



AN INVESTIGATION OF TURKISH UNIVERSITY STUDENTS' INTERNET ADDICTION LEVEL DURING THE COVID-19 PANDEMIC

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Abstract: The purpose of this study is to examine the level of internet addiction of university students in the coronavirus epidemic process in terms of various variables. The research was carried out with the screening model, which is one of the quantitative research methods. The study group in Turkey between coronavirus outbreak and characterized by intense social isolation process from March to April 2020 date, Turkey in different higher education institutions in studying and researching on Google Forms through volunteer who agreed to participate 113 men, 292 women It consists of a total of 405 university students. In the research, "Young Internet Addiction Scale-Short Form" adapted to Turkish by Kutlu et al. (2016) and "Personal Information Form" developed by researchers to determine demographic information were used to determine the level of internet addiction of university students. As a result of the research, internet addiction levels of university students were found low during the coronavirus outbreak days. In addition, while the internet addiction levels of university students participating in the study differ significantly according to the frequency of curfew and daily internet usage time; There is no significant difference in terms of gender, city and residence, number of family members and frequency of coronavirus anxiety. The results of the research were discussed in the light of the literature and suggestions were made.

Key words: Internet addiction, coronavirus, university students.

1. Introduction

Being social entities, people continue their lives by establishing relationships with other people. These relationship processes established by individuals are important for their healthy development. The corona virus disease, which started in China for the first time and has influenced the whole world in a short time, has led to a significant decrease in interpersonal interactions by creating immense anxiety and fear based on its rapid spread and high contagiousness. In addition, the social isolation measures taken by countries to prevent the spread of the virus have led individuals to spend almost all their time at home. This process in which individuals mostly stay at home may decrease their social interactions and have them experience some psychological and social problems. This research aimed to investigate internet addiction, which is a possible problem that may arise when individuals spend more time on the internet as a result of spending more time at home as a result of the social isolation process.

In recent years, the internet has become an important part of our daily lives with the spread of technology in many areas. Today, especially during the corona virus epidemic, internet can make life easier for individuals by allowing them to communicate with each other quickly and free of charge, by facilitating the continuation of educational activities without interruption, by ensuring that the services of institutions are sustained and by providing opportunities to access information quickly and to carry out various social activities (Derin & Bilge, 2016; Ögel, 2012; Telli & Altun, 2020). However, when individuals use the internet addiction may arise as a disorder as a result of individuals using the internet in an addictive and uncontrolled manner (Ayhan & Balcı, 2009; Feindel, 2019).

Internet addiction can be defined as the intense desire experienced by the individual to use the internet. The periods when the individual is not connected to the internet feel insignificant and the individual

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experiences withdrawal symptoms such as irritability and aggression which negatively affect the individual's family, work, education and social life (Block, 2008; Ceyhan, 2008; Young, 2009). As a result, internet addiction may cause physical problems such as pain in the eye and neck and headache, excessive weight loss or weight gain, sleep problems and unhealthy diet; psychological problems such as stress, anxiety, depression, anger and loneliness; social problems such as deprivation from social activities, risks in education and business life, school failure, problems with friends and economic problems (Akın & Iskender, 2011; Baltacı & Bacanlı, 2020; Batıgün & Hasta, 2010; Ceyhan, Ceyhan & Gürcan, 2007; Ceyhan, 2008; Chang & Law, 2008; Gürcan & Hamarta, 2013; Üneri & Tanıdır, 2011; Young, 2009, 2011).

The risk of internet addiction during the corona virus epidemic process can be addressed within the framework of theories explaining internet addiction. Explaining internet addiction by using Maslow's hierarchy of needs theory, Suler stated that people are connected to the internet in order to meet the needs such as physiological needs, need for security, love, belonging, respectability and self-realization (Suler, 1996). In this context, the fact that individuals want to realize their basic physiological and psychological needs on the internet rather than interacting with people in real life as a result of social isolation may pose a risk in terms of developing internet addiction. The rapid spread of the corona virus pandemic in the world and the lethal effect of the virus have scares and worries (Eskici, 2020). Hence, many individuals may experience psychological states such as fear, anxiety, stress and depression during the epidemic process (Abel & McQueen, 2020; Brooks et al., 2020; Ministry of Education, 2020; TEDMEM, 2020; TUBA, 2020; Psychiatric Association of Turkey, 2020; World Economic Forum, 2020; World Health Organization, 2020). Explaining the status of internet addiction within the framework of the psychological and social problems that individuals face in daily life, Kandell stated that individuals may regard the internet as a safe haven to escape from the psychological and social problems they face in daily life (Kandell, 1998). In this context, psychological and social problems that individuals experience with the epidemic process may cause them to spend more time on the internet and lose their control over the internet (Brooks et al., 2020; TEDMEM, 2020; Psychiatric Association of Turkey, 2020). Young, who conducted studies to explain internet addiction, argued that the reason why individuals to turn to the internet is related to the absence of support mechanisms which help individuals to share their problems and interact socially in real life (Young, 2009). According to another approach, individuals may tend to establish relationships over the internet in order to feel more secure as a result of having problems in interpersonal relations in daily life (Liu & Kuo, 2008). Davis, who developed a model within the framework of cognitive-behavioral approach to explain internet addiction, stated that individuals' psychological and social problems and dysfunctional thoughts as well as the existence of reinforcers on the internet may lead to pathological internet use (Davis, 2001). Finally, the approach developed by Caplan stated that feelings of loneliness in real life, feelings of inadequacy in social skills and psychological problems may cause internet addiction (Caplan, 2003). When the theories which explain internet addiction are summarized in general, it can be argued that problems in interpersonal relationships in real life, inadequate social skills and support mechanisms and psychological and social problems may pose a risk for internet addiction. In this context, decreased social interactions among individuals in the corona virus epidemic process, weakened social support mechanisms, inactivity and psychological problems may pose a risk for internet addiction (Brooks ve ark., 2020; Ercan ve ark., 2020; Eskici, 2020; Gümüşgül & Aydoğan, 2020; Király et al., 2020; King et al., 2020; Ministry of Turkey, 2020; Moynihan et al., 2015; Telli & Altun, 2020; TÜBA, 2020; Psychiatric Association of Turkey, 2020).

The corona virus epidemic has led to several studies in the literature on the topic of corona virus. Studies conducted in Turkey on corona virus have generally focused on the biological and physical dimension (Alimoğlu & Erol, 2020; Bulut & Kato, 2020; Çelik, Saatçi & Eyüboğlu, 2020; Eskici, 2020; Gökçay & Keskindemirci, 2020; Gümüşgül & Aydoğan, 2020; Güner, Hasanoğlu & Aktaş, 2020; Önder, 2020; Tırmıkçioğlu, 2020; Tufan, Güler & Matucci-Cerinic, 2020; Yavuz & Ünal, 2020), economic dimension (Acar, 2020; Açıkgöz & Günay, 2020; Günay, Bayraktaroğlu & Özkul, 2020; Zeren & Hızarcı, 2020), administrative dimension (Ankaralı, 2020; Demirbilek, Pehlivan Türk, Özgüler & Alp Meşe, 2020), ethical dimension (Çobanoğlu, 2020), sociological dimension (Şen, 2020) and educational dimension (Özer, 2020; Telli & Altun, 2020) of the epidemic. However, there are no studies on the psychological and social dimension of the corona virus outbreak. In this context,

it can be argued that conducting studies on the effects of the epidemic on the psychological and social health of individuals will lead to preventive mental health services to be carried out during the epidemic process. In this respect, this study examined university students' internet addiction levels during the corona virus epidemic in terms of different variables.

1.1. Purpose of the Study

This study aimed to examine university students' internet addiction levels during the corona virus epidemic based on different variables. Within the framework of this general purpose, answers were sought to the following sub-objectives:

- What is the university students' level of internet addiction scores during the corona virus epidemic?
- Do university students' internet addiction levels differ in terms of gender, province of residence, place of accommodation, number of people they spend time together at home, frequency of perceived corona virus anxiety, frequency of going outside the accommodation and daily average period of internet use during the corona virus outbreak?
- What is the relationship between university students' purposes for using the internet and their level of internet addiction during the corona virus epidemic?

2. Method

This research, which investigated university students' internet addiction levels during the corona virus epidemic in terms of different variables, was carried out with the survey model. Survey model aims to describe participating individuals' past or present views or levels as they are (Büyüköztürk et al., 2018).

2.1. Study Group

The study group was composed of a total of 405 university students (113 males, 27.9% and 292 females, 72.1%) attending different universities in Turkey during the period of March-April 2020 when the coronavirus outbreak and the accompanying social isolation was intense. The participants volunteered to participate in the research through Google Forms. Table 1 presents the demographic information about the study group.

Table 1. Demographic information about the study group

Variable	Group	n	%
Gender	Male	113	27.9
	Female	292	72.1
City	Metropolitan-Zonguldak	267	65.9
	Other Cities	138	34.1
Residence	Apartment	293	72.3
	Detached Houses with Gardens	112	27.7
Family Number	Alone	11	2.7
	1-3 people	200	49.4
	3-5 people	147	36.3
	5+ people	47	11.6
Coronavirus Anxiety	No	61	15.1
	Sometimes	293	72.3
	Constant	51	12.6
Going Outside	No	168	41.5
	Sometimes	217	53.6
	Constant	20	4.9
Using Internet	0-1 hour/day	9	2.2
	1-3 hour/day	66	16.3
	3-5 hour/day	129	31.9
	5+ hour/day	201	49.6
Total		405	

Table 1 demonstrates that of the 405 participants, 113 of the university students participating in the research were males and 292 were females. In addition, 267 of university students participating in the study lived in the metropolitan provinces or in Zonguldak where curfew restrictions were implemented while the remaining 138 lived in cities where there were no curfew restrictions. While 293 of the participants resided apartments, 112 lived in detached houses with gardens/yards. While 11 participants lived alone, 200 lived with 1-3 people, 147 lived with 3-5 people and 47 lived with more than 5 people. 61 of the university students participating in the study reported no coronavirus anxiety, 293 occasional coronavirus anxiety and 51 constant coronavirus anxiety. In addition, while 168 of the university students never went out, 217 stated that they occasionally went out and 20 of them went out all the time during the outbreak. While 10 of the university students participating in the research did not take any precautions against the coronavirus, 95 reported taking occasional precautions and 300 reported taking continuous precautions. While 35 of the university students stated that there were people diagnosed with the coronavirus in their immediate environment, 370 stated that there were no people diagnosed with the coronavirus in their immediate environment. Finally, 9 of the university students reported spending an average of 0-1 hours on the internet, while 66 reported an average of 1-3 hours, 129 reported an average of 3-5 hours and 201 reported an average of more than 5 hours daily.

2.2. Data Collection Tools

“Young’s Internet Addiction Test-Short Version” adapted to Turkish by Kutlu, Savcı, Demir and Aysan (2016) and “Personal Information Form” developed by researchers were used in the research as data collection tools.

2.2.1. Young’s Internet Addiction Test-Short Version. In order to determine the internet addiction levels of the university students participating in the research, Young’s Internet Addiction Test-Short Version was used. The scale was developed by Young (1998) and converted into short form by Pawlikowski, Altstötter-Gleich and Brand (2013) and adapted to Turkish by Kutlu et al. (2016). The five-point Likert type scale consists of 12 items and one dimension.

There are no reverse-scored items in the scale. The lowest score that can be obtained from the scale is 12, and the highest score is 60. The high scores obtained from the scale poses a risk for internet addiction. In order to determine the reliability of the scale, Cronbach Alpha internal consistency coefficient of the scale was found .85 by Pawlikowski et al. (2013) and .91 by Kutlu et al. (2016) while it was calculated to be .88 in this study. It was concluded that the scale is a reliable tool that can be used to determine university students’ internet addiction levels.

2.2.2. Personal Information Form. The form was developed by the researchers in order to determine the demographic information of the university students participating in the research. And includes questions such as gender, city of residence, type of accommodation, number of family members at home, frequency of experiencing corona virus anxiety, frequency of going outside the home and average period of daily internet use.

2.3. Process

During the data collection process, first of all, the necessary permissions were obtained to use “Young’s Internet Addiction Scale-Short Form”. Then, data collection tools were added to Google Forms, which allows online data collection. University students participating in the research were given information about the purpose and the scales that would be used in the research. University students participating in the research were informed that participation was voluntary and people who did not want to participate were excluded. The data were collected online in a single session. Data collection process was conducted from March to April 2020 in Turkey where there was an intense corona virus outbreak. The university students were informed that they would have information about the results of the scale after data collection if they wished. In this context, students who expressed a desire to learn about their results were contacted at the end of the research.

2.4. Data Analysis

After collecting the data of the research, SPSS package program was used for analysis. The normality test was performed to determine whether the data was normally distributed and it was found that the data were not normally distributed in statistical terms. Then, appropriate nonparametric data analyzes

were performed depending on the general problem and sub-problems of the research. Firstly, frequency, percentage, means and standard deviation were calculated to determine university students' internet addiction levels. Mann-Whitney U and Kruskal-Wallis tests, the differentiation tests, were used to examine the differences in university students' internet addiction levels according to variables such as gender, city of residence, type of accommodation, number of family members at home, frequency of experiencing corona virus anxiety, frequency of going outside the home and average period of daily internet use. Then, the Spearman rank correlation test was used to determine the relationship between university students' internet addiction levels and their purpose of internet use such as spending time on social media, following the news, playing games, watching movies/series, continuing their educational activities, and communication.

While analyzing the data obtained from the five-point Likert-type scale used to determine the internet addiction levels of the university students participating in the research, the interval coefficient was calculated as 9.6 $((4/5) \times 12)$ by using the formula $((\text{Range} / \text{Likert Type}) \times \text{Number of Items})$. Table 2 presents the information regarding the range coefficients for the levels adopted in the evaluation of the data obtained from the scale.

Table 2. Interval coefficient for the levels adopted in the evaluation of the data obtained from the scale

Scale Type	Evaluation Criteria	Evaluation Rangers
Five-level Likert scale	Very Low	12.00 – 21.59
	Low	21.60 – 31.19
	Medium	31.20 – 40.79
	High	40.80 – 50.39
	Very High	50.40 – 60.00

The assessment ranges presented in Table 2 were used in the interpretation of the findings obtained in the research.

3. Findings

This section includes the results obtained from the analyses conducted in line with the general objective and sub-objectives of the research.

3.1. University Students' Internet Addiction Level During Coronary Virus Outbreak

Table 3 lists the internet addiction levels of the participating university students during the corona virus epidemic.

Table 3. Internet addiction levels of university students during coronavirus epidemic days

Variable	n	\bar{x}	sd
Internet Addiction	405	27.80	9.33

Table 3 presents the mean internet addiction score for participating university students as 27,80. Based on this finding, it can be argued that university students' internet addiction levels were low within the framework of the evaluation criteria in Table 2.

3.2. Differentiation of University Students' Internet Addiction Levels During the Corona Virus Outbreak According to Different Variables

Mann-Whitney U and Kruskal-Wallis tests, the differentiation tests, were used to examine the differences in university students' internet addiction levels according to variables such as gender, city of residence, type of accommodation, number of family members at home, frequency of experiencing corona virus anxiety, frequency of going outside the home and average period of daily internet use. Table 4 presents the results of Mann-Whitney U and Kruskal-Wallis tests.

Table 4. Differentiation status of internet addiction levels of university students according to various variables during coronavirus outbreak days

Gender	n	Rank average	Row total	U	p
Male	113	207.70	23470.50	15966.500	.615
Female	292	201.18	58744.50		
City	n	Rank average	Row total	U	p
Metropolitan-Zonguldak	267	205.53	54875.50	17748.500	.546
Other Cities	138	198.11	27339.50		
Residence	n	Rank average	Row total	U	p
Apartment	293	202.91	59451,50	16380.500	.979
Detached Houses with Gardens	112	203.25	22763,50		
Family Number	n	Rank average	Sd	χ^2	p
Alone	11	211.09	3	3.952	.267
1-3 people	200	197.30			
3-5 people	147	200.18			
5+ people	47	234.18			
Coronavirus Anxiety	n	Rank average	Sd	χ^2	p
No	61	188.62	2	2.775	.250
Sometimes	293	202.13			
Constant	51	225.21			
Going Outside	n	Rank average	Sd	χ^2	p
No	168	216.44	2	9.082	.011*
Sometimes	217	198.78			
Constant	20	135.90			
Using Internet	n	Rank average	Sd	χ^2	p
0-1 hour/day	9	118.06	3	58.086	.000*
1-3 hour/day	66	133.45			
3-5 hour/day	129	180.12			
5+ hour/day	201	244.32			

Note. * $p < .05$; level of significance

Table 4 demonstrates that internet addiction levels of university students participating in the study significantly differed according to the frequency of going outside the home and daily mean internet use. The Post Hoc test conducted to determine the source of the difference showed that the difference in the internet addiction level variable regarding the frequency of going outside during the epidemic was found to be between the following groups: “Never-All the time” and “Occasionally- All the time”. The difference in the variable regarding daily mean internet use during the epidemic was found to be between the following groups: “0-1 hours - 5+ hours”, “1-3 hours - 3-5 hours”, “1-3 hours - 5+ hours” and “3-5 hours - 5+ hours”. In addition, it was determined that internet addiction levels of university students participating in the study did not significantly differ based on gender gender, city of residence, type of accommodation, number of family members at home and frequency of experiencing corona virus anxiety.

3.3. The Relationship between University Students’ Purposes for Using the Internet and Their Level of Internet Addiction during The Corona Virus Epidemic

The Spearman rank correlation test was used to determine the relationship between university students’ internet addiction levels and their purpose of internet use such as spending time on social media, following the news, playing games, watching movies/series, continuing their educational activities, and communication. Table 5 presents the findings obtained from the Spearman rank correlation test.

Table 5 demonstrates a positive and significant correlation between participating university students’ internet addiction levels and their level of using the internet for purposes such as spending time on social media, playing games, watching movies/series and communication. Based on this finding, it can be argued that the level of internet addiction will increase as the level of spending time on social media, playing games, watching movies / series and communicating via the internet increases.

Table 5. *The relationship between the levels of internet usage and internet addiction levels of university students during the coronavirus outbreak days*

Variable	1	2	3	4	5	6	7
1. Internet Addiction	1						
2. Social Media	.237*	1					
3. News	.016	.485*	1				
4. Game	.266*	.097	.052	1			
5. Movie/Series	.256*	.153*	.133*	.194*	1		
6. Education	-.010	.014	.102*	-.025	.063	1	
7. Communication	.147*	.267*	.208*	.019	.233*	.113*	1

Not. * $p < .001$; level of significance

4. Result, Discussion and Suggestions

The study determined that university students' internet addiction scores were low during the coronavirus outbreak. In addition, it was found that while participating university students' internet addiction levels significantly differed according to frequency of going out and period of mean daily internet use; there were no significant differences based on gender, gender, city of residence, type of accommodation, number of family members at home and frequency of experiencing corona virus anxiety. The period of coronavirus outbreak has affected many individuals psychologically and reduced social interaction among individuals (Ministry of Education, 2020; Moynihan et al., 2015; TUBA, 2020; Psychiatric Association of Turkey, 2020). It is known that internet use has an important place during the time individuals spend at home. In this context, it can be argued that the finding that university students had a low level of internet addiction during the coronavirus epidemic is important in terms of internet addiction and other physical, psychological and social risks that this will bring.

The study results demonstrated that university students' internet addiction levels during the coronavirus outbreak did not significantly differ according to gender. Although no statistically significant difference was found between the groups, mean internet addiction levels show that internet addiction levels of male university students were higher than female university students. This result is parallel with the results of some other studies on this topic in the literature (Balci & Gülnar, 2009; Batıgün & Hasta, 2010; Eldeleklioğlu & Vural-Batik, 2013). In Turkish society, females are known to have a more specific gender role in taking care of housework compared to males during domestic life. In this context, during the coronavirus epidemic, the fact that female take care of the household chores may have reduced their internet use and may have resulted in findings that pointed to higher levels of internet addiction among male university students compared to female university students.

Another finding of the study showed that university students' internet addiction levels during the coronavirus outbreak did not significantly differ according to province of residence. Although there was no statistically significant difference between the groups, it was determined that mean internet addiction levels of university students living in metropolitan cities or Zonguldak province were higher than those of university students living in other provinces in Turkey. It is believed that since curfews were implemented in 30 metropolitan cities as well as the province of Zonguldak at the weekends due to higher number of cases compared to other cities and consequently individuals living in these cities had higher perceived danger of going out, higher number of individuals living in these cities chose to stay at home permanently. Therefore, it can be argued that the university students living in these cities spent more time on the internet or to did not control their internet use.

Another finding of the study showed that university students' internet addiction levels during the coronavirus outbreak did not significantly differ according to type of accommodation. Although there was no statistically significant difference between the groups, it was determined that the mean internet addiction levels of university students residing in detached houses were higher than those of university students residing in apartments. Social isolation and curfew restrictions implemented during the coronavirus epidemic caused individuals to spend more time in their homes. In this process, individuals living in detached houses/with gardens are believed to spend more time outdoors in their yards compared to individuals living in apartments and this setting may be considered as a factor that

protects individuals from the risk of internet addiction caused by staying at home for longer periods of time. However, this study found that while there was no statistically significant difference between these two groups, mean internet addiction levels of university students residing in detached houses were higher than those of university students residing in apartments. In this context, this result may be related to other factors such as lack of information of the hobbies of university students participating in the study such as gardening or spending time outdoors.

The study concluded that university students' internet addiction levels during the coronavirus outbreak did not significantly differ according to number of family members living at home during the epidemic. Although there was no statistically significant difference between the groups, it was determined that the mean internet addiction levels of university students residing with more than 5 people in their homes were higher than those of university students residing with 1-3 persons. The number of people with whom individuals have social interactions in their environment and the quality of these interactions can be important in terms of internet addiction. A qualitative study conducted by Ünlü (2018) with 16 individuals in middle age period reported that some of the individuals who participated in the research expressed an affinity towards social media because they were alone in real life with no one to interact with and they desired to have this interaction by using social media. There are also studies in the literature pointing to a positive relationship between internet addiction and loneliness (Batıgün & Hasta, 2010; Bozoglan, Demirer & Sahin, 2013; Eldeleklioğlu & Vural-Batık, 2013). In this context, the number of people that university students spend time together at home during the coronavirus epidemic can protect them from the problems caused by social isolation. This study found that the internet addiction levels of university students living with 1-3 people at home were the lowest while the internet addiction levels of university students living with more than 5 people in the home environment were the highest. This finding can be interpreted to mean that increase in the number of family members may be overshadow some members of the family.

Another finding in the study demonstrated that university students' internet addiction levels during the coronavirus outbreak did not significantly differ according to frequency of experiencing corona virus anxiety. Although there was no statistically significant difference between the groups, it was determined that the mean internet addiction levels of university students who never experienced corona virus anxiety were the lowest while the mean internet addiction levels of university students who experienced corona virus anxiety all the time were the highest. Internet addiction levels of university students were found to increase along with the increases in the frequency of corona virus anxiety. Stress, sadness or negative emotions experienced by individuals in daily life may pose a risk for internet addiction because individuals who experience these negative emotions can prefer to go on the internet to elude these emotions and relax. As a result, the internet use may be uncontrolled and the risk of internet addiction may be present (Akın & Iskender, 2011; Kandell, 1998; Kavaklı & Yalçın, 2019). In this context, the study concluded that internet addiction levels of university students increased as the frequency of corona virus anxiety increased. The frequency of experiencing corona virus anxiety by the university students participating in the study to may have directed them to the internet more than before and caused them to spend more time on the internet to elude this anxiety. Although there is no current research in the literature that examines the relationship between corona virus anxiety and internet addiction, various studies investigated the relationship between anxiety levels and internet addiction levels. A study conducted by Akın and Iskender (2011) on 300 university students reported a positive and strong correlation between students' internet addiction and anxiety levels. A study conducted by Odacı and Çikrikci (2017) on 543 university students found that university students' problematic internet use levels increased as their depression, anxiety and stress levels increased. A similar study conducted by Buzcu (2017) reported a positive correlation between internet addiction levels and anxiety levels of 251 adults who participated in the study. The results of these studies in the literature are similar to the results obtained in this study.

The study concluded that university students' internet addiction levels during the coronavirus outbreak significantly differed according to how often they were outside the home. The Post Hoc test conducted to determine the source of the difference showed that the difference in the internet addiction level variable regarding the frequency of going outside during the epidemic was found to be between the following groups: "Never-All the time" and "Occasionally- All the time". University students' internet

addiction levels decreases based on how often they went out during the epidemic. Social isolation measures and curfew restrictions started to be implemented during the corona virus epidemic in Turkey. While these measures can be considered as the means to prevent the spread of the corona virus and protect the public health, the experience may very well cause individuals to experience psychological and social problems as their social interactions have considerably decreased and they have started to spend more time at home (Király et al., 2020). The fact that individuals are constantly at home during the corona virus outbreak may also pose a risk in terms of internet addiction because individuals who are constantly at home during this period may spend more time on the internet compared to before which may create risks for internet addiction. This finding supports this view as well.

The study concluded that university students' internet addiction levels during the coronavirus outbreak significantly differed according to their daily mean internet use. The Post Hoc test conducted to determine the source of the difference showed that the difference in the internet addiction level variable regarding the daily mean internet use during the epidemic was found to be between the following groups: "0-1 hours - 5+ hours", "1-3 hours - 3-5 hours", "1-3 hours - 5+ hours" and "3-5 hours - 5+ hours". The study concluded that the level of internet addiction increased during the corona virus epidemic when students' daily mean internet use increased. This result is parallel to the results of some studies conducted on this subject in the literature (Balcı & Gülnar, 2009; Batıgün & Hasta, 2010; Derin & Bilge, 2016; Eldeleklioğlu & Vural-Batık, 2013). Excessive use, one of the main dimensions of internet addiction, is defined as individual's inability to control the time spent on the internet and to spending more time on the internet than originally planned (Block, 2008). In this context, when the time spent by individuals on the internet increases, they may be at risk for internet addiction. The study concluded that the level of internet addiction increased during the corona virus epidemic when students' daily mean internet use increased.

Finally, a positive correlation was found between internet addiction levels of university students during the coronavirus epidemic and their use of internet for social media, playing games, watching movies / series and communicating. It can be argued that the level of internet addiction will increase as they use the internet to spend more time on social media, playing games, watching movies / series and communicating during the corona virus epidemic. Explaining internet addiction only in terms of time spent on the internet is not a healthy approach; why internet is used is also important to explain internet addiction. Internet use may include interactions such as spending time on social media, playing games and communicating with other people. Studies in the literature point to a positive relationship between using internet for interaction and internet addiction (Batıgün & Hasta, 2010; Batıgün & Kılıç, 2011; Derin & Bilge, 2016; Gökçearsan & Günbatar, 2012; Tsitsika et al., 2009; Yang & Tung, 2007). The fact that individuals turn to the internet and continue their interaction over the internet by avoiding social interactions in real life can pose a risk for internet addiction. The preference of individuals to watch movies on the internet, spend time on social media, play games and communicate with others via internet may cause them to break away from the real world and face the risk of addiction.

In the light of these study findings, some suggestions are offered for researchers and the professionals in the field. First of all, this research investigated internet addiction levels of university students during the corona virus epidemic according to different variables. In this context, further research can be conducted with different study groups and variables. In addition, this research was carried out with the quantitative research method and while interpreting some variables, the comments may be limited due to the lack of in-depth knowledge about the individuals participating in the research. In this respect, future studies can be carried out by using the qualitative research method in order to reveal deeper information about internet use during the epidemic. Finally, this study concluded that risk for internet addiction increased when individuals went out less and stayed at home longer because it led them to use internet for longer periods. In addition, this study reported a correlation between the level of internet addiction and the level of internet use (spending time in social media, playing games, watching movies / series and communicating). In this context, policies can be implemented to let individuals outside by taking appropriate measure during these days when the normalization process has begun in Turkey. In addition, public advertisement spots and short online trainings can be used for

individuals who are staying at home for long periods of time so that they can experience a physically, psychologically and socially healthy process.

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