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**FACEBOOK ADDICTION AMONG HIGH SCHOOL STUDENTS IN  
TURKEY****Abstract:**

The social networks such as Facebook and MySpace provide opportunity to individuals for presenting themselves, develop relations with other people and also offer ability to continue of them. Furthermore, social networks are used to interact with the people they know and also the new people they want to meet. By naturally Facebook is a very helpful social networking when it is used consciously. But use of excessive and pointless of it carries with the problem of addiction. Facebook addiction is a fairly common problem among young people. Addiction may lead an experience of erosion in social relations. Facebook addicts may experience problems with their families, friends, at work or in school. Addicted people may pass less time outside of their home and may spend less time with their friends. They may be insensitive to the happenings around while they are with computer. They may prefer to meet their friends on computer to face to face relations outside. Here, in the sample of the area survey conducted with the high school students in Konya City tries to reveal the addiction profiles of students. The data of research are collected by questionnaire technique based on the face to face interviews with 494 participants. In the results it is found that, the addiction levels of female students are higher than the levels of male students. The Facebook addiction level increase when the time passing in using of Facebook in a session and weekly using of the frequency of Facebook increase. Also results show us the using experience of Facebook has a significant positive correlation with Facebook addiction.

**Keywords:**

Keywords: Social sharing networks, Facebook, addiction, high school students

## Introduction

The social networking sites such as Facebook draw attention as environments designed to develop social interaction in the virtual environment. In this type of communication, the user may present his interests on his personal page, share his photos and pictures with other people or present them data about his personal information (Special & Li-Barber, 2012: 624; Lee & Ma, 2012: 332). The members can see each other's profiles and mutually communicate through various applications such as message sections similar to e-mail (Hughes et al., 2012: 561). Such interactions appeal the young people or people on the verge of adolescence from the point of providing the information required for friendship or relationship (Pempek et al., 2009: 228). In this way, Facebook is a useful social sharing network especially for young people in case it is consciously used.

However, overuse and unconsciously using Facebook has brought the discussions about a habit such as Facebook addiction into agenda. Facebook addiction is a problem very common among especially young people. The addiction may generally lead to erosions in social relationships of the individuals in accompany. According to Harzadin (2012), the Facebook addicts may have problems with their families and friends at work or school. The addict people may start going out less or spending less time out with friends due to the time they spend on Facebook. While they are in front of the computer, they may remain unresponsive to the things around them. They may prefer Facebook to meeting with friends face to face. They often give their friends meeting times on Facebook in order to exchange text messages and sit in front of the computer at that time. Indeed, those people those people don't know more than half of their Facebook friends. While visiting the profiles, they give importance to who has how many friends. Frequently, there is a race for having more friends among them. After a while, they start to feel insufficient. They continuously have to satisfy the feeling of "winning". Within the process, those people may find themselves helpless against the feelings of exclusion, exhaustion and insignificancy.

The increase in the number of the characteristics of Facebook usage which bears psychological addiction causes the educators and psychologists increasingly worry about the effects of Facebook on the health of people. In Turkey, the use of Facebook is rapidly increasing. According to the statistics, the second city which has the most users of Facebook in the world is İstanbul (Harzadin, 2012). This study executed on high school students in the province of Konya aims to determine the patterns of using Facebook and also determine their levels of addiction to Facebook, dimension of Facebook addiction and the basic variants in Facebook addiction.

### 1. Facebook Addiction

Some types of activities which people concern on the internet potentially cause addiction. The users may develop addiction related to some activities they participate online rather than being addicted to internet itself. Young discusses that there are five different types of addiction. They are the addiction of computer games which are also called computer addiction, the addiction of surfing the internet, the addiction of online betting or shopping, addiction of online pornography, and addiction of online internet friendships. The addiction to the social sharing networks such as Facebook belongs to the last type of addiction (Kuss & Griffiths, 2011: 3529).

Facebook addiction may bring along the problem which people are alienated to the society. In fact, the Facebook addicts may be communicating with the people whom they share the house through Facebook wall or a message system. Side effects of

such social sharing networks will start to appear more by the course of time. The use of Facebook in extremely amounts may cause experiencing narcissist trends as well as triggering arise of some emotional and behavioral disorders especially among the young people such as arrogance, aggressiveness and anti-social behaviors (Harzadin, 2012).

When the international literature is analyzed, it is seen that the studies focusing on the Facebook addiction has been increasing during recent years although there are numerous studies related to internet addiction such as (Kandell, 1998; Chou & Hsiao, 2000; Morahan-Martin & Schumacker, 2000; Tsai & Lin, 2003; Nalwa & Anand, 2003; Chen et al., 2004; Simkova & Cincera, 2004; Song et al., 2004; Young, 2004; Johansson & Göttestam, 2004; Leung, 2004; Chou et al, 2005; Niemz et al., 2005; Balta & Horzum, 2008; Balcı & Gülnar, 2009).

Facebook addiction causes people to experience social escape and estrangement against their own society. For example, Facebook addicts communicate with their family member living same house by using Facebook or they can embrace different behavior types by using social networking sites. Recently, according to result of the study conducted by psychiatrist Cecilie Schou Andreassen and her friends from Norway Bergen University people who feel themselves in insecure and have worried state of mind are to tend towards Facebook addiction. Because people in these conditions think that face to face communication is insecure and that is why they prefer social networking sites like Facebook for communicating. Beside this, addicts started to become dissociable because of heavy Facebook usage (Griffiths, 2012: 518-519). For example, according to results of the survey conducted in Turkey on university students about the Social Networking Site Addiction shows that % 46.4 of the students joining the survey prefer to spent time on Facebook instead of social activities. Another amazing results of this survey is that % 22.6 of the students prefer to spent huge part of their time in front of the Facebook screen instead of spending their friends (Hazar, 2011: 32).

In Turkey, another study on Facebook addiction was carried out by Çam and İşbulan (2012: 14). In the study, a sampling was chosen among the teachers candidates in Sakarya University. The findings of the study indicate that there is a marked difference between the classes and genders from the point of Facebook addiction. Final year students are prominently more addicted to Facebook than the first and second year students. As for the gender, it was revealed at the end of the study that men were more addicted to Facebook than women.

According to the data of another study by Balcı and Gölcü'nün (2013: 274-275) executed on 903 university students; 5.1% of the participants is addicted and 22.6% of them is risky users. According to those results, 27.7% of the users may be considered as "problematic Facebook users". The existence of a positively significant relationship between the daily use of Facebook and lonesome levels and addiction levels to Facebook was revealed through this study. However, the long periods spent on Facebook may cause the individual go out less and spend less time with friends. In some ways, people may be unresponsive to the events and developments occurring around when connected to Facebook. At the end of study, moreover, it was also concluded that the addiction of participants to Facebook varied according to the purpose of using Facebook. Facebook addicts mostly use social sharing network in order to communicate with friends, accessing the communication information of people, recreation, writing on the wall of friends/reading what is written on their walls, sending a message or receiving a message, having fun and relaxing and knowing people better.

According to these theoretical perspectives, these research questions are wanted to answer in the content of the survey.

- ✓ What are the Facebook usage reasons of participants?
- ✓ What are the Facebook addiction levels of participants?
- ✓ What kind of relations are there between Facebook addiction levels and Facebook operating times of participants.
- ✓ What kind of relations are there between Facebook addiction level and loneness level of participants?
- ✓ What kind of relations are there between Facebook addiction level and Facebook addiction dimensions?
- ✓ Do Facebook addiction dimensions differ according to participants' genders?

## 2. Method

This study has a character stands on a descriptive method tries to explain rationally Facebook addiction and Facebook addiction types of Facebook users who are students of high school in Konya City in Turkey.

### 2.1. Research Model

The survey is general scanning model and among the survey's dependent and independent variables comparative relational scanning is done. At the time of new communication technologies in which heavy Facebook usage among teenagers who are high school students is very popular. Data were collected to define the Facebook addiction level of high school students form young population part of society.

### 2.2. Procedure and Sample

A field survey was conducted within the context of high school students in order to determine students' Facebook addiction level. The population of survey is the high school students attending to schools in Konya city in Turkey. Special reason of why high school students were selected as a sampling is that they have always internet connection, internet usage ability and because of this they are potential internet and also Facebook users which is basic point of the survey. Determination of sampling depends on purposive sampling which is one of the non-probabilistic sampling (Aziz, 2008: 55). Survey's poll was conducted by using face to face technique to students who attend to schools in Konya city center including 15 high schools' students. After pre-treatment, 494 poll sheets were accepted appropriate to analyze.

### 2.3. Measurements

In order to determine students' who joined the survey Facebook addiction levels, usage habitations, identifiers of their Facebook addictions; the poll sheet which consists of 58 questions was prepared. While preparing poll sheet former studies about the topic were used in order to simplify for participants' understanding. In the first part of poll sheet, questions were asked in the form of five point Likert scale to call into question for Facebook usage reasons of participants In the second part of the poll sheet; in order to determine students' addiction level "*The Bergen Facebook Addiction Scale*" took place which consists of 18 questions in the form of five point Likert scale. Participants were requested to give point between 1 and 5 to the 18 questions in Bergen's Facebook Addiction Scale (Andreassen et al., 2012: 516). To prove credibility and validity of the scale *Cronbach's Alpha* coefficient was counted as

.938. Four questions in the third part of the scale were asked in order to determine participants' Facebook usage experiences, frequency of weekly Facebook usage, operating time of participants Facebook for one entrance and their connection situations. By using another scale consisting of 18 questions on the fourth part of the poll sheet, students' activities realized on Facebook were called into question and in order to prove scale's credibility and validity, *Cronbach's Alpha* coefficient which was taken is .930. 6 questions in the last part of the poll sheet, it was aimed to determine demographic features of participants.

## 2.4. Analytical Procedure

The survey was conducted between the dates of 1-15 February 2014 with using face to face meeting technique. Data was analyzed by using the SPSS 20.0 statistic program. In order to determine Facebook usage behaviors and demographic features of participants frequency analyze and arithmetic mean were used and to determine possible differences between different addict groups. The relation between Participants' Facebook addiction level and loneliness level and operating time of participants Facebook for one entrance was analyzed by using Correlation Analysis. The relation between Participants' Facebook addiction level and gender were analyzed with *Independent Samples T-Test*. The relations between Participants' Facebook addiction level and frequency of weekly usage and using tools to connect Facebook were analyzed by using *One-Way ANOVA Analysis*.

## 3. Findings

### 3.1. Some of Features of Participants

Table 1 shows participants' socio-demographic features and Facebook usage behaviors.

- ✓ 48.8 percent of participants are male, 51.2 percent of participants are female. Ratios are convenient for comparing in terms of participants' genders.
- ✓ When descriptive statistic of age dispersion is analyzed, it is seen that lowest age of participants is 14 and highest age of participants is 21. Average age of participants is 17.6 and standard deviation of dispersion is 1.33.
- ✓ When the results of descriptive statistic of monthly expenses participants declared are analyzed, it is seen that minimum expenses limit is 5 TL and maximum expenses limit is 1000 TL. Accordingly, average monthly expenses of participants were determined as 156 TL and standard deviation of dispersion is 141.0.
- ✓ A scale which recommends participants to give points among 1-10 (1= I am never alone, 10= I am really alone) was formed to determine loneness level of participants. The results of statistical analysis including on 486 participants' answers shows that participants have loneness in low level ( $\bar{x} = 4.24$ ).
- ✓ More than half of participants (53.4%) use both vehicles for Facebook connection; 22.1% of participants use mobile phones for Facebook connection and 24.5% of participants use computers for Facebook connection.
- ✓ 44.3% of high school students joining the survey have used Facebook for more than 5 years, 31.6% of them have used Facebook for 3-4 years, 18.6% of them have used Facebook for 1-2 years and 5.5% of them have used Facebook for less than 1 year. Accordingly, users using Facebook for more than 5 years form the majority among the whole participants.

**Table 1. Findings about the some features of participants**

		Frequency	Percent (%)
<b>Gender</b>	Male	241	48.8
	Female	253	51.2
<b>Facebook Connection Tolls</b>	Computer	120	24.5
	Mobile Phone	108	22.1
	Both of them	261	53.4
<b>Facebook Usage Experience</b>	Less than 1 year	27	5.5
	1-2 years	91	18.6
	3-4 years	155	31.6
	5 years and more	217	44.3
<b>Facebook Usage Frequency</b>	1 day in a week	34	6.9
	2-3 days in a week	94	19.1
	4-5 days in a week	147	29.9
	Everyday	216	44.0

	N	Minimum	Maximum	$\bar{x}$	SD
<b>Age</b>	492	14	21	17.6	1.33
<b>Monthly Expenses</b>	479	5 TL	1000 TL	155.9	141.0
<b>Facebook operating time</b>	490	2 dk.	1440 dk.	101.3	151.5
<b>Loneness level</b>	486	1	10	4.24	2.68

- ✓ Answers given to the question about weekly Facebook usage frequency show that 6.9% of participants use Facebook one time in a week, 19.1% of them use Facebook 2-3 times in a week, 29.9% of them use Facebook 4-5 times in a weekend 44% of them use Facebook every day in a week.

### 3.2. Facebook Usage Reasons of Participants

In order to designate why participants think the Facebook usage reasons of users so important, their standard deviations and arithmetic averages were counted. In order to prove scale's credibility and validity, *Cronbach's Alpha* coefficient which was taken is 863.

According to Table 2, the students participate the survey use Facebook more to send and take instant messages ( $\bar{x} = 3.64$ ). Participants tend to use also Facebook to communicate with their friends ( $\bar{x} = 3.46$ ), to entertain and relax ( $\bar{x} = 3.41$ ), to loading photos and looking photos of acquaintances ( $\bar{x} = 3.40$ ), to read writings on my wall and write others' wall ( $\bar{x} = 3.35$ ). They pay no attention to be a keen judge of people ( $\bar{x} = 3.10$ ) and to spent leisure times ( $\bar{x} = 3.17$ ).

**Table 2. Central tendency statistic about Facebook usage reasons**

Facebook Usage Reasons	N	$\bar{x}$	SD
To instant messaging	488	3.64	1.17

To communicate with friends	493	3.46	1.29
To entertain and relax	486	3.41	1.20
To load photos and looking photos of acquaintances	492	3.40	1.18
To read writings on my wall and write others' wall	492	3.35	1.27
To get information about people and events	490	3.34	1.19
To share personal presentation and profile information	490	3.29	1.36
To reach communication information of people	490	3.19	1.30
To spent leisure times	491	3.17	1.23
To be a keen judge of people.	493	3.10	1.28

**Note:** In the scale of Facebook Usage Reasons 1 is coded as *I never agree* and 5 are coded as *I completely agree*.

### 3.3. Facebook Activities of Participants

In this part of the survey, standard deviations and arithmetic averages of threads were counted in order to determine in what frequency participants realized activities listed on the poll sheet and the results were listed in order in terms of importance. In order to prove scale's credibility and validity, *Cronbach's Alpha* coefficient which was taken is .930.

**Table 3.** Central tendency statistic of threads about Facebook activities

Facebook Activities	N	$\bar{X}$	SD
To read private messages from others	487	3.11	0.91
To follow breaking news	489	2.99	0.96
To send message	487	2.95	0.94
To read writings on your wall	491	2.93	1.00
To look others' photos	490	2.83	0.96
To update profile	491	2.80	1.03
To look others' profiles and get information about them	491	2.69	1.04
To add as friend or delete	492	2.65	0.91
To send answers or invitations to others	486	2.63	0.99
To look video links and others' profiles	489	2.62	0.98
To post or share links like YouTube etc.	491	2.60	1.08
To send photos to friends	491	2.56	1.02
To read messages on others' walls	487	2.55	1.02
To comment photos	491	2.54	0.97
To tag or untagged photos	488	2.53	0.96
To get information about an event from others	492	2.50	0.96
To visit groups	491	2.22	1.03

To make groups	490	1.91	1.02
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**Note:** In the scale of Facebook Activities numbers were coded as None= 1, Rarely= 2, Sometimes= 3 Commonly= 4

According to Table 3, the following are most preferred activities by the students participated to survey; to read private messages from others ( $\bar{x} = 3.11$ ), to follow breaking news ( $\bar{x} = 2.99$ ), to send message ( $\bar{x} = 2.95$ ), to read writings on your wall ( $\bar{x} = 2.93$ ), to look others' photos ( $\bar{x} = 2.83$ ), to update profile ( $\bar{x} = 2.80$ ), to look others' profiles and get information about them ( $\bar{x} = 2.69$ ), to add as friend or delete ( $\bar{x} = 2.65$ ). In other way, the following are less preferred activities by the students participated to survey: to make groups ( $\bar{x} = 1.91$ ) and to visit groups ( $\bar{x} = 2.22$ ).

### 3.4. Facebook Addiction Dimensions of Participants

In this part of survey, Bergen's Facebook Addiction Scale was used to determine the high school students' addiction dimensions participated to survey. There are 6 dimensions in this scale: Salience, Tolerance, Withdrawal, Mood Modification, Relapse and Conflict. Every dimension is represented by 3 questions, totally 18 questions take place in scale. The answers of participants were analyzed and arranged by arithmetic mean and standard deviation points took place in Table 4.

**Table 4.** Central tendency statistic of "The Bergen Facebook Addiction Scale"

<b>The Bergen Facebook Addiction Scale</b>	$\bar{x}$	SD
<b>1. Dimension: (Salience)</b>	<b>3.05</b>	<b>1.06</b>
Spent a lot of time thinking about Facebook or planned use of Facebook?	3.17	1.35
Thought about how you could free more time to spend on Facebook?	3.03	1.26
Thought a lot about what has happened on Facebook recently?	2.99	1.26
<b>2. Dimension: (Tolerance)</b>	<b>3.04</b>	<b>1.06</b>
Spend more time on Facebook than initially intended?	3.30	1.25
Felt that you had to use Facebook more and more in order to get the same pleasure from it?	2.92	1.34
Felt an urge to use Facebook more and more?	2.90	1.32
<b>3. Dimension: (Mood Modification)</b>	<b>2.90</b>	<b>1.12</b>
Used Facebook in order to forget about personal problems?	3.04	1.35
Used Facebook in order to reduce restlessness?	2.84	1.27
Used Facebook to reduce feelings of guilt, anxiety, helplessness and depression?	2.83	1.29
<b>4. Dimension: (Relapse)</b>	<b>2.86</b>	<b>1.15</b>
Tried to cut down on the use of Facebook without success?	2.93	1.39
Decided to use Facebook less frequently, but not managed to do so?	2.87	1.34



Experienced that others have told you to reduce your use of Facebook but not listened to them?	2.78	1.31
<b>5. Dimension: (Withdrawal)</b>	<b>3.00</b>	<b>1.11</b>
Become irritable if you have been prohibited from using Facebook?	3.29	1.36
Felt bad if you, for different reasons, could not log on to Facebook for some time?	2.87	1.29
Become restless or troubled if you have been prohibited from using Facebook?	2.84	1.35
<b>6. Dimension: (Conflict)</b>	<b>2.82</b>	<b>1.06</b>
Given less priority to hobbies, leisure activities, and exercise because of Facebook?	2.85	1.32
Used Facebook so much that it has had a negative impact on your job/ studies?	2.84	1.27
Ignored your partner, family members, or friends because of Facebook?	2.76	1.36

**Note:** In Facebook Addiction Scale; numbers are coded as *None= 1, Rarely= 2, Sometimes= 3, Commonly= 4 and Always= 5*

3 points from every dimension took place in Bergen's Facebook Addiction Scale were computed and transformed to one variant and 6 dimensions are lined up bigger to smaller with their arithmetic means. By this results Salience dimension the most participated part among the students to survey. It is followed by Tolerance ( $\bar{x} = 3.04$ ) and Withdrawal ( $\bar{x} = 3.00$ ). The least rated dimension is Conflict ( $\bar{x} = 2.82$ ) by students (see Table 5).

**Table 5.** Descriptive statistics of the dimensions of Facebook addiction

<i>The Bergen Facebook Addiction Scale</i>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	$\bar{x}$	<b>SD</b>
<b>Salience</b>	493	1	5	3.05	1.06
<b>Tolerance</b>	494	1	5	3.04	1.06
<b>Withdrawal</b>	493	1	5	3.00	1.11
<b>Mood Modification</b>	494	1	5	2.90	1.12
<b>Relapse</b>	494	1	5	2.86	1.15
<b>Conflict</b>	494	1	5	2.82	1.06

**Table 6.** The relation between gender and the dimensions of Facebook Addiction

	<b>Gender</b>	<b>N</b>	$\bar{x}$	<b>SD</b>	<b>t-value</b>	<b>Sig.</b>
<b>Salience</b>	Male	240	2.58	0.92	-10.66	<b>.000</b>
	Female	253	3.50	0.98		
<b>Tolerance</b>	Male	241	2.52	0.98	-11.92	<b>.000</b>
	Female	253	3.53	0.89		

<b>Withdrawal</b>	Male	241	2.46	1.10	-9.35	<b>.000</b>
	Female	253	3.33	0.97		
<b>Mood Modification</b>	Male	241	2.33	1.12	-11.20	<b>.000</b>
	Female	253	3.37	0.93		
<b>Relapse</b>	Male	240	2.50	1.09	-10.66	<b>.000</b>
	Female	253	3.47	0.91		
<b>Conflict</b>	Male	241	2.37	1.02	-10.04	<b>.000</b>
	Female	253	3.24	0.91		

When Table 6 was examined, according to gender of participants Salience ( $t = -10.66$ ;  $df = 491$ ;  $p < .001$ ), Tolerance ( $t = -11.92$ ;  $df = 492$ ;  $p < .001$ ), Withdrawal ( $t = -9.35$ ;  $df = 492$ ;  $p < .001$ ), Mood Modification ( $t = -11.20$ ;  $df = 492$ ;  $p < .001$ ), Relapse ( $t = -10.66$ ;  $df = 491$ ;  $p < .001$ ) and Conflict ( $t = -10.04$ ;  $df = 492$ ;  $p < .001$ ) Facebook addiction dimension shows significant differences. Female's Salience, Tolerance, Withdrawal, Mood Modification, Relapse and Conflict average points are higher than male's points (see Table 6).

**Table 7.** The findings of Correlation Analysis between Facebook addiction and Facebook addiction dimensions (Pearson  $r$ )

	<b>Facebook Addiction</b>	<b>Salience</b>	<b>Tolerance</b>	<b>Withdrawal</b>	<b>Mood Modification</b>	<b>Relapse</b>	<b>Conflict</b>
<b>Facebook Addiction</b>	1	.835**	.861**	.801**	.836**	.857**	.784**
<b>Salience</b>		1	.727**	.595**	.620**	.665**	.551**
<b>Tolerance</b>			1	.626**	.647**	.693**	.596**
<b>Withdrawal</b>				1	.607**	.635**	.520**
<b>Mood Modification</b>					1	.646**	.620**
<b>Relapse</b>						1	.619**
<b>Conflict</b>							1

**Note:** \*\* $p < .01$

When Correlation Analysis results between Facebook addiction level and Facebook addiction dimensions shown in Table 7 were examined, participants' addiction level and Salience ( $r = .835$ ,  $p < .01$ ), Tolerance ( $r = .861$ ,  $p < .01$ ), Withdrawal ( $r = .801$ ,  $p < .01$ ), Mood Modification ( $r = .836$ ,  $p < .01$ ), Relapse ( $r = .857$ ,  $p < .01$ ) and Conflict ( $r = .784$ ,  $p < .01$ ) which are part of Facebook addiction dimensions points to a strong relationship between them. There is positively strong and significant relation between the dimensions of Facebook addiction. When it is compared with other dimensions it can be mentioned a strong and significant relation between Salience and Tolerance ( $r = .727$ ,  $p < .01$ ).

**Table 8.** Dispersion of Facebook addiction according to participants' gender

	Gender	N	$\bar{x}$	SD	t-value	Sig.
<b>Facebook Addiction</b>	Male	241	2.45	0.83	-13.60	<b>.000</b>
	Female	253	3.41	0.72		

According to the genders of high school students participated to survey, Facebook addiction levels shows significant diversity ( $t = -13.60$ ;  $df = 492$ ;  $p < .001$ ). When descriptive statistics results were examined Facebook addiction levels of female ( $\bar{x} = 3.41$ ) are higher than male's ( $\bar{x} = 2.45$ ).

**Table 9.** Dispersion of Facebook addiction according to weekly Facebook usage frequency

	Facebook Usage Frequency	N	$\bar{x}$	F	df	Sig.
<b>Facebook Addiction</b>	1 day in a week	34	1.72	51.89	3	<b>.000</b>
	2-3 days in a week	94	2.48			
	4-5 days in a week	147	3.04			
	4-5 days in a week	216	3.29			

Moreover, Facebook addiction levels of participants' weekly usage of Facebook show significant differences ( $F = 51.89$ ;  $df = 3$ ;  $p < .001$ ). In the result of *Tukey Test*, the source of significant difference emerged at 5% mean level is among the students have Facebook connection, using Facebook everyday ( $\bar{x} = 3.29$ ), one day in a week ( $\bar{x} = 1.72$ ), 2-3 days in a week ( $\bar{x} = 2.48$ ), 5-6 days in a week ( $\bar{x} = 3.04$ ). In other words the students using Facebook everyday have more addiction to Facebook than the other categories (see Table 9). Also the frequency of usage of Facebook increases, Facebook addiction levels also increase ( $r = .476$ ,  $p < .01$ ).

**Table 10.** The relation between Facebook operating time and Facebook addiction

	Facebook Addiction
<b>Facebook Operating Time</b>	.255**
<b>N</b>	490

**Note:** \*\* $p < .01$

In another point, Facebook addiction scale consists of 18 items was computed and transformed to one variant to determine the direction and force of the relation between the period of Facebook usage and Facebook addiction. When the Correlation Analysis results were examined, there is a weak mean in positive direction between two variants. According to this when the Facebook usage period increases Facebook addiction levels also increase ( $r = .255$ ,  $p < .01$ ).

**Table 11.** Dispersion of Facebook addiction according to Facebook connection tools

	Connection Tools	N	$\bar{x}$	F	df	Sig.
<b>Facebook Addiction</b>	Computer	120	2.70	13.47	2	<b>.000</b>
	Mobile phone	108	2.75			
	Both of them	261	3.14			

The instruments using to connect to Facebook of high school students participated to survey have significant differences in the levels of addiction ( $F= 13.47$ ;  $df= 2$ ;  $p< .001$ ). When the descriptive statistics and multiple comparison chart were examined, the students connecting to Facebook with computers and also with mobile phones ( $\bar{x} = 3.14$ ) are more addicted than the students connecting with only computers ( $\bar{x} = 2.70$ ), and also the students connecting only with mobile phones ( $\bar{x} = 2.75$ ) (see Table 11).

**Table 12.** Dispersion of Facebook addiction according to Facebook usage experience

	Facebook Usage Experience	N	$\bar{x}$	F	df	Sig.
<b>Facebook Addiction</b>	Less than 1 year	27	2.08	9.74	3	<b>.000</b>
	1-2 years	91	2.92			
	3-4 years	155	2.95			
	5 years and more	217	3.06			

According to participants' usage experience, Facebook addiction levels varying is also shown in this study ( $F= 9.74$ ;  $df= 3$ ;  $p< .001$ ). In the result of *Tukey Test*, the source of significant difference emerged at 5% mean level is among the students using Facebook more than 5 years ( $\bar{x} = 3.06$ ) and the students using less than a year ( $\bar{x} = 2.08$ ) was fixed. Over, the Facebook usage experience of high school students increase, the increase of Facebook addiction can be observed ( $r= .182$ ,  $p< .01$ ).

**Table 13.** The Relation between loneliness level of participants and Facebook addiction

	Facebook Addiction
<b>Loneliness Level</b>	.041
<b>N</b>	486

**Note:**  $p> .05$

Finally, when Correlation Analysis results were examined to understand the relation between power and direction of the Facebook addiction level of the students participated to survey and loneliness levels of participants, no significant sign between two variants are found ( $r= .041$ ,  $p> .05$ ).

## Conclusion and Discussion

Facebook draws attention as social sharing network which has appealed more than one billion people all over the world, especially, young users. The overuse of social sharing networks such as Facebook which provides numerous opportunities such as communicating with friends, having social interactions, having information about events and developments, knowing people better, making personal presentations, entertaining and relaxing brings along the problem of addiction (Balçı & Gölcü, 2013: 274). According to the results of a field research carried out on the high school students in Turkey, Facebook is a social sharing network which is mostly used among the high school students in order to send messages and receive messages, communicate with friends, entertain and relax, look at the photos of friends/download photos.

As a result of this study which Bergen's Facebook Addiction Scale; Saliency is the Facebook Addiction dimension which high school students who participants the study mostly participate. It is followed by Tolerance and Withdrawal. The dimension which the participants scored the least is the Conflict.

When the relationships between Facebook addiction level and Facebook addiction dimensions was analyzed; it was concluded that there is a positive relationship between the Facebook addiction levels of the participants and the Facebook addiction dimensions such as Saliency, Tolerance, Withdrawal, Mood Modification, Relapse and Conflict. Again, a stronger significant relationship exists between Saliency and Tolerance when compared to other dimensions.

At the end of this research carried out on high school students, again, the obtained findings mean Facebook addiction levels of women are rather higher than men.

Facebook addiction levels show differences from the frequency of weekly use of Facebook by the participants. Those who regularly use Facebook everyday have higher Facebook addiction levels than the other categories. Moreover, the more weekly use of Facebook by the participants increase the more Facebook addiction levels increase. Similarly, the more use of Facebook increases the more Facebook addiction levels increase.

According to the instruments which the students who participants the study are connected to Facebook, the significant difference in Facebook addiction levels was determined through this study. Those who are connected to Facebook through both computers and cell phones have higher level of Facebook addiction than those who are connected only computers or cell phones.

It may be concluded from the findings of this study that, finally, the more Facebook using experiences of high school students increase the more their levels of Facebook addiction increase.

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