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## Prediction of Internet Addiction of University Students Based on Various Variables

**Fatma Gizem Karaoglan Yilmaz**, Department of Computer Education and Instructional Technologies, Ankara University, Ankara, Turkey.

**Ramazan Yilmaz\***, Department of Computer Technologies, Bartin University, Bartin, Turkey.

**Necmettin Teker**, Department of Computer Education and Instructional Technologies, Ankara University, Ankara, Turkey.

**Hafize Keser**, Department of Computer Education and Instructional Technologies, Ankara University, Ankara, Turkey.

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### Abstract

That internet is developing fast and its cost is becoming cheaper rapidly increases the number of people using this technology. Although internet provides miscellaneous benefits for the users, it also causes them to encounter certain difficulties. Particularly, those young people, who leave their families to study at a university spend most of their time on the internet because of such personal and social problems as having low satisfaction from life, having social anxiety, not being able to communicate or establish relationships and feeling lonely. And this could lead to internet addiction in young people. The aim of this study is to discuss the internet addiction levels of freshmen and sophomores at university within the scope of educational theories and to predict addiction according to various variables. Survey method is used in the study. The study was carried out on 329 freshmen and sophomores studying at economics, science teaching, primary school mathematics education, primary school teaching and social sciences teaching departments of Bartin University in the second term of 2012-2013 academic year. As an end of the study, factors that cause to internet addiction and what can be done to remove these factors are discussed within theoretical framework.

Keywords: internet addiction, university students, internet.

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\* ADDRESS FOR CORRESPONDENCE: **Ramazan Yilmaz**, Department of Computer Technologies, Bartin University, Bartin, Turkey, E-mail address: [ramazanyilmaz067@gmail.com](mailto:ramazanyilmaz067@gmail.com) / Tel: +905066895430

## 1. Introduction & Literature Review

Internet, which is used effectively in many areas of our lives including communication, education, entertainment, shopping, banking transactions and health, is a communication and information sharing media which enables people to easily access information they need and to communicate fast. In addition to many advantages internet offers its users, there are certain disadvantages resulting from internet use. One of these disadvantages is internet addiction (Griffiths, 2000; Davis, 2001; Bakken, Wenzel, Götestam, Johansson & Oren, 2009; Ozdamli & Beyatli, 2013). Excessive use of internet, particularly seen in school-age individuals, effects their psychological and physical development and social relationships negatively, lowers their academic success, effects their academic and personal development in a negative way and makes the individual addicted (Cengizhan, 2005; Huang, Zhang, Li, Wang, Zhang & Tao, 2009; Kormas, Critselis, Janikian, Kafetzis & Tsitsika, 2011; Ozdamli & Beyatli, 2013). The increase in internet addiction with the expansion of this technology has become an issue of concern lately.

When internet addiction is viewed from a theoretical framework, behaviorist theory explains internet addiction with two main approaches. One of these approaches is classical conditioning. According to this approach, while internet does not have a meaning for the individual at the beginning, after s/he enjoys such elements as online games and chat, the desire to keep these pleasing elements to continue creates internet addiction. And in operant conditioning, the second approach, it is believed that accessing information very fast through internet and establishing virtual communication with people is a reinforcer (Küçükkaragöz, 2002; Beard, 2005; Taçyıldız, 2010).

According to social learning theory, the characteristics of the individual who is taken as a model in the process of learning, is effective on modelling. During puberty the individual mostly models their peers. It is believed that the wide use of internet among peers makes the individual addicted to internet (Arı, 1995; Senemoğlu, 1997; Küçükkaragöz, 2002; Beard, 2005; Taçyıldız, 2010).

When viewed from the point of Gestalt theory, because individual focuses intensely on internet during the process of addiction, the internet-related activities are considered as “figure” and all elements are considered as “ground”. In addition, due to the all-purpose use of internet, the individual sees internet not as “part” of their life but as the life itself (Senemoğlu, 1997; Küçükkaragöz, 2002; Beard, 2005; Corey, 2008; Taçyıldız, 2010). When cognitive approaches are analyzed, it is seen that they focus mostly on “unlogical beliefs” and the change of these beliefs. According to that, the individual says that the time s/he spends on internet is less than it really is and even the individual himself/herself believes in that and then, s/he finds excuses to rationalize to spend more time on internet (Senemoğlu, 1997; Beard, 2005; Corey, 2008; Taçyıldız, 2010).

When developmental approach is examined, it is seen that the emphasis is on the fact that the individuals who lack social skills meet this socialization need on virtual environments (Ülgen, 1995). Especially the demands of peers, whose significance increases during puberty, create a serious direction on teenager. Additionally, such factors as various parent attitudes teenagers face with the impact of the social structure they live in and choosing profession creates a pressure on the individual and makes him/her to steer themselves to the virtual world where s/he believes to be free and far from pressures (Ülgen, 1995; Senemoğlu, 1997; Beard, 2005; Taçyıldız, 2010).

Socio-cultural viewpoint, on the other hand, puts emphasis on familial, social and cultural dynamics that fuels excessive use of internet. For instance, that an individual starts to use internet to avoid conflicts within the family could lead to an addiction in time. Considering internet as a way of meeting new people, having fun and solving problems could lead to addiction to internet (Senemoğlu, 1997; Bacanlı, 1998; Beard, 2005, Taçyıldız, 2010). When possible problems that could arise from internet addiction are taken into consideration, it is obvious that internet addiction has more threatening and damaging effects on individuals in their puberty period (Keser, Eşgi, Kocadağ & Bulu, 2013). Particularly those young people, who leave their families to study at a university spend most of their time on internet because of such personal and social problems as having low satisfaction from life,

having social anxiety, not being able to communicate or establish relationships and feeling lonely (Aydoğdu, 2003; Lim, Bae & Kim, 2004; Orhan & Akkoyunlu, 2004; Aydın, 2005, Şendağ & Odabaşı, 2007). And this could lead to internet addiction in young people. When individuals start to spend most of their time on internet, this could make the process of detaching from life begin and virtual environments and virtual friends establishes ground for the individual to live in a dream world and avoid the realities of life (Fortson, Scotti, Cihen, Malone Judith & Kevin, 2007; Lam, Peng, Mai & Jing, 2009). When the fact that the young population in Turkey is high and that the possibility of this population to become internet-addicted is taken into consideration, descriptive studies on the issue are considered important.

The existence of people who use internet and computer without boundaries, who spend most of their time on social networks and chatrooms, who cannot stop themselves from playing games on internet, who pointlessly spend most of their time on internet and consequently, existence of people who have problems in their personal and social relationships are the signs of internet addiction for some experts, and signs of psychological disorders, for others (Işık, 2007; Floros & Siomos, 2013). Computer and internet use should not impact the health of its users negatively. It is necessary to protect users from the negativities that might develop as a result of addiction (Keser, 2005). Therefore, following the learners internet addiction situations in all phases of teaching, searching the reasons that lead to internet addiction, taking the necessary precautions on the issue and teaching learners to use internet in a proper and conscious manner are essential.

This study aims to determine the level of internet addiction of freshmen and sophomore students at university and to find out with which variables this level is related with. The research questions of the study are as follows:

1. What is students' level of internet addiction?
2. Is there a statistically significant difference among students' level of internet addiction by gender?
3. Is there a statistically significant difference among students' level of internet addiction by the department they study?
4. Is there a statistically significant difference among students' level of internet addiction by their class level?
5. Is there a statistically significant difference among students' level of internet addiction by their purpose of using internet?
6. Is there a statistically significant difference among students' level of internet addiction by whether they have regular access opportunities or not?
7. Is there a statistically significant difference among students' level of internet addiction by the period they have been using internet?
8. Is there a statistically significant difference among students' level of internet addiction by the period they spend on internet daily?
9. Is there a statistically significant difference among students' level of internet addiction by whether they play games online regularly?
10. Is there a statistically significant difference among students' level of internet addiction by whether they smoke or not?
11. Is there a statistically significant difference among students' level of internet addiction by whether they use social networks or not?

## 2. Method

This section of the study includes information on research model, sample group of the study, data collection tool and analysis and interpretation of the data.

### 2.1. Research Model

Survey model is used in the current study in order to find out the level of internet addiction of the freshmen and sophomore students at university. As it is known, survey methods aim to define a condition or an event as it is. The event, or the condition in question, is defined within its own conditions and as they are (Karasar, 2003).

### 2.2. Sample Group and Data Collection Tools

The sample group of the study was 329 freshmen and sophomores studying at economics, science teaching, primary school mathematics education, primary school teaching and social sciences teaching departments of Bartın University in the second term of 2012-2013 academic year. Data concerning the demographic information of the students are presented in Table 1.

Table 1. Demographic Data Concerning The Participants of The Study

Variable	Group	N	%
Gender	Female	223	67.8
	Male	106	32.2
Total		329	100
Age	15-19	88	26.7
	20-25	241	73.3
Total		329	100
Class	Freshman	260	79.0
	Sophomore	69	21.0
Total		329	100
Department	Economics	122	37.1
	Social Sciences Teaching	51	15.5
	Science Teaching	69	21.0
	Primary School Teaching	58	17.6
	Primary School Mathematics Education	29	8.8
Total		329	100
Purpose of using internet	Doing research	135	41.0
	Chatting	54	16.4
	Following news	28	8.5
	Listening to music/ watching movies	65	19.8
	Playing games	13	4.0
	Surfing on internet	34	10.3
Total		329	100
Regular internet access opportunity	Yes	263	79.9
	No	66	20.1
Total		329	100
For how long they have been using internet	1-3 years	79	24.0
	4-6 years	133	40.4
	7 years and more	117	35.6
Total		329	100
Duration they spend on internet daily	Less than 1 hours	84	25.5
	1-3 hours	167	50.8
	4-6 hours	65	19.8
	7-9 hours	11	3.3
	10 hours and more	2	0.6
Total		329	100

In order to find out individuals' level of internet addiction, "Internet Addiction Scale" developed by Hahn and Jerusalem (2001) and adapted into Turkish by Şahin and Korkmaz (2011) was used. The scale includes 19 items and 3 factors which are: the loss of control, tolerance development, and negative consequences for social relationships. Scale items are five-item Likert type scale and are scaled as: (1) Never, (2) Rarely, (3) Sometimes, (4) Generally and (5) Always. There is no item that is reversely coded in the scale. Internal consistency coefficient for the whole scale (Cronbach's alpha coefficient) was found as .86. Internal consistency coefficient of the factors forming the scale (Cronbach's alpha coefficient) was between .89 and .93. The lowest score that one can get from the scale is 19; and the highest score is 95. It is accepted that as the points one get from the scale increases so does the level of internet addiction (Şahin & Korkmaz, 2011).

## 2. Results and Discussion

In the context of the aim and sub-aims of the research, findings and interpretations of findings on gender, class level, the department students study, the purpose of using internet, regular internet access opportunity and for how long they have been using internet are presented below.

In line with the first sub-problem of the study, the high arithmetic average of the total points students get from the scale shows that their level of internet addiction is high; while low arithmetic average shows that their level of internet addiction is low. Within this framework, descriptive statistics showing students' level of internet addiction are shown in Table 2.

Table 2. The Breakdown of University Students Points Concerning Their Level of Internet Addiction

	Number of Items	Lowest score	Highest score	$\bar{X}$	SD	$\bar{x}/k$
Internet Addiction Scale	19	19.00	91.00	34.86	13.72	1.83

According to Table 2, the total point average of the university students from the internet addiction scale was 34.86 (1.83 over 5). In this context, it can be said that university students' level of internet addiction is low.

Whether university students' points concerning their level of internet addiction show a normal distribution or not was tested using Kolmogorov-Smirnov test and it was found that the data did not show a normal distribution ( $p < 0.05$ ). Therefore, Mann Whitney U and Kruskal Wallis test methods which are non-parametric tests were used in analyzing the data. .05 level was based on in the significance tests in the study.

In line with the second sub-problem of the study, descriptive values of university students' level of internet addiction by gender are shown in Table 3.

Table 3. Descriptive Statistics of University Students' Level of Internet Addiction by Gender

Gender	N	$\bar{X}$	SD
Male	106	36.50	14.76
Female	223	34.08	13.16

When Table 3 is analyzed, it is seen that there are differences in internet addiction score averages by gender. In order to find out whether this was a statistically significant case, Mann Whitney U test, a non-parametric test, was used. The results of Mann Whitney U Test are given in Table 4.

Table 4. Mann Whitney U Test Results of University Students' Level of Internet Addiction by Gender

Gender	N	Mean Rank	Sum of Ranks	U	P
Male	223	159.79	35632.50	10656.500	.149
Female	106	175.97	18652.50		

When Table 4 is analyzed, it is seen that there is no statistically significant difference in internet addiction levels of university students by gender ( $U=10656.500$ ,  $p>.05$ ).

In line with the third sub-problem of the study, the descriptive values of university students' level of internet addiction by the department they study are given in Table 5.

Table 5. Descriptive Statistics of University Students' Level of Internet Addiction Based on the Department They Study

Department	N	$\bar{X}$	SD
Economics	122	33.43	12.87
Science Teaching	69	35.20	13.19
Primary School Mathematics Education	29	37.21	12.18
Primary School Teaching	58	35.64	15.50
Social Sciences Teaching	51	35.57	15.23
Total	329	34.86	13.72

When the averages belonging to the groups are analyzed, the highest average belongs to the students studying at primary school mathematics education department while the lowest average belongs to the students studying at economics department.

In line with the third sub-problem of the study, the results of Kruskal Wallis Test concerning whether university students' level of internet addiction is significant by the department they study are given in Table 6.

Table 6. Kruskal Wallis Test results of University Students' Level of Internet Addiction by the Department They Study

Department	N	Mean Rank	df	$\chi^2$	p
Economics	122	155.43			
Science Teaching	69	170.38			
Primary School Mathematics Education	29	191.10	4	3.65	.456
Primary School Teaching	58	165.49			
Social Sciences Teaching	51	165.22			

When table 6 is analyzed, it is seen that there is no statistically significant difference of university students' level of internet addiction by departments they study ( $\chi^2(df=4, n=329)=3.65$ ,  $p>.05$ ).

In line with the fourth sub-problem of the study, descriptive values of university students' level of internet addiction by their class level are given in Table 7.

Table 7. Descriptive Statistics of University students' Level of Internet Addiction by Class Level

Class level	N	$\bar{X}$	SD
Freshmen	260	34.97	13.89
Sophomore	69	34.43	13.16

When table 7 is analyzed, it is seen that there are differences in university students' level of internet addiction score averages by class level. In order to find out whether this is a statistically significant difference Mann Whitney U Test, a non-parametric test, was used. The results of Mann Whitney U Test are given in Table 8.

Table 8. Mann Whitney U Test Results of University Students' Level of Internet Addiction by Class Level

Class Level	N	Mean Rank	Sum of Ranks	U	P
Freshman	260	164.63	42805.00	8875.00	.892
Sophomore	69	166.38	11480.00		

When Table 8 is analyzed, it is seen that there is no statistically significant difference of university students' level of internet addiction by their class level ( $U=8875.00, p>.05$ ).

In line with the fifth sub-problem of the study, descriptive values of university students' level of internet addiction by their purpose of using internet are given in Table 9.

Table 9. Descriptive Statistics of University students' Level of Internet Addiction by Their Purpose of Using Internet

Purpose of Using Internet	N	$\bar{X}$	SD
Doing research	135	33.82	14.46
Chatting	54	39.22	14.49
Following news	28	35.61	14.11
Listening to music/ watching movies	65	33.15	11.49
Playing games	13	31.92	10.67
Surfing on internet	34	35.79	13.38

When Table 9 is analyzed, it is seen that there are differences in university students' level of internet addiction score averages by their purpose of using internet. In order to find out whether this is a statistically significant difference Kruskal Wallis Test was used. The results of Kruskal Wallis Test are given in Table 10.

Table 10. Kruskal Wallis Test Results of University Students' Level of Internet Addiction by Their Purpose of Using Internet

Purpose of Using Internet	N	Mean Rank	df	$\chi^2$	P
Doing research	135	152.56			
Chatting	54	197.21			
Following news	28	172.41			
Listening to music/ watching movies	65	158.92	5	9.50	.091
Playing games	13	151.73			
Surfing on internet	34	173.82			

When Table 10 is analyzed, it is seen that there is no statistically significant difference of university students' level of internet addiction by their purpose of using internet  $\chi^2(df=5, n=329)=9.50, p>.05$ ).

In line with the sixth sub-problem of the study, descriptive values of university students' level of internet addiction by whether they have regular access opportunities to internet are given in Table 11.

Table 11. Descriptive Statistics of University Students' Level of Internet Addiction by Whether They Have Regular Access Opportunities to Internet

Regular Access Opportunities To Internet	N	$\bar{X}$	SD
Yes	263	35.03	13.41
No	66	34.18	15.01

When Table 11 is analyzed, it is seen that there are differences in university students' level of internet addiction score averages by whether they have regular access opportunities to internet. In order to find out whether this is a statistically significant difference, Mann Whitney U Test, a non-parametric test, was used. The results of Mann Whitney U Test are given in Table 12.

Table 12. Mann Whitney U Test Results of University Students' Level of Internet Addiction by Whether They Have Regular Access Opportunities to Internet

Regular Access Opportunities To Internet	N	Mean Rank	Sum of Ranks	U	P
Yes	263	168.05	44198.00	7876.000	.245
No	66	152.83	10087.00	0	

When Table 12 is analyzed, it is seen that there is no statistically significant difference of university students' level of internet addiction by whether they have regular access opportunities to internet (U=7876.000, p>.05).

In line with the seventh sub-problem of the study, descriptive values of university students' level of internet addiction by how long they have been using internet for are given in Table 13.

Table 13. Descriptive Statistics of University students' Level of Internet Addiction by How Long They Have Been Using Internet For

For How Long They Have Been Using Internet	N	$\bar{X}$	SD
1-3 years	79	33.65	13.53
4-6 years	133	34.74	13.79
7 years and more	117	35.80	13.82

When Table 13 is analyzed, it is seen that there are differences in university students' level of internet addiction score averages by how long they have been using internet for. In order to find out whether this is a statistically significant difference Kruskal Wallis Test was used. The results of Kruskal Wallis Test are shown in Table 14.

Table 14. Kruskal Wallis Test Results of University Students' Level of Internet Addiction by How Long They Have Been Using Internet For

For How Long They Have Been Using Internet	N	Mean Rank	df	$\chi^2$	P
1-3 years	79	154.13			
4-6 years	133	164.63	2	1.82	.40
7 years and more	117	172.76			



When Table 14 is analyzed, it is seen that there is no statistically significant difference of university students' level of internet addiction by how long they have been using internet for  $\chi^2(df=2, n=329)=1.82, p>.05$ ).

In line with the eight sub-problem of the study, descriptive values of university students' level of internet addiction by the duration they spend on internet daily are shown in Table 15.

Table 15. Descriptive Statistics of University Students' Level of Internet Addiction by The Duration They Spend on Internet Daily

Duration They Spend On Internet Daily	N	$\bar{X}$	SD
Less than 1 hours	84	30.40	12.49
1-3 hours	167	33.38	11.39
4-6 hours	65	41.29	15.83
7-9 hours	11	53.27	15.91
10 hours and more	2	34.50	16.26

When Table 15 is analyzed, it is seen that there are differences in university students' level of internet addiction score averages by the duration students spend on internet daily. In order to find out whether this is a statistically significant difference Kruskal Wallis Test was used. The results of Kruskal Wallis Test are shown in Table 16.

Table 16. Kruskal Wallis Test Results of University Students' Level of Internet Addiction by The Duration They Spend On Internet Daily

Duration They Spend On Internet Daily	N	Mean Rank	df	$\chi^2$	P	Variables in which statistical significance was observed
Less than 1 hours (A)	84	126.25	4	42.70	.00	A-B
1-3 hours (B)	167	160.40				A-C
4-6 hours (C)	65	208.05				A-D
7-9 hours (D)	11	276.05				B-C
10 hours and more (E)	2	167.25				B-D C-D

When Table 16 is analyzed, it is seen that there is a statistically significant difference of university students' level of internet addiction by the duration they spend on internet daily  $\chi^2(df=4, n=329)=42.70, p<.05$ ). In order to see among which group(s) this statistical significance exists Mann Whitney U Test was implemented. Accordingly, it was observed that there were statistical significance with regards to internet addiction levels of students between those who spend "Less than 1 hours" on internet daily and those who spend "1-3 hours", "4-6 hours" and "7-9 hours" on internet daily; and a statistical significance between those who spend "1-3 hours" on internet daily and those who spend "4-6 hours" and "7-9 hours"; and another statistical significance between those who spend "4-6 hours" and those who spend "7-9 hours" on internet daily. When group averages are examined, it is seen that the highest average belongs to those who spend "7-9 hours" on internet daily while the lowest average belongs to those students who spend "Less than 1 hours" on internet daily.

In line with the ninth sub-problem of the study, descriptive values of university students' level of internet addiction by whether they regularly play games on internet are given in Table 17.

Table 17. Descriptive Statistics of University students' Level of Internet Addiction by Whether They Regularly Play Games on Internet

Whether Students Regularly Play Games on Internet	N	$\bar{X}$	SD
Plays	93	38.85	15.29
Does not play	236	33.28	12.75

When Table 17 is analyzed, it is seen that there are differences in university students' level of internet addiction score averages by whether they regularly play games on internet. In order to find out whether this is a statistically significant difference, Mann Whitney U Test, a non-parametric test, was used. The results of Mann Whitney U Test are given in Table 18.

Table 18. Mann Whitney U Test Results of University Students' Level of Internet Addiction by Whether They Regularly Play Games on Internet

Whether Students Regularly Play Games on Internet	N	Mean Rank	Sum of Ranks	U	P
Plays	93	192.16	17870.50	8448.500	.001
Does not play	236	154.30	36414.50		

When Table 18 is analyzed, it is seen that there is a statistically significant difference of university students' level of internet addiction by whether they regularly play games on internet (U=8448.500, p<.05). As it is seen in Table 18, when the group averages are analyzed, those who play games on internet have relatively higher levels of internet addiction compared to those who do not play games on internet.

In line with the tenth sub-problem of the study, descriptive values of university students' level of internet addiction by whether they smoke are given in Table 19.

Table 19. Descriptive Statistics of University students' Level of Internet Addiction by Whether They Smoke

Whether Students Smoke	N	$\bar{X}$	SD
Smokes	53	34.34	14.14
Does not smoke	276	34.96	13.67

When Table 19 is analyzed, it is seen that there are differences in university students' level of internet addiction score averages by whether they smoke. In order to find out whether this is a statistically significant difference, Mann Whitney U Test, a non-parametric test, was used. The results of Mann Whitney U Test are given in Table 20.

Table 20. Mann Whitney U Test Results of University Students' Level of Internet Addiction by Whether They Smoke

Whether Students Smoke	N	Mean Rank	Sum of Ranks	U	P
Smokes	53	159.68	8463.00	7032.000	.656
Does not smoke	276	166.02	45822.00		

When Table 20 is analyzed, it is seen that there is no statistically significant difference of university students' level of internet addiction by whether they smoke ( $U=7032.000$ ,  $p>.05$ ).

In line with the eleventh sub-problem of the study, descriptive values of university students' level of internet addiction by whether they use social networks are given in Table 21.

Table21. Descriptive Statistics of University Students' Level of Internet Addiction by Whether They Use Social Networks

Whether Students Use Social Networks	N	$\bar{X}$	SD
Uses	278	35.34	13.24
Does not use	51	32.24	16.01

When Table 21 is analyzed, it is seen that there are differences in university students' level of internet addiction score averages by whether they use social networks. In order to find out whether this is a statistically significant difference, Mann Whitney U Test, a non-parametric test, was used. The results of Mann Whitney U Test are given in Table 22.

Table 22. Mann Whitney U Test Results of University Students' Level of Internet Addiction by Whether They Use Social Networks

Whether Students Use Social Networks	N	Mean Rank	Sum of Ranks	U	P
Uses	278	171.69	47730.50	5228.500	.003
Does not use	51	128.52	6554.50		

When Table 22 is analyzed, it is seen that there is a statistically significant difference of university students' level of internet addiction by whether they use social networks ( $U=5228.500$ ,  $p<.05$ ). As it is seen in Table 22, when the group averages are analyzed, those uses social networks have relatively higher levels of internet addiction compared to those who do not use social networks.

## 2. Conclusion and Recommendations

Internet addiction is a frequently encountered phenomenon today. It is necessary that both the parents and the teachers are aware of this phenomenon and take necessary precautions in order to ensure that their children, students and they can cope with this problem. When considered from this point of view, it is possible to say that teachers and parents have a new role in addition to their existing roles.

The findings of the study show that university students' internet addiction is low for the sample group. There is no statistically significant difference between internet addiction and gender, department studied, class level, purpose of using internet, opportunity to have regular access to internet, for how long they have been using internet and smoking variables. However, there is a statistically significant difference found between internet addiction and duration they spend on internet daily, whether students play games online regularly and whether they use social networks. Accordingly, it is observed that there are statistical significance with regards to internet addiction levels of students between those who spend "Less than 1 hours" on internet daily and those who spend "1-3 hours", "4-6 hours" and "7-9 hours" on internet daily; and a statistical significance between those who spend "1-3 hours" on internet daily and those who spend "4-6 hours" and "7-9 hours"; and another statistical significance between those who spend "4-6 hours" and those who spend "7-9 hours" on internet daily. When group averages are examined, it is seen that the highest

average belongs to those who spend “7-9 hours” on internet daily while the lowest average belongs to those students who spend “Less than 1 hour” on internet daily.

It is seen that those who play games on internet regularly have relatively higher levels of internet addiction compared to those who do not play games on internet (Lo, Wang & Fang, 2005). Similarly, it is also seen that those who use social networks have higher levels of internet addiction compared to those who do not use those social networks (Floros & Siomos, 2013).

When considered from this perspective, it is important that parents and teachers should prevent their children and students to see internet as a strong factor to have fun and offer their students and children different alternatives. It is also necessary that internet should not be an award for children/students when they carry out certain behaviors. Otherwise, it might not be possible to prevent operant conditioning of children/students towards internet (Küçükkaragöz, 2002; Beard, 2005). When considered from the point of social learning theories' it is necessary that those people that young people model should not be internet addicted people. At this point, teachers and parents again have certain responsibilities (Arı, 1995; Beard, 2005; Küçükkaragöz, 2002; Lei & Wu, 2007; Li, 2007; Leung & Lee, 2012). According to Gestalt theory it is necessary to help individuals see internet not as their “whole” life but as “part” of their lives and to create a proper perception of internet as a tool that makes life easier Küçükkaragöz, 2002; Beard, 2005; Lei & Wu, 2007; Li, 2007; Corey, 2008; Leung & Lee, 2012). When considered from the point of cognitive approaches, it is necessary to prevent such non-logical beliefs “not telling the actual time spent on internet and instead saying it is less and making oneself believe that, finding excuses for spending more time on internet” and to change these beliefs (Beard, 2005; Corey, 2008; Lei & Wu, 2007; Li, 2007; Taçyıldız, 2010; Leung & Lee, 2012). Therefore, it is necessary that parents and teachers supervise their children's/students' internet use. When considered from the developmental and socio-cultural point of view, parents and teachers should establish constructive relationships with their children/students to prevent factors that put pressure on children/students and make them close themselves to the virtual world where they believe that they are free and far from the pressures (Ülgen, 1995; Beard, 2005; Lei & Wu, 2007; Li, 2007; Leung & Lee, 2012). From the developmental approach's point of view, the emphasis is on the fact that individuals who lack social skills meet their socializing needs on virtual environments (Ülgen, 1995; Lei & Wu, 2007; Li, 2007; Leung & Lee, 2012). Various demands of the peers which increase during puberty period create a significant direction on the teenager. Additionally, such factors as various parent attitudes teenagers face with the impact of the social structure they live in and choosing profession creates a pressure on the individual and makes him/her to steer themselves to the virtual world where s/he believes to be free and far from pressures (Ülgen, 1995; Beard, 2005; Lei & Wu, 2007; Li, 2007; Taçyıldız, 2010; Leung & Lee, 2012). When it is considered that all these precautions explained within the frameworks of theoretical grounds are related to the development periods of an individual, it could be difficult to take these precautions in later years. Therefore, preventing internet addiction during the developmental periods of young people is the most important factor in struggling with this addiction.

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