

Investigating The Smart Phone Addictions Of Vocational School Students From Different Variables

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ABSTRACT

Nowadays, smartphones are used by individuals of all ages for communication, messaging, online or offline gaming, social media browsing and information access. Smartphones, which are frequently used by students for any purpose, increase the level of smartphones dependency of the students and affect them negatively. The purpose of this study is to examine the smartphone dependency levels of vocational college students. Students' smartphone dependency levels are examined according to whether they have a social media account, their smartphone usage goals, smartphone usage times, gender, class degree and family income levels. The survey model was used to collect the research data. Participants of this study are students who are studied at different vocational colleges in Sakarya University at the academic year of 2017-2018. The personal information form created by the researcher to collect data and "Smart Phone Dependency Scale - Short Form" were used that adapted by Noyan, Enez Darçın, Nurmedov, Yılmaz & Dilbaz (2015) to the Turkish language. According to the results, students who were participating in the survey were moderately smartphone addicts. And again as a result of the research, it was seen that female students were more addicted to smartphones than male students. Students in business and public relations programs were found that they were more addicted to smartphones than students in computer programming. In addition, students whose family income level is between 4001-7000 TL are more likely to be addicted to smartphones than students in other family income groups. Another result is that students who use more than 5 hours of telephone use are more addicted to other students and students who use the phone between 3 hours and 5 hours are more smartphone addicts than students who use telephone between 0-3 hours. According to another research result, it can be said that the students who have any social media accounts are more addicted to smartphones than those who do not have social media accounts. Students using the Instagram social media account were found to be more smartphone addicts than students using Facebook. Students' smartphone dependency does not differ significantly from the class levels that they study, smartphone renewal times, and the operating systems that they use on their phones.

Keywords: *Smartphone, smartphone addiction, vocational high school*

INTRODUCTION

Today which is called as the age of information, communication and technology, especially with the rapid development of communication technologies, different technologies have emerged which affect communication between people. Computers, mobile devices, the Internet and smartphones are also at the

forefront of these technologies. At the same time, these technologies are observed to be irreplaceable elements of people for their lives (Çalışkan, Yalçın, Aydın, & Ayık, 2017). Even though it is developing, the telephone technology that Graham Bell invented in 1876 has been adhered to because of the fact that it is wired (Minaz & Çetinkaya Bozkurt, 2017). The emergence of the idea of the internet and the launching of its first bases began to take steps for rapid development in technology in the 1960s. Internet usage in Turkey has been observed in the 1990s began to increase rapidly. In those years, computers have been added among the technological devices such as radio, television and video that have entered our homes and daily lives. In 1973, the first mobile phone was invented, but it took time for this technology to spread as well as the Internet. The history of becoming widespread of the mobile phones in Turkey come across the middle of the 1990s. The invention of the mobile phone has made our lives easier and it has become harder for people to live without mobile phones because of this reason. Mobile phones are integrated with the touch system because of the development of touch systems and their lower prices. In this case, the invention of smartphones has been realized. A smartphone is a mobile phone that offers sophisticated, advanced capabilities such as personal computer functionality or the ability to download applications (Tüzüntürk, 2017). Especially smartphones, which are widely used by almost everybody, make their lives easier and become more and more attractive with their different features such as speaking, sending messages, internet access and social media (Yusufoğlu, 2017).

A smartphone is a device that has sophisticated features that can perform these functions quickly, unlike performing only speaking and messaging functions. The smartphone is equipped with the ability to view photos, play games, play videos, play and record audio-video via built-in camera, send and receive e-mails, create applications for social web sites and surf the web with wireless internet (Samwar & Soomro, 2013). Since smartphones are so used by people, it is seen that students take pictures of their notes with their smartphones instead of taking notes in class (Aktaş & Yılmaz, 2017). Smartphones can easily and directly connect to the internet through protocols such as WiFi, 3G and indirect Bluetooth. This connection allows the user to access the content on various media from time to time while allowing the content to be distributed to others (Woodcock, Middleton & Nortcliffe, 2012). Thanks to smartphones, access to e-mail accounts is easy and cost-effective, increasing efficiency.

Nowadays smartphones can be used for many different purposes. The most prominent of these goals are to communicate, to message, to meet our internet needs, to access social networks, to play games, watch videos or listen to music and finally to meet our other needs through various applications. Almost all age groups do more or less these purposes, although these goals vary according to age.

While the great facilities provided by smartphones make them attractive on the one hand, some harmful effects cause them to be questioned (Yusufoğlu, 2017). While smartphones are more virtualizing our lives with the internet and social media, they can also hurt our daily work. The time spent using smartphones is a waste of time and affects the work we do on a daily basis in our lives. However, smartphones affect people's psychological and physical well-being, and often people who are interested in telephones can lose themselves, their thinking power can weaken, and they can have serious problems, especially eye health (Yusufoğlu, 2017). The fact that smartphones are becoming a part of our lives undoubtedly also causes some problems. At the beginning of these problems is undoubtedly smart phone addiction. Addiction is defined as the continual desire for an object, person or entity to be inevitable, and to be in the direction of another will (Ay, 2013). Nowadays, computer, internet, digital gaming addictions, as well as smartphone addiction has emerged. Such technological addictions are defined as non-chemical behavioral addictions involving human-machine interaction (Griffiths, 1996). Smartphone addiction can be considered as a kind of technological addiction (Lin, Chang, Lee, Tseng, Kuo & Chen, 2014). Smartphone addiction can be defined as excessive use of the phone, inability to interfere with the desire to use it, problems with stopping or disabling usage, being stressed when not in use, and not telling the correct use time (Kwon, Lee, Won, Park, Min, Hann, Gu, Choi & Kim, 2013; Savcı & Aysan, 2017).

If smartphone technology is to be examined at the level of addiction, it is examined in two different groups. These are physical and mental effects. Examples of physical effects, neck pain indication (Lee, Kang & Shin, 2015) or accidents affecting springs and drivers (Klauer, Guo, Simons-Morton, Ouimet, Lee &

Dingus, 2014; Shelton, Elliott, Lynn & Exner, 2009) can be given as an example. With regard to mental health recent work has increased. In these studies, it has been shown that the use of smartphones may be associated with sleep disturbance and depression (Lemola, Perkinson-Gloor, Brand, Dewald-Kaufmann & Grob, 2015). In addition, the frequency and time spent on smartphones is closely related to the density of smartphone addiction (Lee, Ahn, Choi & Choi, 2014; Lin, Lin, Lee, Lin, Lin, Chang, Tseng, Yen, Yang & Kuo, 2015).

Today, there are many researches on smartphone use and smartphone addiction. The study of smartphone use and smartphone addiction among young people in Switzerland was conducted and it was determined that the use of over-smartphones has a negative impact on various mental and physical health indicators (Haug, Castro, Kwon, Filler, Kowatsch & P. Schaub, 2015). Matar Boumosleh and Jaalouk (2017) obtained findings that university students felt tired during the day, sleep quality fell, and they could not sleep more than 4 hours in their studies on their depression, anxiety and smartphone addiction-cross-sectional study. Kahyaoğlu Süt, Kurt, Uzal & Özdilek (2016) found that students of the School of Health Sciences were significantly more likely to use smartphones among themselves.

Çalışkan et al. (2017) conducted a study to determine the level of smartphone addiction of prospective teachers of Computer and Instructional Technology. As a result of the research, it was seen that the teacher candidates had a moderate level of smartphone addiction. Aljomaa, Qudah, Albursan, Bakhiet & Abduljabbar (2016) found that 48% of the students who participated in the study of university students' smartphone addiction were smartphone addicts.

In general, research on smartphone use and smartphone addiction has not been observed in the study of smartphone addiction of vocational high school students using smartphones in our country. For this reason, it is important to examine smartphone addiction of vocational school students.

The purpose of this research is to examine the smartphone addiction of students who are studying at vocational school. For this purpose, answers to the following questions were sought.

1. What are the smartphone addiction levels of Vocational School students?
2. Is there a difference between Vocational School students' smartphone addiction levels according to their;
 - a. Genders,
 - b. Grade levels,
 - c. Departments,
 - d. Family incomes,
 - e. Daily phone usage times,
 - f. Whether they have social media accounts,
 - g. Smartphone renewal times,
 - h. Mobile operating systems,
 - i. Mostly used social media accounts.

RESEARCH METHOD

Research Design

Survey method was used to collect the data. Survey method is a research approaches aimed at

describing a situation that exists in the past or it exists now. It is attempted to define the individual or object subject to the research as if it is within their own conditions (Karasar, 2005). In addition, relational survey methods were utilized in line with sub-objectives.

Participants

Participants of the study are 304 students who study in different departments of different vocational schools of Sakarya University in the academic year of 2017-2018. Numerical distributions of the departments of students who were reached and considered as valid for the scale are given in Table 1.

Table 1. Participants

	Variables	f	%
Gender	Male	168	41,4
	Female	136	58,6
Grade Levels	1. Grade	146	48.0
	2. Grade	158	52.0
Departments	Business Adminisration	88	28.9
	Finance	60	19.7
	Computer Programming	117	38.5
	Public Relations	39	12.8
Family Income Level	0-1700 TL	77	25.3
	1701-2500 TL	106	34.9
	2501-4000 TL	89	29.3
	4001-7000 TL	32	10.5
Daily Phone Use Time	0-3 hour	96	31.6
	3-5 hour	102	33.6
	More than 5 hours	106	34.9
Social Media Account Ownership	Has Social Media Account	289	95.1
	No Social Media Account	15	4.9
Smartphone Renewal Time	1-2 year	98	32.2
	2-4 year	143	47.0
	More than 4 year	63	20.7
Mobile Operating Systems	Android Operating System	175	57.6
	IOS	129	42.4
Their Mostly Visited Social Media Environments	Facebook	37	12.2
	Twitter	26	8.6
	Instagram	225	74.0
	Others	16	5.3
Total		304	100

304 students were reached in the study. 168 (41.4%) of them were male and 136 (58.6%) were female students. In addition, 88 (28.9%) of the students participated in the survey were in the department of Business Administration, 60 (19.7%) were in finance, 117 (38.5%) were in computer programming and 39 (12.8%) were in Public Relations.

Data Collection Tools

The Personal Information Form developed by the researchers and the Smart Phone Addiction Scale-Short Form (ATBÖ-KF) developed by Noyan et al. (2015) were used to collect data in the study. The Smart Phone Addiction Scale-Short Form (ATBO-KF) is a scale that measures the risk of smartphone addiction in adolescents in 10-items and six point likert scale. Scale items are scored from 1 to 6 (1: Strongly disagree, 6: Strongly agree). Scale scores ranged from 10 to 60. As the scores obtained from the test increase, it is evaluated that the risk for addiction is increased. The Cronbach's alpha coefficient of internal consistency

and concurrent validity of the original form is 0.91. In this study, internal consistency coefficient was calculated as .877 after applying scale to vocational school students.

Data Analysis

The highest score for each item at the Smartphone Addiction scale is 6, and the lowest score is 1. In order to evaluate and interpret the smartphone addiction levels of Vocational School students, three evaluation ranges and criteria were determined through average value (Table 2).

Table 2. Smartphone Addiction Evaluation Criteria

Evaluation Criteria	Evaluation Range
Low Level	1,00 – 2,66
Medium Level	2,67 – 4,33
High Level	4,34 – 6,00

The data collected from the students were analyzed using SPSS 16.0 (Statistical Package for the Social Sciences) software. The significance level of the data in the analyzes was taken as .05. The smartphone addiction level of vocational school students was determined from the data obtained from the smartphone addiction scale. Independent samples t-test was used to analyze differences related with variables that have two subgroups, while ANOVA was used to analyze differences related with variables that have more than two subgroups.

FINDINGS AND DISCUSSION

Identification of smartphone addictions of the students in vocational school and evaluation of these addictions in terms of different variables are given as titles within the scope of this study.

Smartphone Addictions of Vocational School Students

The scores of students of Vocational School on smartphone addiction are given in Table 3.

Table 3. Descriptive Results of Scores Related with Students' Smartphone Addiction

	N	Min	Max	\bar{X}	ss
Smartphone Addiction	304	1.00	6.00	2.78	1.15

The average of smartphone addictions of Vocational School students is ($=2.78$). According to this result, it can be said that the students participating in the research are smart phone addicts in the medium level.

Investigation of Students' Smart Phone Addictions in Terms of Gender

The results of the independent sample t-test analysis conducted to determine whether vocational school students differ in terms of gender of smartphone addiction within the scope of the study are given in Table 4.

Table 4. Smartphone Addictions of Students According to Their Genders

	Groups	n	\bar{X}	Sd	df	t	p
Smartphone Addiction	Male	168	2.57	1.12	302	-3.608	.000
	Female	136	3.04	1.13			

According to the results of the analysis, students' smartphone addiction shows a meaningful difference according to gender [$t(302) = -3.608, p < .05$]. It can be said that girls are more smartphone addicts than boys are.

Investigation of Students' Smart Phone Addictions in Terms of Grade Level

The results of the independent sample t-test analysis conducted to determine whether vocational school students differ in terms of grade levels of smartphone addiction in the context of the study are given in Table 5.

Table 5. Smartphone Addictions of Students According to Their Grade Levels

	Groups	n	\bar{X}	Sd	df	t	p
Smartphone Addiction	1. Grade	146	2.77	1.18	302	-.117	.907
	2. Grade	158	2.79	1.12			

According to the results of the analysis, students' smartphone addiction does not show any significant difference compared to their grade levels [$t(302) = -.117, p > .05$].

Investigation of Students' Smart Phone Addictions in Terms of Department

The distribution of smartphone addictions of vocational school students according to their departments is given in Table 6.

Table 6. Smartphone Addiction Values of Students According to Their Departments

Departments	Smartphone Addiction		
	N	\bar{X}	ss
Business Administration	88	3.07	1.17
Finance	60	2.74	1.15
Computer Programming	117	2.51	1.17
Public Relations	39	3.00	.79

As seen in Table 6, students studying in the departments of Business Administration and Public Relations were found that their smartphone addiction was higher than students in other departments were. One way ANOVA was performed to find out whether this difference was a significant difference and the results are given in Table 7.

Table 7. ANOVA Results of Students' Smartphone Addictions According to Their Departments

Source of Variance	K. T	sd	K. O	F	p	Significant Difference
Between Groups	17.993	3	5.998	4.718	.003	1-3
Within Groups	381.366	300	1.271			4-3
Total	399.359	303				

(1: Business Administration, 2: Finance, 3: Computer Programming, 4: Public Relations)

Analysis results show that smartphone addictions of vocational school students are significantly different according to the students' departments [$F(3-303) = 4.718, p < .05$]. The students in the departments of Business Administration and Public Relations were found to be more smartphone addicts than the students in the Computer programming were according to the Scheffe analysis result.

Investigation of Students' Smart Phone Addictions in Terms of Family Income Level

The distribution of smartphone addiction according to family income levels of vocational school students is given in Table 8.

Table 8. Smartphone Addiction Values of Students According to Their Family Income

Smartphone Addiction			
Family Income	N	\bar{X}	ss
0-1700 TL	77	3.07	1.24
1701-2500 TL	106	2.65	1.05
2501-4000 TL	89	2.58	1.06
4001-7000 TL	32	3.18	1.34

As seen in Table 8, it was seen that the students with family income levels between 0-1700 TL and 4001-7000 were found to have higher smart phone addictions than the students with other income levels. One way ANOVA was performed to find out whether this difference was a significant difference and the results are given in Table 9.

Table 9. ANOVA Results of Students' Smartphone Addictions According to Their Family Income

Source of Variance	K. T	sd	K. O	F	p	Significant Difference
Between Groups	14.199	3	4.733	3.687	.012	4-1
Within Groups	385.160	300	1.284			4-2
Total	399.359	303				4-3

(1: 0-1700 TL, 2: 1701-2500 TL, 3: 2501-4000 TL, 4: 4001-7000 TL)

The results of the analysis show a significant difference in smartphone addiction according to the family income levels of the vocational school students [$F(3-303) = 3.687, p < .05$]. According to the results of the Scheffe test to find out the differences between the income levels of the students' families, the students with income level between 4001-7000 TL were found to be more smartphone addicts than the students in the other income group were.

Investigation of Students' Smart Phone Addictions in Terms of Daily Phone Use Time

The distribution of smartphone addictions of vocational school students according to their daily phone usage times is given in Table 10.

Table 10. Smartphone Addiction Values of Students According to Their Daily Use

Smartphone Addiction			
Daily Use	N	\bar{X}	ss
0-3 hour	96	2.15	.94
3-5 hour	102	2.68	.97
More than 5 hours	106	3.44	1.14

As seen in Table 10, it was seen that students with more than 5 hours of daily phone use were more likely to have smartphone addictions than those with other daily usage times. One way ANOVA was performed to find out whether this difference was a significant difference and the results are given in Table 11.

Table 11. ANOVA Results of Students' Smartphone Addictions According to Their Daily Phone Use

Source of Variance	K. T	sd	K. O	F	p	Significant Difference
Between Groups	85.334	3	42.667	40.897	.000	3-1
Within Groups	314.025	300	1.043			3-2
Total	399.359	303				2-1

(1: 0-3 hour, 2: 3-5 hour, 3: More than 5 hours)

Analysis results show that smartphone addictions of vocational school students are significantly different according to daily phone usage times [$F(3-303) = 40.897, p < .05$]. According to the results of the Scheffe test conducted to find out the difference between the daily usage times of the students, the students who use phone more than 5 hours compared to other students, and who use phone for 3-5 hours compared to the students who use phone for 0-3 hours, were found to be more addicted.

Investigation of Students' Smart Phone Addictions in Terms of Social Media Account Ownership

The results of the Mann Whitney U-test analysis to determine whether vocational school students differ in terms of whether or not smartphone addictions are social media accounts are given in Table 12.

Table 12. Smartphone Addictions of Students According to Their Social Media Account Ownership

Groups		n	S.O	S.T	U	p
Smartphone Addiction	Has Social Media Account	289	156.29	45169.00	1071.00	.001
	No Social Media Account	15	79.40	1191.00		

According to the results of the analysis, students' smartphone addictions are significantly different according to whether or not they have social media accounts ($U = 1071.00, p < .05$). Considering the average of the rankings, it can be said that the students who have any social media account are more addicted to the smartphone than the students who do not have social media account.

Investigation of Students' Smart Phone Addictions in Terms of Smartphone Renewal Time

The distribution of smartphone addictions according to smartphone renewal times of vocational school students is given in Table 13.

Table 13. Smartphone Addiction Values of Students According to Their Smartphone Renewal Periods

Smartphone Addiction			
Smartphone Renewal Periods	N	\bar{X}	ss
1-2 year	98	2.84	1.18
2-4 year	143	2.79	1.07
More than 4 year	63	2.66	1.28

As shown in Table 13, smartphone addictions were found to be higher than other renewal times for students with a smartphone renewal time of 1-2 years. One way ANOVA was performed to find out whether this difference was a significant difference and the results are given in Table 14.

Table 14. ANOVA Results of Students' Smartphone Addictions According to Their Smartphone Renewal Periods

Source of Variance	K. T	sd	K. O	F	p	Significant Difference
Between Groups	1.367	2	.684	.517	.597	-
Within Groups	397.992	301	1.322			
Total	399.359	303				

Analysis results do not show any significant difference in smartphone addictions of students according to their smartphone renewal times [$F(2-303) = .517, p > .05$].

Investigation of Students' Smart Phone Addictions in Terms of Mobile Operating Systems

Table 15 shows the results of the independent sample t-test conducted to determine whether vocational school students differ in terms of the operating systems used by their smartphone addictions on their phones.

Table 15. Smartphone Addictions of Students According to Mobile Operating Systems

	Groups	n	\bar{X}	Sd	df	t	p
Smartphone Addiction	Android Operating System	175	2,75	1.15	302	-.502	.616
	IOS	129	2,82	1.15			

According to the results of the analysis, students' smartphone addictions do not show any significant difference compared to the operating systems they use on their phones [$t(302) = -.502, p > .05$].

Investigation of Students' Smart Phone Addictions in Terms of Their Mostly Visited Social Media Environments

Table 16 shows the distributions of smartphone addictions of vocational school students according to their mostly visited social media environments.

Table 16. Smartphone Addiction Values of Students According to Social Media Environments That They Mostly Visit

Smartphone Addiction			
Social Media Environments That They Mostly Visit	N	\bar{X}	ss
Facebook	37	2.29	1.17
Twitter	26	2.61	1.13
Instagram	225	2.88	1.12
Others	16	2.75	1.35

As seen in Table 16, students who use Twitter social media account have higher smartphone addiction than those who use other social media accounts. One way ANOVA was performed to find out whether this difference was a significant difference and the results are given in Table 17.

Table 17. ANOVA Results of Students' Smartphone Addictions According to Social Media Environments That They Mostly Visit

Source of Variance	K. T	sd	K. O	F	p	Significant Difference
Between Groups	11.794	3	3.931	3.043	.029	3-1
Within Groups	387.565	300	1.292			
Total	399.359	303				

(1: Facebook, 2: Twitter, 3: Instagram, 4: Others)

The results of the analysis show that there is a significant difference in vocational school students' smartphone addiction according to their mostly visited social media environments [$F(3-303) = 3.043, p < .05$]. According to the results of the Scheffe test to find out which groups are among the most used social media environments, the students using the Instagram social media account were found to be more smartphone addicts than the students using Facebook were.

RESULTS AND RECOMMENDATIONS

In this study, the addictions levels of vocational school students on smartphones was examined according to different variables. It is concluded that vocational school students participating in the study have smartphone addictions in the medium level. Haug et al. (2015) stated that nearly half of the young people participating in the study in Switzerland were smart phone addicts and that their addictions were related to their level of education. Çalışkan et al. (2017) found that computer and instructional technology teacher candidates had a medium level of smartphone addiction. Aljomaa, Qudah, Albursan, Bakhiet and Abduljabbar (2016) found that school students' smartphone addictions are close to medium level. In Kwon and others' study (2013) it is stated that students have more smartphone addictions than employees.

Kahyaoglu Süt et al. (2016) reached the result that students from the faculty of health science use their smartphones at a high level.

The smartphone addictions of vocational school students differ according to gender, with the result that the addiction levels of female students are higher. Kwon and others (2013) found that female participants were more addicted to the smartphone than male participants were. It seems that there are similar studies that show that women are mostly addicted to smartphones in the literature (Doğan & Tosun, 2016; Park & Lee, 2014; Kawasaki et.al., 2006; Hakoama & Hakoyama, 2011; Jenaro, Flores, Gomez-Vela, Gonzales & Caballo, 2007). At the same time, there are studies that reach the result that smartphone addictions do not differ according to gender (Minaz & Çetinkaya Bozkurt, 2017; Çalışkan et.al., 2017; Kuyucu, 2017).

All of the students in the vocational school participating in this study have smartphones, and these students have a level of dependence on the use of smartphones at different rates. Also in this study, it was revealed that the smartphone addiction levels of vocational school students differ according to the departments they study. Students studying in Business Administration and Public Relations departments were found to be more addicted to smartphones than students in computer programming were. This is presumably due to the intensity of the curriculum of students studying in computer programming and the need to have different technology dependencies instead of smartphone dependency as they are already using continuous technology. Similarly, Abu Jedy (2008) observed that mobile phone addiction differs according to the department of the students, and that students from the department of humanity sciences have higher mobile phone addiction than students in the department of natural sciences.

Another factor that affects smartphone addiction of vocational school students is family income level. Students with high family income were found to have more smartphone addictions. A study on the phone use time, which is a different analysis, showed that students who use phone more than 5 hours are more addicted than other students are, and those who use phone between 3-5 hours are more smartphone addicts than students who use phone between 0-3 hours. The study of Haug and others (2015) shows that smartphone addiction increased in proportion to the increase in daily use time of smartphones. Another result of the study is that students' smartphone addictions are connected to whether or not their ownership of any social media accounts. Students with a social media account can be said to be more smartphone addicts than students who do not have a social media account. Lin and others (2014) investigated the similarities between social media users and alcohol addicts and shared the findings about the addiction of those who entered social media accounts on the phone in the morning. In addition, the study found that the addiction levels of vocational school students did not differ significantly in terms of smartphone renewal times. Similar results were found that the addiction levels of vocational school students who participated in the study did not show any significant difference compared to the operating systems they used their phones. Finally, vocational school students' smartphone addiction is significantly different from the social media environments they use the most. Students using the Instagram social media account were found to be more smartphone addicts than students using Facebook were.

According to the results of this study, the fact that vocational school students face smartphone addiction has emerged. The first priority among the reasons for smartphone addictions is that individuals grow up by getting used to technology from an early age. From a young age, the individual enters into an amusing time using technological products like TV, game console, smart phone. This is the basis of smartphone addiction. In addition, thanks to the smartphones that are connected to the internet, students have access to communication diversity. Students have the convenience of communicating and accessing the information they want to learn. It is a necessity to take some precautions to prevent smart phone addiction, which has both physical and psychological affects, from going up to higher levels and preventing smart phone addiction.

In today's educational environments, students often use smartphones and even this smartphone usage seems to be addictive. It is observed that such addictions reduce both students' achievements and reduce students' social environment. Even the occurrence of space changes in real social settings has elements that can be considered positive for the physical condition of the person. However, during the

socialization in the virtual environment, you are able to connect with the whole world in one place. This leads both to laziness and to the use of dependency because it is easy to access the technology it uses. One of the duties of the educational institutions is to provide students with education and at the same time to prepare the students for their future life in the best possible way. This requires students to be rescued from smartphone addiction. Making the necessary studies will contribute to the related literature so that the effect of smartphone addiction on students is removed. Moreover, it will be useful to investigate other age group students to understand how smartphone addictions are they and how these addictions are advanced.

REFERENCES

- Abu-Jedy, A. (2008). Mobile phone addiction and its relationship with self-disclosure among sample of students from University of Jordan and Amman Al-Ahliyya University. *Jordan Journal of Educational Science*, 4(2), 137-50.
- Aktaş, H. & Yılmaz, N. (2017). Üniversite gençlerinin yalnızlık ve utangaçlık unsurları açısından akıllı telefon bağımlılığı. *International Journal of Social Sciences and Education Research*, 3, 85-100.
- Aljomaa, S. S., Qudah, M. F. A., Albursan, I. S., Bakhiet, S. F. & Abduljabbar, A. S. (2016). Smartphone addiction among university students in the light of some variables. *Computers in Human Behavior*, 61, 155-164.
- Ay, S. (2013). İletişim araçları kullanımının yarattığı bağımlılığın sosyal izolasyon üzerindeki etkisi cep telefonu kullanıcıları üzerinde bir araştırma. Bilgi ve İletişim Kurumu, İdari Uzmanlık Tezi, İzmir.
- Çalışkan, N., Yalçın, O., Aydın, M. & Ayık, A. (2017). Böte öğretmen adaylarının akıllı telefon bağımlılık düzeylerini belirlemeye yönelik bir çalışma. *International Journal of Eurasia Social Sciences*, 8(22), 111-125.
- Doğan, U. & Tosun, H. İ. (2016). Lise öğrencilerinde problemlili akıllı telefon kullanımının sosyal kaygı ve sosyal ağların kullanımına aracılık etkisi. *Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 8(22), 99-128.
- Griffiths, M. (1996). Gambling on the internet: A brief note. *Journal of Gambling Studies*, 12(4), 471-473.
- Hakoama, M. & Hakoyama, S. (2011). The impact of cell phone use on social networking and development among college student. *The American Association of Behavioral and Social Sciences*, 15, 1-20.
- Haug, S., P. Castro, R., Kwon, M., Filler, A., Kowatsch, T. & P. Schaub, M. (2015). Smartphone use and smartphone addiction among young people in Switzerland. *Journal of Behavioral Addictions*, 4(4), 299-307.
- Jenaro, CN., Flores, M., Gomez-Vela, F., Gonzales, G. & Caballo, C. (2007). Problematic internet and cell-phone use: Psychological, behavioral and helat correlates. *Addiction Research and Theory*, 15(3), 309-20.
- Kahyaoğlu Süt, H., Kurt, S., Uzal, Ö. & Özdilek, S. (2016). Sağlık bilimleri fakültesi öğrencilerinin akıllı telefon bağımlılık düzeylerinin sosyal ve eğitim hayatına etkisi, *Avrasya Aile Hekimliği Dergisi*, 5, 13-19.

- Karasar, N. (2005). *Bilimsel araştırma yöntemi*. Ankara: Nobel Yayın Dağıtım.
- Kawasaki, N., Tanei, S. & Ogata, F. (2006). Survey on cellular phone usage on students in Thailand. *Journal of Physiological Anthropology*, 25(6), 377-382.
- Klauer, S. G., Guo, F., Simons-Morton, B-G., Ouimet, M-C., Lee, S. E. & Dingus, T. A. (2014). Distracted driving and risk of road crashes among novice and experienced drivers. *The New England Journal of Medicine*, 370, 54-59.
- Kuyucu, M. (2017). Gençlerde akıllı telefon kullanımı ve akıllı telefon bağımlılığı sorunsalı: "akıllı telefon(kolik)" üniversite gençliği. *Global Media Journal TR Edition*, 7(14), 328-359.
- Kwon, M., Lee, J-Y, Won, W-Y, Park, J-W, Min, J-A, Hann, C., Gu, X., Choi, J-H. & Kim, D-J. (2013). Development and validation of a smartphone addiction scale (SAS), *Plos One*, 8(2), 56-93.
- Lee, H., Ahn, H., Choi, S. & Choi, W. (2014). The SAMS: Smartphone addiction management system and verification. *Journal of Medical Systems*, 38(1), 1-10.
- Lee, S., Kang, H. & Shin, G. (2015). Head flexion angle while using a smartphone. *Ergonomics*, 58(2), 220-226.
- Lemola, S., Perkinson-Gloor, N., Brand, S., Dewald-Kaufmann, J. F. & Grob, A. (2015). Adolescents' electronic media use at night, sleep disturbance, and depressive symptoms in the smartphone age. *Journal of Youth and Adolescence*, 44(2), 405-418.
- Lin, Y. H., Lin, Y. C., Lee, Y. H., Lin, P. H., Lin, S. H., Chang, L. R., et al. (2015). Time distortion associated with smartphone addiction: Identifying smartphone addiction via a mobile application (App). *Journal of Psychiatric Research*, 65, 139-145.
- Lin, Y-H., Chang, L-R., Lee, Y-H., Tseng, H-W., Kuo, T-B. & Chen, S-H. (2014). Development and validation of the smartphone addiction inventory (SPAI). *Plos One*, 9(6), e98312.
- Matar Boumosleh, J. & Jaalouk, D. (2017). Depression, anxiety, and smartphone addiction in university students- A cross sectional study. *PLoS One*, 12(8), 1-14.
- Minaz, A. & Çetinkaya Bozkurt, Ö. (2017). Üniversite öğrencilerinin akıllı telefon bağımlılık düzeylerinin ve kullanım amaçlarının farklı değişkenler açısından incelenmesi. *Mehmet Akif Ersoy Üniversitesi, Sosyal Bilimler Dergisi*, 9(21), 268-286.
- Noyan, C. O., Enez Darçın, A., Nurmedov, S., Yılmaz, O. & Dilbaz, N. (2015). Akıllı telefon bağımlılığı ölçeğinin kısa formunun üniversite öğrencilerin Türkçe geçerlilik ve güvenilirlik çalışması. *Anadolu Psikiyatri Dergisi*, 16(1), 73-81.
- Park, N. & Lee, H. (2014). Gender difference in social networking on smartphones: A case study of Korean College student smartphone users. *International Telecommunications Policy Review*, 21(2), 1-18.
- Samwar, M. & Soomro, T. R. (2013). Impact of smartphone's on society. *European Journal of Scientific Research*, 98(2), 216-226.

- Savcı, M. & Aysan, F. (2017). Technological addictions and social connectedness: predictor effect of internet addiction, social media addiction, digital game addiction and smartphone addiction on social connectedness. *Düşünen Adam The Journal of Psychiatry and Neurological Sciences*, 30, 202-216.
- Shelton, J. T., Elliott, E. M., Lynn, S. D. & Exner, A. L. (2009). The distracting effects of a ringing cell phone: An investigation of the laboratory and the classroom setting. *Journal of Environmental Psychology*, 29(4), 513-521.
- Tüzüntürk, S. (2017). Uyum analizi kullanarak y kuşağı akıllı telefon kullanıcılarının tüketici davranışlarının anlaşılması: Bursa örneği. *Marmara Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 39(1), 257-280.
- Woodcock, B., Middleton, A. & Nortcliffe, A. (2012). Considering the smartphone learner: an investigation into student interest in the use of personal technology to enhance their learning. *Student Engagement and Experience Journal*, 1(1).
- Yusufoğlu, Ö. Ş. (2017). Boş zaman faaliyeti olarak akıllı telefonlar ve sosyal yaşam üzerine etkileri: üniversite öğrencileri üzerine bir araştırma. *İnsan ve Toplum Bilimleri Dergisi*, 6(5), 2414-2434.