An Analysis of the Relationship between Internet Addiction and Depression Levels of High School Students

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The concept of internet addiction refers to the excessive use of internet which in turn causes various problems in individual, social and professional aspects. The aim of this study is to determine the relationship between depression and internet addiction in terms of grades, sex, the existence of internet connection at home and time spent on internet. The study used survey model. The study group consisted of 369 adolescents from three high schools of different socio-economic background. Data was collected by means of "Personal Information Form", "Internet Addiction Scale" and "Beck Depression Inventory". Arithmetic mean, standard deviation, independent sampling t test, ANOVA and Scheffe tests were performed on collected data. The results of the study show that the internet addiction and depression scores of the adolescents are low and the internet addiction levels of ninth and tenth grade students with compared to the eleventh grade ones; of males with compared to females; of those having computer at home with compared to the ones having no internet at home and of the ones spending much more time on internet with compared to those spending less time have been found to be higher. No significant difference has been found between depression and internet addiction.

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Introduction

Internet is a worldwide information source that is easily reached via computers and rapid databases by every person. The computer network project developed with the aim of research, education and defence in 1960s has recently reached a new aspect including all activities such as research, education, social communication, politics, entertainment and trade which concern all people. Internet is the fastest developing electric technology in the world history (Musch, 2000; Hecht, 2001; Alkan & Canbay, 2011). The internet usage rate in our country was 13,3% in 2004, but it is 42,9 % in 2011. It is reported that the internet use frequency is the highest in the age group 16-24 and that in every age group, the rate of internet use of men is higher than the use of women (BTK, 2011; DPT, 2011; TUİK, 2011). Öztürk et al. (2007) indicated that internet addiction has become an important risk factor especially for the age group 12-18. Adolescents due to being not psychologically mature yet are regarded as a potential risk group in terms of getting addicted to internet (Üneri & Tanıdır, 2011).

According to some studies, it is indicated that the age group 13-19 generally use internet in order to play computer games, listen to music and meet new friends (Ata, Akpınar & Kelleci, 2011). Increasing internet use of students day by day and getting all kinds of information in an easy and uncontrolled way have led to many negative results (Karaman & Kurtoğlu, 2009). It is explained that while some people restrict internet use with the period they need to use, some people are not able to make restriction and have problems in their social and business lives (Ata, Akpınar & Kelleci, 2011). It is possible to mention both the negative and positive effects of computers and especially internet on people and society (Çalık & Çınar, 2009; Khasawneh & Al-Awidi, 2008; Kelleci, 2008; Weiner, 1996). Internet addiction can be said one of these negative effects (Chou, Condron & Belland, 2005).

Internet addiction term firstly used by Goldberg in 1995 has recently become a phenomenon which is tried to be described with different names such as 'net addiction', 'internet addiction', 'online addiction', 'internet addiction disorder', 'pathologic internet use' and 'cyber disorder' (Eichenberg & Ott, 1999). There aren't any standardized descriptions for 'internet disorder' (Chou, Condron & Belland, 2005) but its basic symptoms can be described as to be unable to limit internet use, to continue using internet in spite of social or academic damage and to feel deep anxiety when their internet use is limited (Öztürk et al., 2007). In the book The Diagnostic and Statistical Manual of Mental Disorders published by American Psychiatric Association (APA) in 2000 and abbreviated as 'DSM-IV-TR', internet addiction isn't still included as an disorder. It is claimed that the most similar disorder to internet addiction is 'pathologic gambling' (Köroğlu, 2001; Öztürk et al., 2007; Rehbein, Jukschat & Mössle, 2011; Şahin, 2011). Young (1998) who is the first to describe internet addiction and to determine its symptoms claimed that the most similar disorder to internet addiction which wasn't related to substance abuse was 'pathologic gambling' situated under the heading of impulse control disorder in the DSM IV (Hahn & Jerusalem, 2001; Arısoy, 2009).

Internet addiction term means using internet in an uncontrolled way which in turn causes individual, social and professional problems (Şahin, 2011; Şahin & Korkmaz, 2011). Recently, internet addiction has been regarded as a psychological problem relating various psychological problems and especially educators, psychological consultants, psychologists and psychiatrists have began to search for the issue (Zimmerl, 1998; Eichenberg & Ott, 1999; Morahan-Martin & Schumacher, 2000; Young, 2006; Ayaroğlu, 2002; Bölükbaş, 2003; Orhan & Akkoyunlu, 2004; Cengizhan, 2005; Esen 2007; Turnalar Kurtaran, 2008; Şahin, 2011). These studies have generally analyzed the relationship between excessive use of

internet and loneliness and depression; and having values not accepted by society and low emotional intelligence; and relationship with family especially with parents and friends; playing online games, searching, shopping and reducing social interaction; and individuals' psychological well-being; social, verbal, academic functions and depressive symptoms. As it can be seen, many scientists have tried to describe internet use concentrating on different aspects.

It is stated that one of the most common psychological disorder determined during psychological health services is depression as a mood change (Yüksel, 1984). Depression is a psychological mood change which has symptoms like sleep and appetite disorders, somatic symptoms, pessimism, bad feelings about ego, general dissatisfaction, loss of love and interest, crying spells, decreasing self esteem, negative expectations, self criticism, self blame, difficulties in decision making, loss of motivation, ideas about escape, withdrawal and revenge (Hisli, 1988).

Due to their ages, high school students have difficulties in accepting themselves and adapting to environment, in finding a place in society, in discovering their own identity and having the society confirm their behaviours. For that reason, they are more sensitive about assessing real life situations than adults are. It is seen that compared to adults, the young have problems related to depression because of that sensitivity (Ören & Gençdoğan, 2007).

One of the possible risk factors influencing internet addiction is their depression level and time spent on internet (Üneri & Tanıdır, 2011; Young, 2006). Adolescents' internet use leading addiction brings about various socially and psychologically negative behaviours apart from lots of developmental problems. That situation is an important contemporary problem about which teachers, psychological consultants, and especially parents should take care. Further studies on internet addiction need to be made considering also demographic features of individuals who often use internet and who are in the risk group.

Consequently, the study is thought to both differentiate from other studies and get important because it determines the relationship between depression and internet addiction in terms of grades, sex, the existence of internet connection at home and time spent on internet and accordingly, it aims to provide practical and tangible solutions to overcome the problem.

Aim of the study

The aim of the study is to determine the relationship between depression and internet addiction in terms of grades, sex, the existence of internet connection at home and time spent on internet. Within the scope of that aim, the following questions are tried to be answered:

(1) What are the levels of internet addiction and depression?
(2) Are there any differences between the levels of internet addiction and depression in terms of adolescents'
    (a) Grades
    (b) Sex
    (c) The existence of internet connection at home
    (d) Weekly time spent on internet.

Method

Study Model

This is a descriptive study in which a survey model was used. As it is known, survey models aim to indicate an existing situation as they are (Karasar, 1999). In this framework, we tried to determine computer games addiction and depression levels of the adolescents (high school students).

Study Group

The study group consisted of 369 students of 9th, 10th and 11th grades from three different high schools of different socio economic backgrounds in Kırşehir province. Table 1 shows the features of individuals attending in the study.

Table 1. Demographic features of Study Group

Adolescents'	N (369)	%
Grades		
9th grade	126	34,1
10th grade	138	37,4
11th grade	105	28,5
Sex		
Female	204	55,3
Male	165	44,7
The existence of internet connection at home		
Existent	186	50,4
None Existent	183	49,6
Weekly time spent on internet		
>0 hour	74	20,1
1-3 hours	166	45,0
4-7 hours	60	16,3
8< hours	69	18,7

Data collection

The data of the study was collected with 'Personal Information Form' developed by the researcher of the study to collect information about independent variables of the study, with 'Internet Addiction Scale' to identify levels of students' internet addiction, and with 'Beck Depression Scale' to make out levels of students' depression.

Personal Information Form: This form developed by the researcher includes questions on adolescents' demographic features (grade, sex, existence of internet connection at home, time spent on internet).

Internet Addiction Scale: The scale designed by Hahn and Jerusalem (2001) to determine internet addiction levels of the individuals and adapted into Turkish by Şahin and Korkmaz (2011) was used. The original title of the scale is "Skala zur Erfassung der Internetsucht". The scale contains 19 items and 3 factors. The first factor is "Loss of Control"; the second factor is "Tolerance Development" and the third factor is "Negative Consequences for Social Relationships". In order to test structural validity of the scale, Kaiser-Meyer-Oklin (KMO) and Bartlett test analyses were firstly performed. It was indicated that KMO= 0,919; Bartlett test value was $x2= 6087,383$; sd=171 (p=0,000). It was found that the items within the scale concentrated on three factors and explained 68.095% of total variance. Confirmatory factor analyses showed that the model had an acceptable adaptation. To calculate discriminative power of items, the correlations between the scores obtained from each item and the scores

obtained from the factors were calculated and it was found that each item had a significant and positive relationship with factor score. Internal consistency analyses were conducted to calculate internal consistency of the scale. Analyses showed that internal consistency coefficients of the factors varied between 0.887 and 0.926 and that internal consistency coefficient for the general of the scale was 0.858. In that study, it was also indicated that Cronbach's Alpha Coefficient was .890.

Beck Depression Scale: This is a self evaluation scale used mostly in depression studies. The scale consists of 21 items. Each item determines a behavioural feature related to depression. These items are evaluated by a scale grading from 0 to 3 in accordance with the severity of depression. Studies conducted in Turkey showed the scale was valid and reliable (Tegin1980; Hisli 1988; Hisli 1989). In the study which was conducted by Tegin (1980) and used split half and test- retest methods on university students revealed that the reliability coefficients were r=.78 for the first method and r=.65 for the second one. In the study conducted by Hisli (1988) on psychiatric sampling, the scale was used with the MMPI-D scale as a validity criteria and the correlation coefficient between these two scales was found as r=.63. According to results of another study conducted by the same researcher on university students, the split half test correlation was r=.74 and the internal consistency coefficient was r=.80 (Hisli, 1989). In one another study conducted with 146 students between the ages 14 and 20, test- retest reliability of BDS was determined as .73. Furthermore, it was reported that its correlation with Automatic Thoughts Scale was .58 (p<.001) and its correlation with Dysfunctional Attitudes Scale was .28 (p<.05) (Hisli, 1990). According to the scores obtained from the scale; scores between 10-17 means *low;* 18-29 *medium* and 30-63 *high (serious)* depression levels (Savasır & Şahin, 1997). In that study, Crobnach alfa coefficient was found as .760

Data analysis

In order to get answers of the questions mentioned in the study aims section, Arithmetic mean, standard deviation, independent sampling t test, ANOVA and Scheffe tests and r analysis were performed. For significant test, level of p<.05 is accepted. Furthermore, score ranges used to figure out internet addiction and depression levels are summarized in Table 2.

Tablo 2. Score Ranges for Levels of Internet Addiction and Depression

	Factors	Min. Score	Max. Score	Low	Medium	High
INT. ADDICT.	Loss of Control	7,00	35,00	7,00 – 16,33	16,34 – 25,66	25,67 – 35,00
	Tolerance Development	4,00	20,00	4,00 – 9,33	9,34 – 14,66	14,67 – 20,00
	Negative Consequences for Social Relationships	8,00	40,00	8,00 – 18,66	18,67 – 29,33	29,34 – 40,00
INTERNET ADDICTION		19,00	95,00	19,00 – 44,33	44,34 – 69,67	69,67 – 95,00
DEPRESSION		0,00	63,00	10,00 – 17,00	18,00 – 29,00	30,00 – 63,00

Findings

After the findings of analysis were performed to determine whether internet addiction level of adolescents in the study group show differences in accordance with independent variables or not, they were presented and evaluated in tables in this chapter.

1. Adolescents' Internet Addiction and Depression Level

Table 3 summarizes the findings related to adolescents' internet addiction and their depression level.

Table 3. Adolescents' Internet Addiction and Their Depression Level

	Variables	N	Minimum Score	Maximum Score	M	SD	Level
INT. ADDICT.	Loss of Control	396	7,00	29,00	10,44	4,36	Low
	Tolerance Development	396	4,00	20,00	5,64	2,85	Low
	Negative Consequences for Social Relationships	396	8,00	28,00	10,09	3,68	Low
INTERNET ADDICTION		396	19,00	70,00	26,18	9,36	Low
DEPRESSION		396	1,00	54,00	15,44	8,81	Light

Table 3 shows that adolescents' internet addiction and depression levels are low.

2.1. Adolescents' internet addiction and depression level in terms of grades

Table 4 indicates the findings related to adolescents' internet addiction and depression levels in terms of grades**.**

Table 4. Means, Standard deviations and Variance Analysis Results (ANOVA) of the Internet Addiction Levels of the Adolescents in terms of grades.

	Variables	N	M	SD	Source of Variance	Square Total	Degree of Freedom	Mean Square	F	p	Scheffe
INTERNET ADDICTION	**Loss of Control** 9. Grade	126	11,35	3,96	Between groups	522,838	2	261,419	14,75	,000	
	10.Grade	138	11,04	5,23	Within groups	6486,382	366	17,722			9-11 10-11
	11. Grade	105	8,57	2,72	Total	7009,220	368				
	Tolerance Development 9. Grade	126	6,19	2,34	Between groups	148,325	2	74,163	9,49	,000	
	10.Grade	138	5,89	3,66	Within groups	2858,455	366	7,810			9-11 10-11
	11. Grade	105	4,65	1,78	Total	3006,780	368				
	Negative Consequences for Social Relationships 9. Grade	126	10,95	4,16	Between groups	293,412	2	146,706	11,39	,000	
	10.Grade	138	10,34	3,91	Within groups	4713,076	366	12,877			9-11 10-11
	11. Grade	105	8,74	2,07	Total	5006,488	368				
	INTERNET ADDICTION (TOTAL) 9. Grade	126	28,50	8,99	Between groups	2705,705	2	1352,853	16,74	,000	
	10.Grade	138	27,28	10,97	Within groups	29564,393	366	80,777			9-11 10-11
	11. Grade	105	21,97	5,32	Total	32270,098	368				
	DEPRESSION 9. Grade	126	15,09	9,50	Between groups	49,058	2	24,529	,31	,730	
	10.Grade	138	15,34	8,10	Within groups	28518,161	366	77,918			
	11. Grade	105	16,00	8,89	Total	28567,220	368				

As it can be seen, as adolescents' grade levels are increasing, their internet addiction scores are decreasing. According to results of analysis performed to determine whether the observed differences are significant, it was found out that there were significant differences between sub dimensions including loss of control ($F_{(2-368)}=14,75$; $P<.01$), tolerance development ($F_{(2-368)}=9,49$; $P<.01$), negative consequences for social relationships ($F_{(2-368)}=11,39$; $P<.01$) and total scores of internet addiction ($F_{(2-368)}=16,74$; $P<.01$). In order to determine which groups caused the differences, Scheffe test were performed and the test results concluding the differences were observed between 9th and 10th; 9th and 11th grades.

Furthermore, it was pointed out that as adolescents' grade levels are increasing, their depression levels are increasing slightly. The observed differences were analyzed to determine whether the differences were significant or not and it was found out that the differences between adolescents' grades and their depression levels were not significant (F(2-368)=,31; P>.05).

2.2. Adolescents' internet addiction and depression levels in terms of sex

Table 5 presents the findings related to adolescents' internet addiction and depression levels in terms of sex.

Tablo 5. Results of Means, Standard deviations and t-test of the Internet Addiction Levels of the Adolescents in terms of sex.

	Variables	Sex	N	Score	Ss	Level	t	Sd	p
INT. ADDICT.	Loss of Control	Female	204	9,79	4,23	Low	-3,23	367	,001
		Male	165	11,25	4,39	Low			
	Tolerance Development	Female	204	4,97	2,31	Low	-5,19	367	,000
		Male	165	6,47	3,22	Low			
	Negative Consequences for Social Relationships	Female	204	8,88	2,36	Low	-7,55	367	,000
		Male	165	11,60	4,41	Low			
INTERNET ADDICTION		Female	204	23,64	7,81	Low	-6,06	367	,000
		Male	165	29,32	10,16	Low			
DEPRESSION		Female	204	14,97	7,45	Not	-1,15	367	,248
		Male	165	16,03	10,23	Low			

In the Table 5, it can be seen that females' internet addiction scores (23, 64±7, 81) are higher than males' internet addiction scores (29,32±10,16). According to statistical analysis, the differences between males' and females' internet addiction scores are not significant (t(367)=6,06; P<.01). Significant differences were found in terms of sub dimensions including loss of control (t(367)=3,23; P<.01), tolerance development (t(367)=5,19; P<.01) and negative consequences for social relationships (t(367)=7,55; P<.01). Moreover, male students had higher depression scores than female students and the difference was found as significant after performing analysis (t(367)=1,15; P>.05).

2.3 Adolescents' computer games addiction levels in terms of the existence of internet connection at home

The findings related to adolescents' computer games addiction levels in terms of the existence of internet connection at home are illustrated at Table 6.

Table 6. Results of Means, Standard deviations and t-test Adolescents' computer addiction and depression levels in terms of the existence of internet connection at home

	Variables		N	M	SD	LEVEL	DF	t	p
INTERNET ADDICTION	Loss of Control	Existent	186	11,37	4,45	Low	367	4,19	,000
		None Existent	183	9,50	4,07	Low			
	Tolerance Development	Existent	186	6,19	3,36	Low	367	3,80	,000
		None Existent	183	5,08	2,08	Low			
	Negative Consequences for Social Relationships	Existent	186	10,79	4,19	Low	367	3,70	,000
		None Existent	183	9,39	2,94	Low			
INTERNET ADDICTION		Existent	186	28,35	10,76	Low	367	4,60	,000
		None Existent	183	23,98	7,05	Low			
DEPRESSION		Existent	186	14,66	8,55	Light	367	-1,73	,084

None Existent	183	16,24	9,01	Light

In table 6, it can be seen that internet addiction scores of students who have internet at home (28,35±10,76) are higher than the scores of students who don't have internet at home (23,98±7,05). The statistical analysis indicated that the differences between internet addictions scores of students with and without internet addiction at home were significant (t(367)=4,60; P<.01). In terms of sub dimension including loss of control (t(367)=4,19; P<.01), tolerance development (t(367)=3,80; P<.01), and negative consequences for social relationships (t(367)=3,70; P<.01), significant differences were concluded. It was found out that students with internet at home had higher scores than the students without internet at home. In order to determine whether the differences were significant, statistical analysis were performed and there found significant differences between adolescents' depression scores and availability and unavailability of internet at home (t(367)=1,73; P>.05).

2.4 Adolescents' internet addiction and depression levels in terms of the weekly time they spend on internet

In table 7, the findings related to adolescents' internet addiction and depression levels in terms of the weekly time they spend on internet are illustrated**.**

Tablo7. Means, Standard deviations and Variance Analysis Results (ANOVA) of the Internet Addiction and depression level of the Adolescents in terms of the weekly time they spend on internet.

Variables		N	M	SD	Source of Variance	Square Total	DF	Mean Square	F	p	Scheffe
Loss of Control	>0 hours	74	9,64	5,57	Between groups	904,938	3	301,646	18,03	,00	
	1-3 hours	166	9,59	3,31	Within groups	6104,281	365	16,724			0*8
	4-7 hours	60	10,05	2,60	Total	7009,220	368				1-3*8
	8< hours	69	13,69	4,87							4-7*8
Tolerance Development	>0 hours	74	4,44	1,25	Between groups	432,897	3	144,299	20,46	,00	
	1-3 hours	166	5,51	2,45	Within groups	2573,884	365	7,052			0*1-3
	4-7 hours	60	5,05	1,12	Total	3006,780	368				0*8
	8< hours	69	7,73	4,51							1-3*8 4-7*8
Negative Consequences for Social Relationships	>0 hours	74	8,94	2,91	Between groups	387,064	3	129,021	10,19	,00	
	1-3 hours	166	9,94	3,83	Within groups	4619,424	365	12,656			0*8
	4-7 hours	60	9,65	2,51	Total	5006,488	368				1-3*8
	8< hours	69	12,08	4,21							4-7*8
INTERNET ADDICTION (Total)	>0 hours	74	23,04	7,99	Between groups	4779,354	3	1593,118	21,15	,00	
	1-3 hours	166	25,06	8,34	Within groups	27490,743	365	75,317			0*8
	4-7 hours	60	24,75	4,63	Total	32270,098	368				1-3*8
	8< hours	69	33,52	12,17							4-7*8
DEPRESSION	>0 hours	74	15,79	7,06	Between groups	272,342	3	90,781	1,17	,32	
	1-3 hours	166	15,80	9,74	Within groups	28294,877	365	77,520			
	4-7 hours	60	13,50	6,64	Total	28567,220	368				
	8< hours	69	15,91	9,67							

The findings in Table 7 show as the time staying online is increasing, the scores of internet addiction are increasing relatively. According to the analysis performed in order to find out whether the differences are significant, the differences between internet addiction total scores

(F(3-365)= 21,15; P<.01) and loss of control (F(3-365)= 18,03; P<.01), tolerance development (F(3-365)= 20,46; P<.01), and negative consequences for social relationships (F(3-365)= 10,19; P<.01) were regarded as significant. To the results of Scheffe test carried out to determine which groups caused the differences, it was indicated that the differences were between the ones using internet eight and more hours and the ones using less. There observed some slight differences between the scores of adolescents' depression levels and the time they stay online. With the aim of getting out whether the differences were significant or not, analysis performed and they find out that there were significant differences between adolescents' depression scores and the time they stay online (F(3-365)=1,17; P>.05).

3. The relationship between adolescents' depression levels and their internet addiction

The findings related to the relationship between adolescents' depression levels and their internet addiction and its sub dimensions are shown in the Table 8.

Tablo 8. The results of relationship between adolescents' depression levels and their internet addiction and its sub dimensions.

Variables		LC	TD	NCSR	INTERNET ADDICTION	DEPRESSION
Loss of Control-LC	r	1	,630(*)	,555(*)	,877(*)	,095
	p		,000	,000	,000	,069
Tolerance Development-TD	r		1	,630(*)	,847(*)	,018
	p			,000	,000	,725
Negative Consequences for Social Relationships-NCSR	r			1	,845(**)	,102
	p				,000	,051
INTERNET ADDICTION (Total)	r				1	,090
	p					,085
DEPRESSION	r					1
	p					

N=396   *p<.01

Table 8 shows the positive significant relationship among the sub dimensions of internet addiction; between control loss and tolerance development (r=,630; p<.000), negative consequences for social relationships (r=,555; p<.000) and total scores of internet addiction (r=,877; p<.000); tolerance development and negative consequences for social relationships (r=,630; p<.000) and total scores of internet addiction (r=,845; p<.000). The positive relations among sub dimensions show the sub dimension have effect on each other (P<.01). No significant difference has been found between depression and internet addiction (P>.05).

Discussion

In the study, d the relationship between depression and internet addiction were examined in terms of grades, sex, the existence of internet connection at home and time spent on internet.

In the study, it was determined that adolescents' internet addiction levels were low and their depression levels were light, which can be explained with the parents' sensitivity about their children internet use. We can also connect that situation with both individual success of students living in Kırşehir and their leading position among cities in the high school entrance

exam (OKS) and university entrance exams (YGS-LYS) in Kırşehir (Kirşehir MEM, 2012). That Kırşehir is an undeveloped city in terms of industry, that there are limited job and employment opportunities make the parents prepare their children for university entrance exam and make them be sensitive about their children's studying for that exam. For that reason, it can be understood that the parents are careful about their children's spending less time on internet. Moreover, that situation may depend on the fact that internet addiction is diagnosed only with addiction scale evaluations without performing any clinical evaluations (Üneri & Tanıdır, 2011). That finding is consistent with the other studies in the literature. In Turkish and foreign literature, there are various studies showing the number of young people addicted to internet is really low (Özcan & Buzlu, 2005; Ceyhan, Ceyhan & Gürcan, 2007; Saville et al., 2010). Similar studies demonstrate that most of the individuals have very low level of internet addiction (Niesing, 2001; Hahn & Jerusalem, 2001).

In that study, it was indicated that the eleventh graders had higher internet addiction scores than the ninth and tenth graders. The findings can be interpreted like that students feel relieved after high school entrance exam (OKS) and they spend more time on internet but in time they limit the time they spend on internet as university entrance exams (YGS and LYS) are approaching.

When internet addiction scores are evaluated in terms of sex, it is indicated that males have higher scores than females. The finding can be understood that male sex is a risk factor for internet addiction. So, male students using computer should be checked more carefully than female students should be. Most studies in the literature show that male students' addiction levels are higher than female students' scores (Betül Yılmaz, 2010; Ceyhan & Ceyhan, 2007; Jang et al, 2008; Durak, Batıgün & Hasta, 2010; Üneri & Tanıdır, 2011). Another study conducted by Hahn & Jerusalem (2001) shows that males use internet more than females but internet use of females are getting increasing in time. In the study conducted by Şahin (2011) and analyzing internet addiction levels of individuals in different ages, internet addiction levels of males were determined as higher than addiction levels of females. According to households information technologies use research, in our country females' internet use drop back males' internet use in every age group (BTK, 2011; DPT, 2011; TUİK, 2011). However there are some studies showing no differences between internet addiction and sex (Kim et al., 2006).

Internet addiction scores of individuals who have access to internet at home are determined as higher than the scores of individuals who haven't. In the study conducted by Üneri and Tanıdır (2011), they evaluated internet addiction of a group of high school students and they determined that there weren't any significant differences between internet addiction and having access to internet at home and between internet addiction and existence of computers at the adolescents' rooms.

Adolescents staying online longer were found to have higher level of internet addiction than ones staying online shorter. It can be said that students using internet more than three hours a day are tend to get addicted (Young, 1998; Hahn & Jerusalem, 2001; Yang & Tung, 2004). Studies in the literature show that as the time spending on internet is increasing, addiction level is increasing, too (Üneri & Tanıdır, 2011; Ata, Akpınar & Kelleci, 2011).

In that study, between depression score and internet addiction and its sub dimensions were found significant relation. This finding can be explained with the fact that students in the study group have both low internet addiction scores and low depression scores. In the

literature, studies show there is significant relationship between the time staying online and depression (Young and Rogers, 1998; Özcan & Buzlu, 2005; Üneri & Tanıdır, 2011). In the study conducted by Kim et al. (2006), adolescents with internet addiction have high level of depression and suicide opinions.

Conclusion and Suggestions

In that study analyzing the relationship between adolescents' internet addiction and their depression levels in terms of grades, sex, the existence of internet connection at home and time spent on internet, the following result have been established that the internet addiction and depression scores of the adolescents are low and the internet addiction levels of ninth and tenth grade students with compared to the eleventh grade ones; of males with compared to females; of those having computer at home with compared to the ones having no internet at home and of the ones spending much more time on internet with compared to those spending less time have been found to be higher. No significant difference has been found between depression and internet addiction.

As a result of the study findings, the following suggestion can be made for teachers, psychological consultants, school administrators, and parents:

- School psychological consultants should inform parents and students about possible negative situations brought about with internet use.
- Parents should be informed about their control on the time their children spend on internet.
- Adolescents are known to spend most of their time on internet apart from the time they spend for learning activities. So psychological consultants in schools should know about the literature on internet addiction. For that aim, further studies should be conducted to find out the situations of psychological consultants about that subject and if there are any problems, they should be tried to be solved.
- Psychological consultants should pay attention parents' concerns about their children's using computers for long hours.
- The findings of the study are limited with features of the study group. For that reason, it can be suggested that the study or similar studies be conducted in different school settings. Further studies which will be conducted with the students using computers in different areas, in different socio economic status and even in internet cafes.

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