Examination of the Relationship between Internet Attitudes and Internet Addictions of 13-18-Year-Old Students: The Case of Kahramanmaraş[*]

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ABSTRACT
This study aims to determine internet attitudes and internet addiction levels of 13-18-year-old students and examine the relationship between these variables. The "internet attitude scale", developed by Tavşancıl and Keser (2002) and the "internet addiction scale", developed by Hahn and Jerusalem and adapted into Turkish by Şahin and Korkmaz (2011), were used as a data collection tool. The scales were applied to 286 students who were selected from secondary schools and high schools in the Kahramanmaraş province. The analyses indicated that average internet attitude score of students is 3.661 and this value corresponds to the choice "I agree" in the scale. Also, it was found that average internet addiction score of students is 2.119. The findings show that the students are at the level of probable addiction in terms of tendency to internet addiction. As a result of correlation analysis, a positively significant relationship was found between internet attitude and internet addictions of the students. Also, it was determined through the regression analysis that internet attitudes of students significantly predict their internet addictions.

Keywords: Internet attitude, Internet addiction, Addiction, Secondary school students, High school students.

INTRODUCTION
Today, students grow up in a very different living environment compared with the past. They were born into a period of time when technology and computer are used intensively. Most importantly, today's students do not know how a world without computer, internet and videogames is (Prensky, 2001). Communication and information technologies are developing very fast in our times. Such technologies and internet connection change our lives and offer many benefits for the users (Beard & Wolf, 2001; Büyükaslan, 2002; Kuzu, Çuhadar and Akbulut, 2007). The concept of internet has more functions than information distribution mechanism and advertisement (Paksoy, Ürkmez and Arıcıoğlu, 2003; Weiser, 2001). Besides, internet is a means of interaction where individuals are involved in social communication. More precisely, the Internet has an important place not just in obtaining information, sending or receiving e-mail and shopping but in establishing social communication as well (Lavanco et al., 2008). One of the basic factors that constitute human behavior is attitudes (Kağıtçıbaşı, 1999, p. 129). Although there is no certain consensus on the concept of attitude just like in many concepts in the field of social sciences, (Tavşancıl, 2002, p. 65), attitude is a constant and consistent emotion, belief and tendency which causes us always behave the same way towards objects, individuals, organizations or events (Öncül, 2000). Belief, emotion and tendency are considered important in guiding behaviors of an individual. Due

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to the fact that attitude is one of the variables that form the human behavior (Kağıtçıbaşı, 1999, p. 128) and considered as an element that guides behaviors of an individual (Tavşancıl, 2002, p. 65), it is deemed necessary to measure internet attitudes (Bahar, et al., 2009).

Internet technology has led to introduction of new concepts such as online or virtual learning, asynchronous learning, time and space independent learning, virtual classroom, virtual university, internet literacy and virtual education (Çakır and Yalçın, 2006). Undoubtedly, primary schools are one of the most effective institutions for an individual in the process of acquiring and developing basic internet and computer skills (Bahar, et al., 2009). Internet addiction is a phenomenon which is expressed as the use of internet in a harmful and uncontrolled manner. Recently, internet addiction is considered as a psychological problem in science, which may be associated with various psychological problems. In particular, psychologists, educators, psychiatrists and psychological counselors have focused on various studies in the subject area (Kurtaran, 2008; Cengizhan, 2005; Orhan and Akkoyunlu, 2004; Bölükbaş, 2003; Ayaroğlu, 2002; Eichenberg and Ott, 1999; Zimmerl, 1998). Internet addiction is defined as a disease in the "Diagnostic and Statistical Manual of Mental Disorders", called "DSM IV" and published in 1994 by the American Psychiatric Association (Arısoy, 2009). The concept of Internet addiction, which was used in 1995 for the first time, has become a phenomenon associated with various terms in recent years, such as "online addiction", "internet addiction", "net addiction", "internet addiction disorder", "cyber disorder" and "pathologic internet use" (Eichenberg and Ott, 1999). Although there is still no clear definition of internet addiction (Chou, Condron and Belland, 2005), the basic traces are considered to be the failure to limit the use of internet, continuing the use of internet despite academic or social harms and feeling an intensive anxiety in cases when access to internet is limited (Öztürk et al., 2007). Communication technologies and information are progressing very fast in this era. In line with these technologies, internet changes our lives and offers many benefits for its users (Beard and Wolf, 2001; Büyükaslan, 2002; Kuzu, Çuhadar and Akbulut, 2007). The concept of internet has more functions than information distribution mechanism and advertisement (Paksoy, Ürkmez and Arıcıoğlu, 2003; Weiser, 2001). In Turkey, there are many researches which are conducted on the use of internet. In a study conducted on use of internet by primary school students, internet access of students and their purposes of use of internet are examined (Orhan and Akkoyunlu, 2004). According to findings of that study, it is found that majority of students use the internet frequently. Also, it is observed that as students get older the rate of using internet increases and the use for the purpose of playing games decreases and there is an increase in the rate of using internet for purposes like access to information and communication (Şahin, 2009). When the data available in literature is reviewed, it is possible to see many studies which underline that both internet attitudes and internet addictions of students are important in their educational process. Although these studies are conducted on individuals within a certain age group, this study is carried out based on the assumption that the relationship between internet attitudes and internet addictions of 13-18-year-old students, an age range that covers pubescence and adolescence period, which is considered a critical period for individuals.

METHOD
Relational screening model is used in the study. Descriptive statistics were preferred for the data analysis. First of all, internet attitude and internet addiction levels of students were measured. Then, a correlation and regression analysis was made in turn among all data, data of secondary school students and data of high school students in order to identify the relationship between internet attitudes and internet addictions of students.

SAMPLE GROUP
Sample group of the study consists of 111 secondary school students and 175 high school students who study in secondary and high schools affiliated with the Ministry of National Education in the Kahramanmaraş province in the education year of 2013-2014. These students and schools were selected by drawing of lots. First of all, secondary and high schools where the study will be conducted was determined. Then, students who study in different branches of these schools were selected randomly. The gender factor was also considered when selecting the sample group (139 female, 147 male). The number of samples was determined to make sure it is five times higher than the item number of scales (Büyüköztürk, 2014, p. 146). Also, target population of the study consists of secondary and high school students who study in the Kahramanmaraş province.

DATA COLLECTION TOOL
The "internet attitude scale", developed by Tavşancıl and Keser (2002), and the "internet addiction scale", developed by Hahn and Jerusalem and adapted into Turkish by Şahin and Korkmaz (2011), were used as a data collection tool in the study. Cronbach alpha internal reliability coefficients of internet attitude scale and internet addiction scale are 0.890 and 0.858, respectively. In this application, reliability coefficients of said scaled were calculated 0.821 and 0.803, respectively.

PROCESS
The SPSS package software was used in the analysis of research data. 5 columns 4 spaces approach was adopted in order to determine the range of arithmetic means of internet attitude scores of students. The value of this range is 4/5=0.8. Accordingly, it is interpreted as follows: .00-1.79: Strongly Disagree, 1.80-2.59: Disagree, 2.60-3.39: Neutral, 3.40-4.19: Agree, 4.20-5.00: Strongly Agree. Students who constitute the sample group of the study were examined in three groups, namely internet addicts, non-addicts and probable addicts, by considering the overall internet addiction score obtained from the internet addiction scale, standard deviation value, and the lowest and the highest score that can be obtained from the scale. Accordingly, those who get a one score higher than the standard deviation of average score obtained from the internet addiction scale were considered as "addict", those who get a one score lower than the standard deviation as "non-addict", and those who get other scores as "probable addict". Also, in order to determine the relationship between internet attitude and internet addiction of students, the Pearson correlation value was calculated and a positively significant relationship was found (r=0.337, p<0.01). It is observed that this value is higher based on the data collected from secondary school students (r=0.381, p<0.01), and lower based on the data collected from high school students (r=0.329, p<0.01). In addition, a regression analysis was made in order to calculate the regression level of internet attitude of students on their internet addictions and a significant regression relationship was found based on the data collected from all students (R=0.349 p<0.01). It was identified that this value is higher based on the data collected from secondary school students (r=0.381, p<0.01), and lower based on the data collected from high school students (r=0.329, p<0.01).

FINDINGS
Mean and standard deviation values of internet attitudes and internet addiction levels of students are shown in Table 1.

Table 1: Score breakdown of internet attitude and internet addiction levels of students

	N	Mean	Standard Deviation	Min-Max
Internet attitude	286	3.661	0.938	1-5
Internet addiction	286	2.119	0.921	1-5

When Table 1 is examined, it is seen that average internet attitude score of students is 3.661 and this value corresponds to the choice "Agree" in the scale. This finding indicates that internet attitude of students is high. Again, Table 1 shows that overall average internet addiction score of students is 2.119 and standard deviation is 0.921. In the study, addiction status of students who are internet addict, non-addict and probable addict is evaluated considering the overall addiction score obtained from the internet addiction scale and the lowest and the highest score that can be obtained from the scale. Accordingly, those who get a score of 2.119+0.921=3.400 and higher (maximum 5) are evaluated as "addict", those who get a score of 2.119-0.921=1.198 and higher (minimum=1) as "non-addict" and those who get a score between 3.400 and 1.198 as "probable addict". In this stage, mean and standard deviation values of addiction status of students are given in Table 2 based on their internet addiction scores.

Table 2: Descriptive statistics of addiction status based on internet addiction scores

Addiction Status	N	%	Mean	Standard Deviation
Addict	22	7.69	4.045	0.554
Non-addict	69	24.13	1.000	0.000
Probable addict	195	68.18	2.297	0.561

When Table 2 is examined, the data collected from the internet addiction scale indicate that 22 of students are "addict" (7.69%), 69 are "non-addict" (24.13%) and 195 are "probable addict" (68.18%).

Relationship between internet attitudes and internet addictions of individuals
In the study, correlation value was taken into account in order to determine the relationship between internet attitudes and internet addictions of students and a positively significant relationship was identified between their internet attitudes and internet addictions. The table which shows this relationship is given below.

Table 3: The relationship between internet attitudes and internet addictions of students

Relationship	Correlation Value	p
The relationship between internet attitudes and internet addictions of 13-18-year-old individuals	0.337	0.000
The relationship between internet attitudes and internet addictions of secondary school students	0.381	0.000

The relationship between internet attitudes and internet addictions of high school students	0.329	0.000

When Table 3 is examined, it is observed that the relationship between internet attitudes and internet addictions of 13-18-year-old individuals is significant (r=0.337, p<0.05). Also, when the data collected from secondary school students (r=0.381, p<0.05) and the data collected from high school students (r=0.329, p<0.05) are considered, this relationship is also calculated to be significant as well.

Regression Level of Internet Attitudes of Students on Internet Addictions
A regression analysis was made in order to examine what kind of regression relationship exists between internet attitudes and internet addictions. Variance and error values of this regression analysis are shown in the table below.

Table 4: Variance table of regression relationship between internet attitudes and internet addictions of students

Source of Variance	Data Group	Sum of Squares	sd	Mean of Squares	F	p
	Total	30.590	1	30.590	39.397	0.000
Regression	Secondary School	13.525	1	13.525	18.296	0.000
	High School	15.927	1	15.927	20.866	0.000
	Total	220.512	284	0.776		
Error	Secondary School	79.841	108	0.739		
	High School	131.287	172	0.763		
	Total	251.101	285			
Total	Secondary School	93.366	109			
	High School	147.214	173			

When Table 4 is examined, it was found that the regression relationship between internet attitudes and internet addictions of 13-18-year-old students is significant (R=0.349, p<0.05). Also when the data collected from secondary school students (R=0.381, p<0.05) and the data collected from high school students (R=0.329, p<0.05) is examined, this regression relationship is observed to be significant again.

DISCUSSION
When the research data is examined, it is seen that average internet attitude score of students is 3.661 and this value corresponds to the choice "I agree" in the scale. This finding indicates that internet attitude of students is high. Also, the data indicates that overall average internet addiction score of students is 2.119 and standard deviation is 0.921. In the study, addiction status of students who are internet addict, non-addict and probable addict is evaluated considering the overall addiction score obtained from the internet addiction scale and the lowest and the highest score that can be obtained from the scale. Accordingly, those who get a score of 2.119+0.921=3.400 and higher (maximum 5) are evaluated as "addict", those who get a score of 2.119-0.921=1.198 and higher (minimum=1) as "non-addict" and those who get a score between 3.400 and 1.198 as "probable addict". Also, when the average and standard deviation values of addiction status of status is examined based on addiction scores, it is observed that 22 of students are "addict" (7,69%), 69 are "non-addict" (24,13%) and 195 are "probable addict" (68,18%). Çelik and Mercimek (2014) also found in their study conducted on internet addiction of university students that 79% of students are probable addicts. This data shows the research finding. In addition, the relationship between internet attitudes and internet addictions of students was examined (r=0.337, p<0.01) and a positively significant relationship was found between dependent variables. This relationship was measured based on the data collected from secondary school students (r=0.381, p<0.05) and the data collected from high school students (r=0.329, p<0.05) and it was observed to be significant. A regression analysis was made in order to examine what kind of regression relationship exists between internet attitudes and internet addictions. As a result of the regression analysis, it was found that the regression relationship between internet attitudes and internet addictions of 13-18-year-old students is significant (R=0.349, p<0.05). When the data collected from secondary school students (R=0.381, p<0.05) and the data collected from high school students (R=0.329, p<0.05) is examined, this regression relationship is observed to be significant again. The literature review includes studies which indicate that internet attitudes are associated with the internet addiction as well as studies which support this data. In their study, Ayas and Horzum (2013) found that families who have a negligent internet attitude have an important role in the internet addiction. Adaptation into Turkish, validity and reliability study of online cognition scale developed by David (2001) were performed

by Keser-Özcan and Buzlu (2005) and it was found that addiction risk increases as the total score from scale increases. Also, in a study conducted by Sargın (2013), the relationship between internet attitude and problematic internet use was examined and a significant relationship was found between internet attitude and total score. In the light of this data, future researches can be conducted on wider audiences. The study can be extended to individuals in different age groups. Also, the relationship between internet attitude and internet addiction can be examined based on different variables.

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