSS overall score. The hopeless style has a negative correlation with seeking social support and a positive correlation with the SCSS overall score. Lastly, a positive correlation was found between seeking social support and the SCSS overall scores.

Table 4 displays the results of the regression analysis performed to determine the effect of the SCSS on internet addiction. Accordingly, it can be seen that the overall score of the SCSS is a significant predictor of internet addiction ($F = 14.246$; $p < .05$). The higher the SCSS score, the more the level of internet addiction rises ($B = 5.246$), and it is observed that the model explained the dependent variable, that is, internet addiction, at the level of $R^2 = 2.3\%$.

Table 5 displays the results of the regression analysis performed to determine the effect of the SCSS subscales on internet addiction. Accordingly, it can be seen that the proposed model's subscales of submissive style and hopeless style are significant predictors of internet addiction ($F = 30.829$; $p < .05$). As the scores of both subscales increase, it is seen that the level of internet addiction also rises, but the submissive approach ($B = 4.306$) exerts the greatest effect ($p < .05$). It was seen that the model explained the dependent variable, that is, internet addiction, at the level of $R^2 = 21.6\%$.

Table 4.
Regression Analysis of Correlation Between Internet Addiction and the Styles of Coping With Stress Scale

	Unstandardized Coefficients		*t*	Sig.
	B	Std. Error		
(Constant)	18.266	2.340	7.807	.000
SCSS total	5.246	1.390	3.774	.000*

[a]Dependent variable: Young internet addiction: $F = 14.246$; $R^2 = .023$; $p < .00$.

Discussion

This study was conducted to determine the extent of internet addiction among university students and how they coped with stress during the COVID-19 pandemic in Turkey. Young (2009) has asserted that individuals may be drawn to the internet if they feel they do not have a sufficient outlet through which they can share their problems in their real lives or if they perceive the lack of a support system. In this context, it can be seen that due to reduced social interaction between individuals during the COVID-19 pandemic, because of being forced into social isolation by remaining in home quarantine, the decrease in opportunities

Table 5.
Regression Analysis of Correlation Between Internet Addiction and the Styles of Coping With Stress Scale

Model	Unstandardized Coefficients		*t*	Sig.
	B	Std. Error		
Constant	20.409	2.327	8.769	.000
Self-confident style	−.815	.790	−1.032	.303
Optimistic style	−1.442	.799	−1.805	.072
Submissive style	4.306	.768	5.605	.000*
Hopeless style	4.032	.744	5.423	.000*
Searching for social support	−.297	.700	−.424	.672

[a]Dependent variable: Young internet addiction: $F = 30.829$; $R^2 = .216$; $p < .00$.

for physical activity, insufficient support mechanisms, and psychological discomfort, people are at risk of developing an internet addiction (Brooks et al., 2020).

It was found in this study that students are moderately addicted to the internet and are unsuccessful in coping with stress. Among the ways that students choose to cope with stress, it was found that the most common method was to adopt a self-confident approach, while the least preferred method was to use a submissive approach. As the time spent on the internet increases, the more this adversely affects the mechanism of coping with stress, and it was seen that in this case, students tend to make less use of a self-confident attitude. It was reported in a study conducted with university students that a large majority of students experienced difficulty in controlling their use of the internet during the COVID-19 pandemic, and it was seen that this excessive usage adversely affected their relationships with others (Baltacı et al., 2020). A study in China demonstrated that 46.8% of the participants displayed increased symptoms of internet addiction during the COVID-19 pandemic (Sun et al., 2020). In another study, this time in Mexico, it was noted that 62.7% of the study participants were at risk of internet addiction (Priego-Parra et al., 2020).

In this study, it was reported that half of the students spent a maximum of 3 – 5 hours on the internet on weekdays and during the weekend. Similarly, another Chinese study reported that while about 26% of the participants had been spending an average of 3 or more hours on the internet daily before the pandemic, with the start of the pandemic, about 57% of participants began to spend a daily average of 3 hours or more on the internet (Duan et al., 2020).

It was found in this study that a large majority of the students (82.6%) used the internet for following up on the social media. It can be seen that the internet was generally used for keeping track of the social media, playing online games, and doing online shopping during the COVID-19 pandemic, which are circumstances that constitute a risk in terms of developing internet addiction. In a study conducted in Germany, 71.4% of the participants increased the time they spent on the social media compared to that before the pandemic. It was reported that in this period, male participants displayed an increase in their online game-playing time, while females spent more time than previously on the social media, searching for information and video streaming (Lemenager et al., 2020). Laconi et al. (2016) said in their study that male participants preferred gaming, porn, and shopping sites, while females chose chat rooms as their preference.

It is known that the COVID-19 pandemic was a new source of stress for university students because of the fear and anxiety they felt about whether the infection would affect them or their loved ones and due to the restrictions in their physical and social activities, not being able to go to school and other changes in their lifestyles (Yang et al., 2021).

This study showed that among the ways the students coped with stress, the most common was taking on a self-confident approach and searching for social support; students' tendency to adopt a submissive approach was at a low level. These findings are consistent with the results of the study by Yılmaz et al. (2017). Similarly, it was found in another study carried out with university students that students mostly preferred to show a self-confident approach in coping with stress and their submissive tendencies were at a low level (Eraslan, 2015). In the assessment of the scale, it is asserted that higher scores on the problem-solving and seeking social support subscales indicate that negative coping styles are being used. In this study, the fact that the technique of seeking social support is predominant among the students suggests that they are not making use of effective coping methods. It should not be forgotten during the pandemic that students need to be provided with online training that will raise their awareness about how they can deal with stress effectively.

It was observed that the SCSS subscales of self-confidence and seeking social support showed significant differences according to income status ($p < .05$). Those with a good income had higher scores in these subscales than those in a family with middle or poor income. In one study, it is reported that the socioeconomic level of a university student is an influential fact in the style of coping with stress that the student adopts (Savcı & Aysan, 2014). In a study conducted with medical school and health sciences college students, it was found that the family's income status was correlated with styles of coping with stress (Kaya et al. 2007). It can be said that students at a good income level adopt more effective styles of coping with stress than those in families at middle- or low-income levels.

According to the findings noted regarding the correlation between each of the SCSS scales and levels of internet addiction, it is seen that the SCSS overall score is a significant predictor of internet addiction. As the scores go up on the SCSS, internet addiction also rises. As the level of the students' internet addiction rises, the level of their submissive and hopeless approach styles also increases ($p < .05$). The results of the study showed that the submissive approach style subscale was first, the hopeless approach style second in significantly predicting internet addiction.

Limitations and Directions/Suggestions

The limitation of this study was that it was conducted with the students of only two universities in Turkey. Although the size of the sample was large, the results of the study cannot be generalized to the entire Turkish university population.

We aimed in our study to examine the internet addiction status and styles of coping used by students during the COVID-19 pandemic. It was seen that during the COVID-19 pandemic, the students were moderately addicted to the internet and that among the most common styles they adopted to cope with stress was by a self-confident style and seeking social support. It has been noted that there is not enough research in the literature on potential internet addiction and the ways individuals cope with stress during the COVID-19 pandemic, and therefore, our study may be considered a contribution to filling this gap in the literature. Planning for future studies on the effects of the pandemic with different groups may also shed more light on this issue.

It is recommended, during and after the pandemic, that online training is organized and provided to university students so that their awareness can be raised regarding the issues of internet addiction and coping with stress. Other activities as well can be undertaken in order to protect students' well-being in this period and to strengthen their network of social support. Talks held regularly between students and their advisors and education

provided in class sessions about the pandemic and crisis management are two examples of what can be offered to students in this context.

Ethics Committee Approval: Ethics committee approval was received for this study from the Non-interventional Research Ethics Committee of Bandırma Onyedi Eylül University (Dated 08.05.2021 and numbered 2021-28).

Informed Consent: Informed consent was obtained from all participants prior to their inclusion in the study.

Peer-review: Externally peer-reviewed.

Author Contributions: Research Study Design and Implementation - L.U.A., H.G.Y.; Data Collection and Analysis, Drafting the manuscript - L.U.A., H.G.Y.; Critical Review for Intellectual Content and Approval of the Final Version of the Manuscript - L.U.A., H.G.Y.

Declaration of Interests: The authors have declared that no conflicts of interest exist.

Funding: The authors declared that this study has received no financial support.

References

Amirkhan, J. H. (1990). A factor analytically derived measure of coping: The Coping Strategy Indicator. *Journal of Personality and Social Psychology*, *59*(5), 1066.

Aysan, F. (1994). Başa çıkma stratejisi ölçeğinin üniversite öğrencileri için geçerliği, güvenirliği. *I. Eğitim Bilimleri Kongresi Bildiriler Kitabı*, *3*, 1158 – 1168.

Baltacı, Ö., Akbulut, Ö. F., & Zafer, R. (2020). COVID-19 pandemisinde problemli internet kullanimi: Bir nitel araştirma [Problematic internet use in the COVID-19 pandemic: A qualitative study]. *Kırşehir Ahi Evran Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, *1*(3), 126 – 140.

Batıgün, A. D., & Hasta, D. (2010). Internet bağimliliği: Yalnızlık ve kişilerarası ilişki tarzları açısından bir değerlendirme [The relationship between internet addiction and loneliness]. *Anadolu Psikiyatri Dergisi*, *11*(3), 213 – 219.

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *Lancet*, *395*(10227), 912 – 920. [CrossRef]

Can, H. C., & Tozoğlu, E. (2019). Üniversite öğrencilerinin internet bağimlilik düzeylerinin spor ve farkli değişkenler açisindan incelenmesi [Examining of university students' internet addiction levels in terms of sports and different variables]. *Spor Eğitim Dergisi*, *3*(3), 102 – 118.

Cellini, N., Canale, N., Mioni, G., & Costa, S. (2020). Changes in sleep pattern, sense of time and digital media use during COVID - 19 lockdown in Italy. *Journal of Sleep Research*, *29*(4), e13074. [CrossRef]

Chou, W. P., Ko, C. H., Kaufman, E. A., Crowell, S. E., Hsiao, R. C., Wang, P. W., Lin, J. J., & Yen, C. F., & Yen, C. F. (2015). Association of stress coping strategies with internet addiction in college students: The moderating effect of depression. *Comprehensive Psychiatry*, *62*, 27 – 33. [CrossRef]

Dalbudak, E., Evren, C., Aldemir, S., Coskun, K. S., Ugurlu, H., & Yildirim, F. G. (2013) Relationship of internet addiction severity with depression, anxiety, and alexithymia, temperament and character in university students. *Cyberpsychology, Behavior, and Social Networking*, *16*(4), 272 – 278. [CrossRef]

Dong, H., Yang, F., Lu, X., & Hao, W. (2020). Internet addiction and related psychological factors among children and adolescents in China during the coronavirus disease 2019 (COVID-19) epidemic. *Frontiers in Psychiatry*, *11*, 751. [CrossRef]

Duan, L., Shao, X., Wang, Y., Huang, Y., Miao, J., Yang, X., & Zhu, G. (2020). An investigation of mental health status of children and adolescents in China during the outbreak of COVID-19. *Journal of Affective Disorders*, *275*, 112 – 118. [CrossRef]

Eraslan, M. (2015). Spor bölümlerinde öğrenim gören üniversite öğrencilerinin kişilik özelliklerinin ve stresle başa çikma stillerinin çeşitli değişkenlere göre incelenmesi [Investigation personality aspects and coping style to stress of students taking education at sport departments in terms of some variables]. *Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *7*(12), 65 – 82.

Hall, A. S., & Parsons, J. (2001). Internet addiction: College student case study using best practices in cognitive behavior therapy. *Journal of Mental Health Counseling*, *23*(4), 312.

Hasan, A. A. H., & Jaber, A. A. (2019). Prevalence of internet addiction, its association with psychological distress, coping strategies among undergraduate students. *Nurse Education Today*, *81*, 78 – 82. [CrossRef]

Kar, S. K., Arafat, S. M. Y., Sharma, P., Dixit, A., Marthoenis, M., & Kabir, R. (2020). COVID-19 pandemic and addiction: Current problems and future concerns. *Asian Journal of Psychiatry*, *51*. [CrossRef]

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, [Prevalence of depressive symptoms, coping styles and influencing factors in medical faculty and health school students]. *Türk Psikiyatri Dergisi = Turkish Journal of Psychiatry*, *18*(2), 137 – 146.

King, D. L., Delfabbro, P. H., Billieux, J., & Potenza, M. N. (2020). Problematic online gaming and the COVID-19 pandemic. *Journal of Behavioral Addictions*, *9*(2), 184 – 186. [CrossRef]

Kutlu, M., Savci, M., Demir, Y., & Aysan, F. (2016). Young internet bağımlılığı testi kısa Formunun Türkçe Uyarlaması: Üniversite öğrencileri ve ergenlerde geçerlilik ve güvenilirlik çalişmasi [Turkish adaptation of Young's Internet Addiction Test-Short Form: A reliability and validity study on university students and adolescents]. *Anadolu Psikiyatri Dergisi*, *17*(1), 69 – 76. [CrossRef]

Laconi, S., Andréoletti, A., Chauchard, E., Rodgers, R. F., & Chabrol, H. (2016). Problematic internet use, time spent online and personality traits. *L'Encephale*, *42*(3), 214 – 218. [CrossRef]

Lei, H., Cheong, C. M., Li, S., & Lu, M. (2018). The relationship between coping style and internet addiction among mainland Chinese students: A meta-analysis. *Psychiatry Research*, *270*, 831 – 841. [CrossRef]

Lemenager, T., Neissner, M., Koopmann, A., Reinhard, I., Georgiadou, E., Müller, A., Kiefer, F., & Hillemacher, T. (2020). COVID-19 lockdown restrictions and online media consumption in Germany. *International Journal of Environmental Research and Public Health*, *18*(1), 14. [CrossRef]

Li, L., Xu, D. D., Chai, J. X., Wang, D., Li, L., Zhang, L., Lu, L., Ng, C. H., Ungvari, G. S., Mei, S. L., & Xiang, Y. T. (2018). Prevalence of internet addiction disorder in Chinese university students: A comprehensive meta-analysis of observational studies. *Journal of Behavioral Addictions*, *7*(3), 610 – 623. [CrossRef]

Lin, M. P. (2020). Prevalence of Internet addiction during the COVID-19 outbreak and its risk factors among junior high school students in Taiwan. *International Journal of Environmental Research and Public Health*, *17*(22), 8547. [CrossRef]

Pektaş, İ., & Mayda, A. S. (2018). Tıp fakültesi öğrencilerinde internet bağımlılığı düzeyi ve etkileyen etmenler [The level of internet addiction and affecting factors in medical school students]. *Sakarya Medical Journal*, *8*(1), 52 – 62. [CrossRef]

Priego-Parra, B. A., Triana-Romero, A., Pinto-Gálvez, S. M., Ramos, C. D., Salas-Nolasco, O., Reyes, M. M., Ramosde-la-Medina, A., & Remes-Troche, J. M. (2020). Anxiety, depression, attitudes, and

internet addiction during the initial phase of the 2019 coronavirus disease (COVID-19) epidemic: A cross-sectional study in Mexico. *MedRxiv*, 20095844. [CrossRef]

Savcı, M., & Aysan, F. (2014). Üniversite öğrencilerinde algılanan stres düzeyi ile stresle ile başa çıkma stratejileri arasındaki ilişki, [The relationship between the perceived stress level and the stress coping strategies in university students]. *Uluslararası Türk Eğitim Bilimleri Dergisi*, *2*(1), 44 – 56.

Shao, Y. J., Zheng, T., Wang, Y. Q., Liu, L., Chen, Y., & Yao, Y. S. (2018). Internet addiction detection rate among college students in the People's Republic of China: A meta-analysis. *Child and Adolescent Psychiatry and Mental Health*, *12*(1), 25. [CrossRef]

Sun, Y., Li, Y., Bao, Y., Meng, S., Sun, Y., Schumann, G., Kosten, T., Strang, J., Lu, L., & Shi, J., Strang, J., Lu, L., & Shi, J. (2020). Brief report: Increased addictive internet and substance use behavior during the COVID - 19 pandemic in China. *American Journal on Addictions*, *29*(4), 268 – 270. [CrossRef]

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. [CrossRef]

Yılmaz, M., Yaman, Z., & Erdoğan, S. (2017). Öğrenci hemşirelerde stres yaratan durumlar ve baş etme yöntemleri. *Mersin Üniversitesi Sağlık Bilimleri Dergisi*, *10*(2), 88 – 99. [CrossRef]

Yılmazsoy, B., & Kahraman, M. (2017). Uzaktan eğitim öğrencilerinin internet bağımlılık düzeylerinin incelenmesi, [Examination of internet addiction levels of distance education students]. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi*, *3*(4), 9 – 29. Retrieved from https://dergipark.org.tr/en/pub/auad/issue/34247/378481.

Young, K. S. (2009). Internet addiction: Diagnosis and treatment considerations. *Journal of Contemporary Psychotherapy*, *39*(4), 241 – 246. [CrossRef]

Yussuf, A. D., Issa, B. A., Ajiboye, P. O., & Buhari, O. I. N. (2013). The correlates of stress, coping styles and psychiatric morbidity in the first year of medical education at a Nigerian university. *African Journal of Psychiatry*, *16*(3), 206 – 215. [CrossRef]