Examination of Narcissistic Personality Traits' Predicting Level of Internet Addiction and Cyber Bullying through Path Analysis

Füsun EKŞİ[a]

Abstract

The main aim of this study is to find out to what extend do narcissistic personality traits predict internet addiction and cyber bullying in vocational high school students. For this study five hundred and eight vocational high school students (331 male students- 66,2%, 169 female students 33,8% and 8 unstated x̄ 16,24) from Anatolian side of Istanbul Province have been selected by using cluster sampling method. As data collection tools, Narcissistic Personality Inventory adopted by Atay, Internet Addiction Scale developed by Günüç and Kayri, and Cyber Bullying Inventory developed by Arıcak et.al have been used. The model shows that narcissism has an indirect effect on cyber bullying. As a trait of narcissistic personality "entitlement", significantly predicts "deprivation" and controlling difficulty in internet addiction, besides, the trait of narcissistic personality, "superiority" predicts significantly "social isolation" in internet addiction. It is found out that the scores of narcissistic personality "exploitativeness" negatively predict the scores of internet addiction "controlling difficulty".

Key Words

Personality, Narcissism, Narcissistic Personality, Internet Addiction, Cyber Bullying, Path Analysis.

21ˢᵗ century is different from other centuries with its many features. Today, in other words in 'information age', computers and Internet has stepped in every part of our lives. The information technologies which were originally designed to ease our lives, later has caused some disadvantages and problems. Internet addiction and cyber bullying are only two of these problems. Besides these problems are mentioned in the media frequently, the number of people consulting psychiatrist because of internet addiction and cyberbullying is increasing and the problem is discussed at schools increasingly at

psychological counseling and guidance services. Recently, by extending the traditional bullying concept, the opportunities brought by the technology and youngsters' using technology widespread emerged the cyber bullying concept which enables people to bully via technology (Ayas and Horzum, 2011). Bullying, in many societies, has a very crucial effect on adolescents. There are many studies concerning bullying in the literature. (Conolly and O'Moore, 2003; Çalık, Özbay, Özer, Kurt and Kandemir, 2009; Dake, Price, Telljohann and Funk 2003; Piskin, 2002). Traditional bullying consist of physical behaviors (hitting, pushing… etc.) and verbal exploitation (mocking and nicknaming) and further exclusion from the society and gossiping about someone (Kowalski and Limber, 2007). There is a meaningful relationship between bullying and cyberbullying (Li, 2007b). Shariff (2005) states that cyberbullying is an extension of bullying. Bullies, cyber bullies and their victims are in close friendship and almost 30% of bullies are cyber bullies (Li, 2007b). Although there are some similarities

a **Füsun EKŞİ**, **PhD.**, holds an EdD in Educational Administration and Supervision and works as a psychological counselor at III. Selim Primary School. Her research interests include interpersonal communication, new media, child and media interaction, internet addiction, and personal development literature. Correspondence:. Üsküdar III. Selim İÖO, Salacak Mahallesi Köprülü Konak Sokak No: 7 Üsküdar/İstanbul-Turkey. E-mail: fusuneksi@yahoo.com Phone: +90 216 492 9864 Fax: +90 216 391 7175.

between traditional bullying and cyber bullying, (Hinduja and Patchin, 2008; Li, 2006, 2007a), there are important differences between cyber bullying and traditional bullying (Kowalski and Limber, 2007; Mason, 2008). For instance, traditional bullies are known by others at school or at work. Yet, usually it is not known who the virtual bullies are (Anderson and Sturm, 2007; Chibbaro, 2007; Strom and Strom, 2005). This causes virtual bullying harm much (Beale and Hall, 2007). Valkenburg and Soeters (2011) list the negative sides of information and communication technologies for adolescents as the possibility of encountering the pornographic images and violent materials, sharing the personal information with people met via information and communication technologies, and meeting that people face to face. Scaglione and Scaglione (2006) state that among these negative sides, the transfer of traditional bullying to cyber world takes the first place and this is called cyber bullying. Cyber bullying has emerged from bullying and harassment in recent years. It is defined as " a person's or a group's enabling harassment and threat and tying to harm others by sending rude texts and/or images continuously and on purpose to other people or groups via technology, e-mail, mobile phones, beepers, short message service, and web sites" (Ang and Goh, 2010; Arıcak, 2009; Belsey, 2008; Berson, Berson and Ferron, 2002; Finkelhor, Mitchell and Wolak, 2008; Mason, 2008; Patchin and Hinduja, 2006; Willard, 2007; Ybarra and Mitchell, 2004). Cyberbullies think themselves powerful towards their victims. Cyberbullies use two important electronic tools to harm their victims. First of all, they use their personal computers to send bully and disturbing e-mails and instant messages, and then they send unmentionable words, humiliating, abusing and pejorative messages. Secondly, they send text messages to the victim via mobile phones (Patchin and Hinduja, 2006). Although the studies on cyber bullying in Turkey are limited, the number of studies is increasing day by day. For a qualitative study about the cyber bullying of high school students in Trabzon, 12 students were interviewed. The results of the content analysis have revealed that students are exposed to cyber bullying in different aspects and it is stated that sometimes they do cyber bully. Males students cyber bully others more than the females students do, and the most common cyber bullying activity is "calling with a private number and disturbing " (Şahin, Sarı, Özer and Er, 2010, p. 266). In the study Arıcak *et al.* conducted on cyber bullying in Turk adolescents, it is revealed that 35,7% of the participant students show bully

behaviors, 23,8% of them are reported to be both bully and victim, and 5,9% of the participant students state they are victims. The male students are revealed to be more bully, victim and bully-victim compared to female students. Besides, 25% of the adolescents who have been exposed to cyber bullying are stated to tell the situation to their peers and parents, while 30,6% of state that they find active solutions themselves like blocking the bully.

The study conducted by Arıcak (2009) on cyber bullying behaviors of university students and the relationship between psychiatric symptoms reveal that hostile behaviors and psychoticism predict cyber bullying. Furthermore, it is found out that existing cyber bullying predicts the possibility of cyber bullying in the future. There is a close relationship between anonymity and cyberbullying. Besides, males state that they more cyber bully than the females do. In the study carried out by Dilmaç (2009) concerning the determination of the correlation between cyber bullying and personality traits of undergraduate students, nonbullying victims show more resoluteness trait than bully-victims. Resoluteness is the only variable that predicts bullying. When the values concerning the resoluteness increases, the ratio of being exposed to cyber bullying decreases. Erdur-Baker and Kavşut (2007) conducted a study analyzing the cyber bullying experiences of high school students. The results showed that it is possible to become a cyber-bully or a victim, male students cyber bully more than the females do, and males become victims to a higher extent. Moreover, it is found out that the more the use of internet based sources increases, the more the risk of becoming bully or victim (the new face of peer bullying). The study on the perceptions of teachers' cyber bullying conducted by Ayas and Horzum (2011) show that the perceptions of teachers' cyber bullying are high. A connection between the values of secondary school students and the behaviors of cyber bullying is revealed by a study conducted in 2010 by Dilmaç and Aydoğan (2010). The more the values the students have, the less cyber bullying behaviors they show. Another study conducted by Dilmaç and Aydoğan points out that parents' attitudes predict the cyber bullying behaviors of the students.

When the results of t-test conducted to determine the significance of regression coefficients pertaining to the attitudes of parents are analyzed, being the most important predictor, authoritarian attitude predicts cyber bullying behaviors performed by the student up to now (%5.4), behavior of cyber bullying

students (%4), cyber bullying others (%6), behavior of students' introduction of themselves as someone else (%2.9), and behavior of students' introduction of themselves as again someone else (%7.7).

Another concept of our study is internet addiction. Internet addiction shows an increase among adolescents in the recent years. Because of that reason, it is thought that the use of internet and the problems cause because of internet use must be studied (Kesici, Şahin, Özteke and Li, 2010). Internet addiction is a term defined as using the internet out-of- control and harmfully. But, there is no strict descriptions and rating scale for internet addiction yet (Beard, 2005 cited in, Öztürk, Odabaşoğlu, Eraslan, Genç and Kalyoncu, 2007). Internet addiction is defined as kind of technology addiction and a subset of behavioral addiction (Griffith, 1998). Technology addiction can be categorized under behavioral addictions like eating, gambling, and sex (Griffiths, 1999 cited in Günüç and Kayri, 2010, p. 221). Media addiction, television addiction, mobile phone addiction, computer and internet addiction can be categorized in technology addiction (Günüç, Kayri, p. 221). Internet addiction is a disorder which carries a risk in terms of causing social problems, and especially seen in the early ages in young people, is accompanied by other psychiatric disorders and sometimes leads up to new psychiatric disorders. Furthermore, it is confirmed by the researchers that internet addiction can be observed together with attention-deficit/hyperactivity disorder (ADHD), social phobia and depression, and the tendency to addiction in the family increases the risk of internet addiction (Öztürk *et al.,* 2007). Chatting in chat rooms, sharing experiences via messages and spending time among adolescents are increasing day by day. As a result of this some adolescents show the symptoms of internet addiction or pathological/unhealthy internet use, thus their daily lives are badly affected because of that reason (Ceyhan, 2008). Balcı and Gülnar (2009) conducted a study in order to measure the internet addiction levels of 953students in Selçuk University. The results of the study reveal that 23,2% of the participant students show symptoms of internet addiction. Further, it is pointed out in the study that the internet addicts spend more time online and rely on the internet more. In another study conducted by Tutgun, Deniz and Moon (2011) on comparison of Turkish and Korean pre-service teachers' loneliness and problematic internet use, it is stated that there is no difference between Turkish and Korean pre- service teachers in terms of problematic internet use, but Turkish male pre-service teachers use the internet

more problematic than the females. There is a positive but low correlation between problematic internet use and loneliness of both countries' pre-service teachers. In the study conducted by Büyükşahin-Çevik and Çelikkaleli (2010) in which the connection between internet addiction of adolescents and some other variables are analyzed, it is found that there is positively significant correlation between friend attachment and computer attachment. In addition, male t adolescents are found out to have higher internet addiction scores than the female adolescents. Furthermore, the study reveals that the friend attachment scores of males are higher than the females. Another finding of the study is that the internet addiction means of adolescents who define their parents' attitudes as 'indifferent' are significantly higher than those who defined their parents as 'protective', 'authoritarian', 'democratic'. In the study of Ayas, Çakır and Horzum'un (2011) about the internet and video game addiction of university students, it is revealed that internet and video game addictions of male students are higher than the female students. In the study conducted by Batıgün and Hasta (2010) on internet addiction, loneliness, and interpersonal relationship styles, it is pointed out that 14% of the participants can be defined as internet addicts and internet addicts use inhibitory style more than ones who are not addicts in interpersonal relationships, and their level of loneliness is higher. In addition internet addicts use ınternet for longer hours and mainly for communication purposes. In the study Ko *et.al* (2006) carried out, the behavioral differences of adolescents with internet addicted and substance abuse. It is revealed that the adolescents with internet addiction have higher possibility of experiencing substance abuse, and it is found that a search for novelty, being avoidance dimensions high and being award addiction low predict internet addiction in adolescents. Further is showed that the scores of avoiding harm in the internet addict group is the highest. In the study on adults Hardie and Tee (2007) conducted, it is stated that 40% of the participants are average internet users, 52% of them are problematic excessive users, 8% of them are reported as pathological internet users. It is found out that the excessive users and internet addicts, compared to average internet users, spend increasingly more time in the internet, get more neurotic and less extrovert, socially become more anxious and sensationally become lonelier and get more support from the social networks. It is revealed that the perception of getting support from only neuroticism and social networks is an important predictor of excessive internet use. Moreover, it

is revealed that excessive users are younger and less experienced in computer use compared to average and addicted internet users.

According to Twenge and Campbell (2010), internet is one of the best spreaders of narcissism epidemic. The fondness of narcissists to internet is due to their chance of presenting themselves as they desire via social network sites. Additionally, it is stated that these social network sites reinforce narcissism and the superficial sentimental relationships which narcissists are in need. The main characteristic of narcissism is a highly positive and exaggerated feeling about ego. Narcissists basically see themselves superior, special, rights-holder, and unique (Twenge and Campbell). Narcissism is mostly defined in clinical terms as a kind of pathology. Pathological narcissism is first defined in 1980 in DMS III as a personality disorder and it takes its final form in DMS VI (Atay, 2009, p. 184). According to DMS IV, narcissistic personality disorder is constant pattern which starts at early adolescence and emerges in under different situations and consists of feeling of superiority (in reality and in imagination), the need to be liked, and not being able to establish empathy. Narcissists have difficulty in conveying good relationships with others since they are fond of their own comfort, always expect something from others, and their aggressive behaviors (Köroğlu and Bayraktar, 2007). As is seen, pathological feelings of superiority, high self-esteem, and expecting that from others, lack of establishing empathy, and pretention, are the main characteristics of narcissism. Although narcissism is considered in clinic aspect as a pathologic, there are studies arguing that there is healthy narcissism, healthy strategies in modern world, too (Atay). According to Morf and Rhodewalt, narcissists are individuals with need of high success but low kinship (cited in Elliot and Thrash, 2001). They would like to have a narcissist relationship in order not to have intrinsic satisfaction as a result of communication with others, but for external benefit. One of the symptoms of modern narcissistic personality is decrease of social aims and concern toward others, instead increase of egoism. The most important feature of narcissism is steeply giving 'self' prominence and the decrease of the interest towards other people (Timuroğlu and İşcan, 2008). Geçtan (1996) assumes that modern narcissism causes metropolitan people lose their geography and perceive the places they live as interior places, lose the continuity of the time perception and become disconnected time frames, thus cause emotional lives lose their continuity. It is also stated that some of the depression cases are indica-

tors of secondary narcissism. According to Parman (1996), today's adolescents are more required to be sufficient to themselves compared to the past, yet they are prepared a world with very complex relationship networks and where the individuals would be excessively dependent on their environment. This paradox causes the increase of narcissistic pathologies.

Within the frame of these aforementioned, the main aim of the study is to find out to what extent do narcissistic personality traits, which can be today considered as an epidemic, become a predictor for internet addiction and cyber bullying.

Method

Population and Sample

The population of the study is consisted of the vocational high school students of Istanbul, Anatolian side (N=508, Male=331, Female= 169, Unstated=8). Table 1 shows the information about the samples selected by random cluster sampling method.

Data Collection Tools

Narcissistic Personality Inventory: NPI which was developed by Raskin and Hall in 1979 is the most frequently used tool for empirical studies. Raskin and Hall regarded DSM III behavioral standards as conceptual framework and they prepared a pool of items with 220 statements which they thought to reflect narcissism. By considering the related studies conducted and doing internal consistency analysis with the chosen items, they prepared a 54-item scale. After the item analysis and factor analysis, some statements were removed from the scale and a 40-question NPI was developed. The inventory is consists of these seven dimensions: superiority (NS), exploitativeness (NEXP), authority (NA), self-efficacy (NSE), self-esteem (NSF), entitlement (NE), exhibitionism (NEXH).(Raskin and Terry, 1988 cited in, Atay, 2009).

NPI-40 had been widely used until the 2000's. Dr. Ames *et al.* in Colombia University redesigned the NPI as a 16 item inventory in 2006(Ames, 2006 cited in Atay, 2009). The inventory was translated into Turkish by two academicians and then back translated into English by another academician in order to check its authenticity during the process of adapting the inventory into Turkish. The internal reliability and construct validity of the inventory are assured on two different samples. As a result of the piloting on university students, the items which

Table 1
The frequency and percentages of the demographic information of the samples

Groups		1	2	3	4	Total
Sex		Male	Female			
	η	331	169			500
	%	66,2	33,8			100
Type of high school		Imam Hatip High School	Industrial Vocational High school	Trade Vocational High School		
	η	204	202	102		508
	%	40,2	39,8	20,1		100
Age		15and under	16 or 17	18 and plus		
	η	150	260	76		486
	%	30,9	53,5	15,6		100
Grade		9th Grade	10th Grade	11th Grade	12t Grade	479
	η	136	64	176	103	100
	%					
Income		Low	Intermediate	Upper Intermediate		
	η	61	304	138		503
	%	12,1	60,4	27,4		100
Father's Education		Primary and less	Secondary School	High School	Higher Education	
	η	232	106	126	40	504
	%	46,0	21,0	25,0	7,9	100
Mother's Education		Primary and less	Secondary School	High School	Higher Education	
	η	340	75	65	16	496
	%	68,5	15,1	13,1	3,2	100
Are parents married?		Yes	No			-
	η	485	17			502
	%	96,6	3,4			100
Place of birth		Village	Town	City	Metropolis	
	η	17	187	51	243	499
	%	3,4	37,7	10,2	48,7	100
Number of Members in the family		3 and less	4	5	6 and more	
	η	40	173	183	108	504
	%	7,9	34,3	36,3	21,4	100

decrease the reliability of the scale were reorganized. The second group samples are the workers at national and international businesses. The results revealed that NPI holds the required reliability and validity scores (for the details see Atay, 2009).

Internet Addiction Scale: In this study the Internet Addiction Scale which was developed by Günüç and Kayri (2010) was used. The samples were 754 secondary school students and a 35-item five-point likert scale was used. In grading of scale, in order to obtain detailed results about addiction situations of the individuals "two-step cluster analysis method" was applied to the samples. Cronbach alpha (a) internal consistency coefficient of the scale was found .944. Exploratory factor analysis for structural validity and confirmatory factor analysis to test the

correctness of factor structure were used as methods. The scale is consisted of four sub-factors which were defined as 'deprivation' (IAD), 'controlling difficulty' (IACD), 'disorder in functionality' (IADF) and 'social isolation'(IASI). Total variance about the scale was found 47,463%.

Cyber bullying Scale (CBS): The scale was developed by Arıcak, Kınay and Tanrıkulu on 515 student samples at a state primary school and different secondary schools in Istanbul, Anatolian side. In the process of developing the scale first exploratory factor analysis was conducted for all items in terms of principal components analysis and when the components matrix was analyzed, it was revealed that all the items were categorized under one factor. That one factor describes the 50,58% of the

total variance. Factor loading of the items under that one factor ranges between .49 and .80. Thus, it was stated that the scale has one- factor structure. The Cronbach alpha coefficient for the whole scale is .95; test-retest reliability coefficient is found to be .70. These results show that the scale is a reliable assessment tool. The scale is consisted of 24 items and is answered on a quaternary scale (Never, Sometimes, Often, Always). The distribution of the scores is as follow: Never 1 point, Sometimes 2 points, Often 3 points, Always 4 points. The scores of the scale range between 24 and 96. The high score at the scale indicates cyber bullying. There are no reverse-scored items.

Procedure

The theoretical model constructed in this study is hypothesized that narcissistic personality scores are directly predictors of internet addiction, while the scores are indirectly predictors of cyber bullying. It is also thought that internet addiction is a predictor of cyber bullying behaviors. Internet addiction is partial intervening variable in this model. As is seen in figure 1, the model is constructed on the regression equation that the six observed variables can correctly be predictors of the other five observed variables. First the required standards were analyzed in order to ensure model fit while doing the path analysis. While the model fit is analyzed, RMSEA (the Root Mean Square Error of Approximation), NFI (Normed-Fit Index), TLI (Tucker-Lewis Index) and CFI (Comparative Fit Index) values were considered to be critical standards. The analysis revealed that the while RMSEA value is 0.93, NFI and CFI values are 0.99. Further the χ^2/sd is found to be 2. 43. Thus, it is approved that the model is constructed correctly in consideration of the related literature.

Results

Descriptive and Difference Statistics

When the mean values concerning the scales are examined, it could be mentioned that the level of cyber bullying expressed by the students is rather low ($\bar{x}$=27,39, maximum score: 96). When the mean values are divided by item numbers of item to make a comparison in Internet addiction, it is found out that the highest ratio is in deprivation ($\bar{x}$=2,43). As the trait of narcissistic personality showing the highest mean value, exploitativeness is encountered ($\bar{x}$=1,22).

Dimensions	n	$\bar{x}$	sd
Table 2 *Mean and Standard Deviation Values of Scales and Sub-dimensions*			
1-Cyber Bullying	491	27,39	7,20
2-Internet Addiction-Deprivation	508	26,75	9,19
3- Internet Addiction-Controlling Difficulty	508	18,45	7,03
4- Internet Addiction-Disorder in Functionality	508	12,55	5,63
5- Internet Addiction-Social Isolation	508	11,29	4,82
6- Narcissistic Personality-Entitlement	429	,50	,63
7- Narcissistic Personality-Self-Efficacy	418	1,14	,91
8- Narcissistic Personality-Authority	399	1,03	,73
9- Narcissistic Personality-Exploitativeness	355	1,22	,91
10- Narcissistic Personality-Exhibitionism	406	1,14	1,09
11- Narcissistic Personality-Superiority	411	,94	,94

Difference Statistics

The results of independence group t-test conducted to determine whether the scores of scales and sub-dimensions differentiate in terms of sex variable firstly reveal that males cyberbully others more than females do (t= 4,81, p < .01). In the sub-dimensions of Internet Addiction-Controlling Difficulty (t= 2,47, p < .01), Internet Addiction-Disorder in Functionality (t=3,21, p < .01), and Internet Addiction-Social Isolation (t= 4,14, p < .01), there is a significant difference in favor of males. It is determined that in the sub-dimensions of Entitlement (t=2,23, p < .01) and Superiority (t=2,66, p < .01) there is a significant difference in favor of males, furthermore, in the sub-dimension Exploitativeness Superiority (t=-2,19, p <.01), there is a significant difference in favor of females; hence it could be stressed that in the aforementioned three sub-dimensions concerning the traits of narcissistic personality there is a differentiation with respect to sex variable.

Path Analysis

As is seen in Figure 1, as a trait of narcissistic personality "entitlement", significantly predicts "deprivation" (β=.095, p=.042) and controlling difficulty (β=.089, p=.016) in internet addiction, besides, the trait of narcissistic personality, "superiority" predicts significantly "social isolation"

Table 3
The Results of Independence Group t-test Conducted to Determine whether the Scores of Scales and Sub-Dimensions Differentiate in terms of Sex Variable

Sub-Dimension	Groups	n	x̄	sd	x̄	t Test	
						df	t
1-CBI	Male	318	28,53	8,32	,46	482	4,81*
	Female	166	25,27	3,70	,28		
2- Internet Addiction-Deprivation	Male	331	27,1480	9,11	,50	498	1,16
	Female	169	26,1361	9,42	,72		
3- Internet Addiction-Controlling Difficulty	Male	331	19,0302	7,23	,39	498	2,47*
	Female	169	17,3964	6,48	,49		
4- Internet Addiction-Disorder in Functionality	Male	331	13,1662	5,94	,32	498	3,21*
	Female	169	11,4675	4,84	,37		
5- Internet Addiction-Social Isolation	Male	331	11,9637	5,20	,28	498	4,14*
	Female	169	10,0947	3,78	,29		
6- Narcissistic Personality-Entitlement	Male	280	,5536	,65	,03	420	2,23*
	Female	142	,4085	,58	,04		
7- Narcissistic Personality-Self-Efficacy	Male	278	1,1799	,92	,05	410	,93
	Female	134	1,0896	,88	,07		
8- Narcissistic Personality-Authority	Male	275	1,0255	,70	,04	392	,00
	Female	119	1,0252	,78	,07		
9- Narcissistic Personality-Exploitativeness	Male	239	1,1423	,91	,05	348	-2,19*
	Female	111	1,3694	,87	,08		
10- Narcissistic Personality-Exhibitionism	Male	268	1,1381	1,08	,06	399	,15
	Female	133	1,1203	1,10	,09		
11- Narcissistic Personality-Superiority	Male	283	1,0283	,97	,05	404	2,66*
	Female	123	,7561	,86	,07		

(β=.108, p=.014) in internet addiction. In the With the interpretation of non-standard regression values *(B)*, one point increase in the score of narcissistic "entitlement" results in 1.381 point increase in the score of internet addiction "deprivation" and .98 point increase in the score of "controlling difficulty". Likewise, one point increase in the scores of narcissistic "superiority" causes .549 increase in the scores of internet addiction "social isolation". It is found out that the scores of narcissistic personality "exploitativeness" negatively predict the scores of internet addiction "controlling difficulty" (β=-.094, p=.034).

When the effect of internet addiction scores on each other is examined, it is seen that "deprivation" has a significant effect on "controlling difficulty" (β=.633, p=.001) and "social isolation" (β=.116, p=.011), in addition, "controlling difficulty" has a significant effect on "social isolation" (β=.555, p=.001) and "disorder in functionality"

(β=.465, p=.001), and "social isolation" has also a significant effect on "disorder in functionality" (β=.403, p=.001).

It has been revealed that the only variable significantly predicting "cyber bullying" behaviors in the sub-dimensions of internet addiction is "social isolation" (β=.357, p=.001). When this result is interpreted in terms of *B* value, it could be explicated that one point increase in the scores of "social isolation" result in .535 point increase in the scores of "cyber bullying".

As is depicted in Table 4, when the indirect/mediated effect of sub-dimensions belonging to Narcissistic Personality Inventory on "cyber bullying" is analysed, it is determined that the scores of "entitlement" have an effect on "cyber bullying" at .663 level, the scores of "self-efficacy" has an effect on "cyber bullying" at .171 level, the scores of "authority" have an effect on "cyber bullying" at .210 level, the scores of "exploitative-
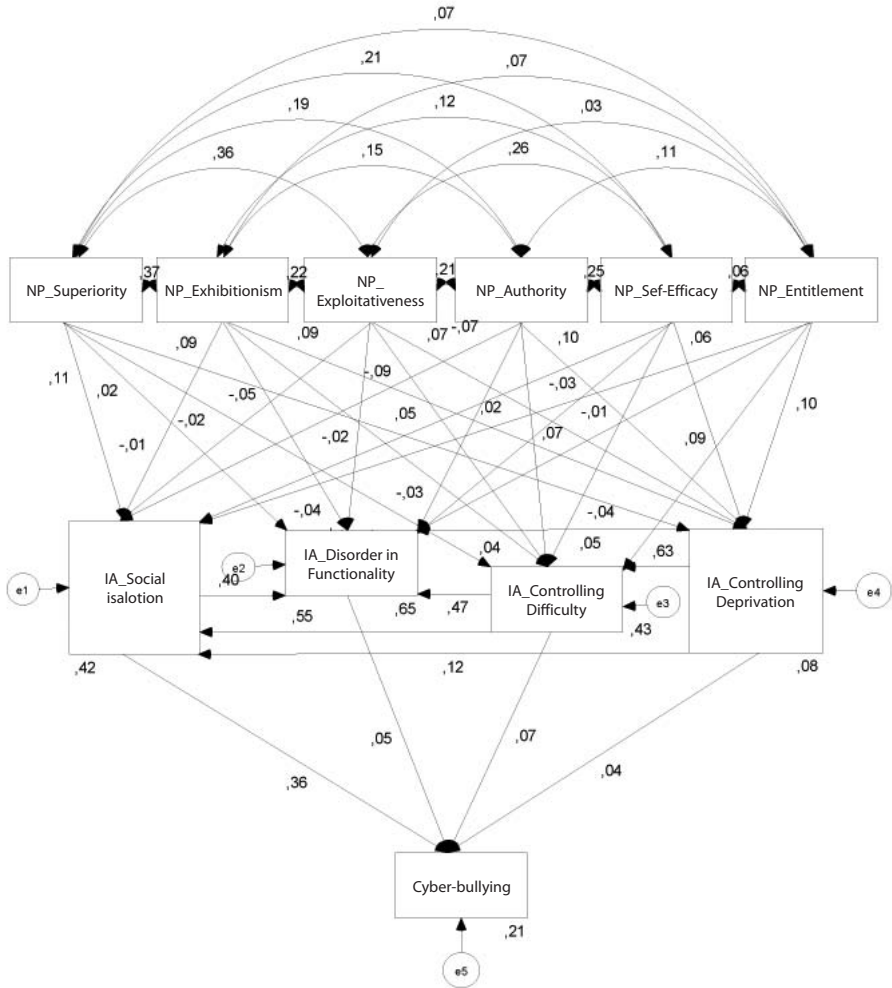
Figure 1: *Path Analysis for the Model*

ness" have an effect on "cyber bullying" at -.241 level, the scores of "superiority" have an effect on "cyber bullying" at .458 level, and the scores of "exhibitionism" have an effect on "cyber bullying" at .220 level. The regression wieghts are non-standard *(B)* coefficients, in addition to this, one unit increase in the scores of narcissism accounts for X unit increase in the scores of "cyber bullying". Consequently, this model has importance with regards to showing that narcissism has an indirect/mediated effect on cyber bullying.

Discussion

According to the results of the research, as a trait of narcissistic personality "entitlement" predicts "deprivation" in internet addiction and "controlling difficulty" significantly, moreover, the trait of narcissistic "superiority" significantly predicts "social isolation" in internet addiction. Providing that it is interpreted through non-standard regression values, one point increase in the score of narcissistic "entitlement" results in 1.381 point increase in the score of internet addiction "deprivation" and .98 point increase in the score of "controlling difficulty". Similarly, one point increase in the scores of narcissistic "superiority" leads to .549 point in the scores of internet addiction "social isolation". It is pointed out that the scores of narcis-

Table 4
Regression Weights of Variables in the Model

			B	SH	β	Critical Ratio	p
i_deprivation	<---	n_superiority	,857	,536	,088	1,598	,110
i_deprivation	<---	n_exhibitionism	,756	,439	,090	1,722	,085
i_deprivation	<---	n_exploitativeness	,666	,574	,066	1,161	,246
i_deprivation	<---	n_authority	1,211	,644	,096	1,879	,060
i_deprivation	<---	n_self-efficacy	,568	,509	,056	1,117	,264
i_deprivation	**<---**	**n_entitlement**	**1,381**	**,679**	,095	**2,034**	**,042**
i_cont_difficulty	**<---**	**i_deprivation**	**,484**	**,027**	,633	**17,975**	**,001**
i_cont_difficulty	<---	n_superiority	-,132	,322	-,018	-,409	,682
i_cont_difficulty	<---	n_exhibitionism	,283	,264	,044	1,071	,284
i_cont_difficulty	**<---**	**n_exploitativeness**	**-,731**	**,344**	-,094	**-2,125**	**,034**
i_cont_difficulty	<---	n_authority	,666	,388	,069	1,718	,086
i_cont_difficulty	<---	n_self-efficacy	-,274	,305	-,036	-,899	,369
i_cont_difficulty	**<---**	**n_entitlement**	**,980**	**,408**	,089	**2,398**	**,016**
i_social isolation	**<---**	**n_superiority**	**,549**	**,223**	,108	**2,465**	**,014**
i_social isolation	**<---**	**i_deprivation**	**,061**	**,024**	,116	**2,546**	**,011**
i_social isolation	**<---**	**i_cont_difficulty**	**,381**	**,031**	,555	**12,281**	**,001**
i_social isolation	<---	n_exhibitionism	-,030	,183	-,007	-,164	,870
i_social isolation	<---	n_exploitativeness	-,266	,241	-,050	-1,104	,270
i_social isolation	<---	n_authority	-,435	,270	-,066	-1,614	,106
i_social isolation	<---	n_self-efficacy	,259	,211	,049	1,226	,220
i_social isolation	<---	n_entitlement	,118	,285	,016	,414	,679
i_disorder in function	<---	i_deprivation	,030	,022	,049	1,379	,168
i_disorder in function	**<---**	**i_cont_difficulty**	**,373**	**,032**	,465	**11,671**	**,001**
i_disorder in function	<---	n_superiority	,113	,204	,019	,553	,580
i_disorder in function	<---	n_exhibitionism	-,220	,166	-,043	-1,330	,183
i_disorder in function	<---	n_exploitativeness	-,113	,218	-,018	-,516	,606
i_disorder in function	<---	n_authority	-,204	,245	-,026	-,834	,404
i_disorder in function	<---	n_self-efficacy	-,182	,192	-,029	-,951	,342
i_disorder in function	<---	n_entitlement	-,081	,258	-,009	-,316	,752
i_disorder in function	**<---**	**i_social isolation**	**,471**	**,040**	,403	**11,660**	**,001**
z_total	**<---**	**i_social isolation**	**,535**	**,088**	,357	**6,068**	**,001**
z_total	<---	i_disorder in function	,058	,087	,045	,668	,504
z_total	<---	i_cont_difficulty	,075	,069	,073	1,091	,275
z_total	<---	i_deprivation	,028	,041	,035	,670	,503

*$p < .01$

sistic "exploitativeness" negatively predicts the scores of internet addiction "controlling difficulty". A study carried out by Dilmaç (2009) concerning the determination of the correlation between cyber bullying and personality traits.

Nonbullying victims show more resoluteness trait than victims and bully-victims. Resoluteness is the only variable that predicts bullying. When the values regarding resoluteness increase, the ratio of being exposed to cyber bullying decreases. The study of Dilmaç has parallel characteristics with the current study in the context of determining the relation between cyber bullying and personal traits.

Similarly, Rahey (2007) stresses that while resoluteness among friends increases, pyscical victimization decreases. Besides, another similar finding of this study points out that resoluteness predicts the possibility of a person's being involved in cyber bullying in the future. Hence, it is stated that resoluteness is a negative pychological characteristic concerning cyber bullying. The findings of the aforementioned studies support the findings of the current research indirectly. This could be interpreted in the direction that there is a relation between cyber bullying and personality traits. According to Crothers and Kolbert (2008), children, frequently

bullying others, generally are shown little affection by their families and brought up through a strict dicipline understanding based on pyscial violence. Deep interests of adolescents and people with narcissistic personality trait in internet bring about the risk of addiction and bullying behaviors. In the research carried out by Ang ve Goh (2010) with 396 adolescents participants in Singapore, it is determined that teenegar males and females with low emotional and cognitive empathy have higher scores of cyber bullying. In the literature, it is put forward that there is a substantial relation between aggression and cyber bullying (Beran and Li, 2005; Chisholm, 2006; David-Ferdon and Hertz, 2007; Dilmaç, 2009; Harman, Hansen, Cochran and Lindsey, 2005; Willard, 2007). Furthermore, it is stated that there is a positive correlation between being exposed to cyber bullying and cyber bullying others (Arıcak, 2009; Baker and Kavşut, 2007; Şahin et al., 2010), additionally, students being exposed to bullying behaviors in different aspects cyber bully others (Şahin et al.). From Stover's point of view (2006), adolescents use social communication networks such as Facebook, Myspace and Xanga to gain their social status by acting opposed to people with higher social status and speaking ill of others or ostracizing them. Adolescents have been trying to obtain interest and sympathy that are not avaible in their dail life by cyber bullying others. A number of reseaches (Bauman, 2007; Brown, Jackson and Wanda, 2006; Patchin and Hinduja, 2006) show that adolescents who experience bullying in virtual environment continue it in their environmet. In the finding of a research conducted by Çalık et al (2009), it is found that selfish or altruism helping behaviors predict bullying status. It is also seen that whereas selfish help increases the tendency to become a bully, altruism help decreases the tendency to become a bully. The finding of the research support the findings of the current research indirectly.

Internet, which gives considerably positive contribution to lives of adolescents, is also undeniable fact thaat the use of interest is a necessity of this era. However, in all societies internet addiction and unhealthy/problematic internet use is a signifacant threat for some as it is the same for most adults (Ceyhan, 2008). It has been determined that students with weekly high internet use frequency display more cyber bullying behaviors. Many researchers (Erdur-Baker and Kavşut, 2007; Hinduja and Patchin, 2008; Li, 2007b; Ybarra, 2004) put forward that the relation between the use frequency of information-communication technologies and cyber bullying. Thanks to internet, it is possible

to get in touch with friends and family members. However, it is also possible that a person may meet and interact with others unfavorably as it is in other social surroundings (Ybarra, Diener-West and Leaf, 2007). The research including various mediating variables such as the risky use of internet on the relation between the use frequency of information-communication technologies by people and their cyber bullying would make this relation more comprehensible. It has been determined that the only variable predicting significantly "cyber bullying" behaviors in the sub-dimensions of internet addiction is "social isolation". When the result is interpreted with regards to *B* value, one point increase in the scores of "social isolation" could be interpreted in the way that it leads to .535 point increase in the scores of "cyber bullying". In a study of Xiuqin et al (2010) examining personality traits of male adolescents and internet addiction, it has been confirmed that with some mental symptoms personal traits such as introversion and psychoticism concur with internet addiction. Adolescents with internet addiction have regarded their parents' attitudes as excessively intrusive, punisher and apathetic. Through these findings, it has been figured out that parenting styles and family functions are vital factors that contribute to internet addiction. Though internet addiction is not a psychiatric disorder as defined by the DSM IV, clinicians compare internet addiction with pathological gambling, which is the closest behavioral dependency (Öztürk, Odabaşoğlu, Eraslan, Genç and Kalyoncu, 2007). When the effect of scores of internet addiction on each other is analysed, it is revealed that "deprevation" has a significant effect on "controlling difficulty" and "social isolation", "controlling difficulty" has a significant effect on "social isolation" and disorder in functionality, besides there is a significant effect of "social isolation" on "disorder in functionality". Relationship between loneliness and virtual communication is researched on a total of 717 undergraduate students studying at universities in the provinces of Erzurum, Erzincan and Ankara (Özen, 2009). Furthermore, it is concluded that internet is an instrument to share loneliness, nonetheless, paradoxically internet, by leading individuals into the addiction, drives adolescents to loneliness.

In the research by Walrave and Heirman (2011) 1318 Belgian adolescents are questioned about their involvement in cyberbullying and it is found out that past involvement in cyberbullying and engaging in online risk behaviour increase the likelihood of victimisation; non-rejection of cyberbullying and online identity experimentation augment the

likelihood of perpetration. In a study conducted by Wan and Chiou (2006), it is emphasized that internet addicted persons seek a kind of relief from their dissatisfaction through the use of internet (cited in., Kesici et al., 2010).

When the indirect/mediated effect of sub-dimensions belonging to Narcissistic Personality Inventory on "cyber bullying" is analysed, it is determined that the scores of "entitlement" have an effect on "cyber bullying" at .663 level, the scores of "self-efficacy" has an effect on "cyber bullying" at .171 level, the scores of "authority" have an effect on "cyber bullying" at .210 level, the scores of "exploitativeness" have an effect on "cyber bullying" at -.241 level, the scores of "superiority" have an effect on "cyber bullying" at .458 level, and the scores of "exhibitionism" have an effect on "cyber bullying" at .220 level. The regression wieghts are non-standard coefficients, in addition to this, one unit increase in the scores of narcissism accounts for X unit increase in the scores of "cyber bullying". This model has importance with regards to showing that narcissism has an indirect/mediated effect on cyber bullying.

According to Kowalski et al (2008), the reasons of cyber bullying include exerting control over others, getting pleasure from aggresive behaviors, gaining prestige among friends, expressing aggressive imaginations in virtual environment, trying to take revenge for something else the victim does to them, desire to look like strict and cold blooded, low possiblity of being arrested, an opportunity to hide their identities, no need to face-to-face communication with victims (cited in., Eroğlu, 2011). The research finding reinforces the tendency that persons with narcissist personality traits have an effect on persons though indirectly through cyber bullying in the current research finding. Agression, poor self-control and narcissistic personality traits may predispose some persons to become addicted to online games (Kim, Nankoong, Ku et al., 2008 as cited in Xiuqin et al., 2010). It is stressed that persons, who experience cyberbullying, have low self-esteem (Patchin and Hinduja, 2010). Moreover, in persons exposed to cyber bullying feelings of anger, depression, anxiety are seen the common ones (Ayas, 2011), which may lead to a number of destrcutive pyschological health problems including suicide. (Arıcak et al., 2008). In the light of the related literature and the results of the current research, it is possible to suggest analysing cyber bullying, internet addiction and narcissistic personality traits regarding these variables in a detailed manner.

References/Kaynakça

Anderson, T., & Sturm, B. (2007). Cyberbullying from playground to computer. *Young Adult Library Services*, *Winter*, 24-27.

Ang, R. P., & Goh, D. H. (2010). Cyberbullying among adolescents: The role of affective and cognitive empathy, and gender. *Child Psychiatry & Human Development*, *41* (4), 387-397.

Arıcak, O. T. (2009). Psychiatric symptomatology as a predictor of cyberbullying among university students. *Eurasian Journal of Educational Research*, *34*, 167-184.

Arıcak, O. T., Kınay, H. ve Tanrıkulu, T. (2011, Ekim). *Siber zorbalık ölçeğinin ilk psikometrik bulguları*. XI. Ulusal Psikolojik Danışma ve Rehberlik Kongresinde sunulan sözel bildiri, İzmir.

Arıcak, T., Siyahhan, S., Uzunhasanoglu, A. Sarıbeyoglu, S., Cıplak, S., Yılmaz, N. et al. (2008). Cyberbullying among Turkish adolescents. *CyberPsychology & Behavior*, *11* (3), 253-261.

Atay, S. (2009). Narsistik Kişilik Envanteri'nin Türkçe'ye standardizasyonu. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, *11* (1), 181-196.

Ayas, T. (2011, Ekim). *Lise öğrencilerinin sanal zorba ve kurban olma yaygınlığı*. 11. Ulusal Psikolojik Danışma ve Rehberlik Kongresinde sunulan bildiri, Ege Üniversitesi Eğitim Fakültesi, İzmir, Türkiye.

Ayas, T., & Horzum, M. B. (2011). Exploring the teachers' cyber bullying perception in terms of various variables. *International Online Journal of Educational Sciences*, *3* (2), 619-640.

Ayas, T., Çakır, Ö. ve Horzum. M. B. (2011). Ergenler için bilgisayar bağımlılığı ölçeği. *Kastamonu Eğitim Dergisi, 19* (2), 439-448.

Baker, Ö. E. ve Kavşut, F. (2007). Akran zorbalığının yeni yüzü: Siber zorbalık. *Eurasian Journal of Educational Research, 27*, 31-42.

Balcı, Ş. ve Gülnar, B. (2009). Üniversite öğrencileri arasında internet bağımlılığı ve internet bağımlılarının profili. *Selçuk İletişim*, *6* (1), 5-22.

Batıgün, A. D. ve Hasta, D. (2010). İnternet bağımlılığı: Yalnızlık ve kişilerarası ilişki tarzları açısından bir değerlendirme. *Anadolu Psikiyatri Dergisi*, *11*, 213-219.

Bauman, S. (2007, November). *Cyberbullying: A virtual menace*. Paper presented at the National Coalition Against Bullying National Conference, Melbourne.

Beale, A., & Hall, K. R. (2007). Cyberbullying: What school administrators (and parents) can do. *Clearing House, 81*(1), 8–12.

Belsey, B. (2008). *Cyberbullying*. Retrieved August 03, 2008, from http://www.cyberbullying.org.

Beran, T., & Li, Q. (2005). Cyber-harassment: A study of a new method for an old behavior. *Journal of Educational Computing Research*, *32* (3), 265-277.

Berson, I. R., Berson, M. J., & Ferron, J. M. (2002). Emerging risks of violence in the digital age: Lessons for educators from online study of adolescent girls in the United States. *Journal of School Violence*, *1* (2), 51-71.

Brown, K., Jackson, M., & Wanda, C. (2006). Cyber-bullying: Developing a policy to direct responses that are equitable and effective in addressing this special form of bullying. *Canadian Journal of Educational Administration and Policy, 57*. Retrieved April 11, 2011 from http://umanitoba.ca/publications/cjeap/articles/brown_jackson_cassidy.html.

Büyükşahin-Çevik, G. ve Çelikkaleli, Ö. (2010). Ergenlerin arkadaş bağlılığı ve internet bağımlılığının cinsiyet, ebeveyn tutumu ve anne-baba eğitim düzeylerine göre incelenmesi.

Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, *19* (3), 225-240.

Ceyhan, E. (2008). Ergen ruh sağlığı açısından bir risk faktörü: İnternet bağımlılığı. *Çocuk ve Gençlik Ruh Sağlığı Dergisi*, *15* (2), 109-116.

Chibbaro, J. S. (2007). School counselors and the cyberbully: Interventions and implications. *Professional School Counseling*, *11* (1), 65-68.

Chisholm, J. F. (2006). Cyberspace violence against girls and adolescent females. *Annals of the New York Academy of Sciences*, *1087* (1), 74-89.

Connolly, I and O'Moore, M. (2003) Personality and family relations of children who bully. *Personality and Individual Differences*, *35*, 559-567.

Crothers, L. M., & Kolbert J. B. (2008). Tackling a problematic behavior management issue: Teachers' intervention in childhood bullying problems. *Intervention in School and Clinic*, *43* (3), 132-139.

Çalık, T., Özbay, Y., Özer,A., Kurt, T. ve Kandemir, M. (2009). İlköğretim okulu öğrencilerinin zorbalık statülerinin okul iklimi, prosoyal davranışlar, temel ihtiyaçlar ve cinsiyet değişkenlerine göre incelenmesi. *Kuram ve Uygulamada Eğitim Yönetimi, 15,* (60), 555-576.

Dake, J. A., Price, J. H., Telljohann, S. K., & Funk, J. B. (2003). Teacher perceptions and practices regarding school bullying prevention. *Journal of School Health*, *73*(9), 347-355.

David-Ferdon, C., & Hertz, M. F. (2007). Electronic media, violence, and adolescents: An emerging public health problem. *Journal of Adolescent Health*, *41*, 1-5.

Dilmaç, B. (2009). Psychological needs as a predictor of cyberbullying: A preliminary report on college students. *Educational Sciences: Theory & Practice, 9,* 1291-1325.

Dilmaç, B., & Aydoğan, D. (2010). Values as a predictor of cyber-bullying among secondary school students. *International Journal of Human and Social Sciences, 5* (3), 185-188.

Elliot, A. J., & Thrash, T. M. (2001). Narcissism and motivation. *Psychological Inquiry*, *12*, 216-219.

Erdur-Baker, Ö. ve Kavşut, F. (2007). Akran zorbalığının yeni yüzü: Siber zorbalık. *Eğitim Araştırmaları*, *27*, 31-42.

Eroğlu, Y. (2011). *Koşullu öz-değer, riskle internet davranışları ve siber zorbalık/mağduriyet arasındaki ilişkinin incelenmese.* Yayımlanmamış yüksek lisans tezi, Sakarya Üniversitesi Eğitim Bilimleri Enstitüsü, Sakarya.

Finkelhor, D., Mitchell, K., & Wolak, J. (2008). *Highlights of the youth ınternet safety survey. Juvenile Justice Fact Sheet-FS200104.* Washington, DC: US Government P rinting Off ice 2001. Retrieved August 3, 2008, from http://www.unh.edu/ccrc/pdf/jvq/CV46.pdf.

Geçtan, E. (1996). Günümüzün sekonder narsisizmi. *Psikiyatri Sürekli Yayınları*, *1* (3), 361-366.

Griffiths, M. (1998). Internet addiction: Does it really exist. In J. Gackenbach (Ed.), *Psychology and the Internet: Intrapersonal, interpersonal, and transpersonal implication* (pp. 61-75). New York: Academic Press.

Günüç, S. ve Kayri, M. (2010). Türkiye'de internet bağımlılık profili ve İnternet Bağımlılık Ölçeğinin geliştirilmesi: Geçerlik-güvenirlik çalışması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, *39*, 220-232.

Hardie, E., & Tee, M. (2007). Excessive internet use: The role of personality, loneliness and social support networks in internet addiction. *Australian Journal of Emerging Technologies and Society*, *5* (1), 34-47.

Harman, J. P., Hansen, C. E., Cochran, M. E., & Lindsey, C. R. (2005). Liar, liar: Internet faking but not frequency of use aff ects social skills, self-esteem, social anxiety,and aggression. *CyberPsychology & Behavior*, *8* (1), 1-6.

Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to off ending and victimization. *Deviant Behavio*, *29* (2), 129-156.

Kesici, Ş., Şahin, İ., ve Özteke, H. İ. & Li, S. M. (2010, April). *College students' internet addiction and use of internet functions in Turkey and Taiwan: A comparative study.* Paper presented at 10. International Educational Technology Conference, İstanbul.

Ko, C. H., Yen, J. Y., Chen, C. C., Chen, S. H., Wu, K., & Yen, C. F. (2006). Tridimensional personality of adolescents with Internet addiction and substance use experience. *The Canadian Journal of Psychiatry*, *51* (14), 887-894.

Kowalski, R. M., & Limber, S. (2007). Electronic bullying among middle school students. *Journal of Adolescent Health, 41* (Supply), 22-30.

Köroğlu, E. ve Bayraktar, S. (2007). *Kişilik bozuklukları*. Ankara: HYB Yayınları.

Li, Q. (2006). Cyberbullying in schools: A research of gender differences. *School Psychology International*, *27* (2), 157-170.

Li, Q. (2007a). Bullying in the new playground: Research into cyberbullying and cyber victimisation. *Australasian Journal of Educational Technology*, *23* (4), 435-454.

Li, Q. (2007b). New bottle but old wine: A research of cyberbullying in schools. *Computers in Human Behavior*, *23* (4), 1777-1791.

Mason, K. L. (2008). Cyberbullying: A preliminary assessment for school personnel. *Psychology in the Schools, 45* (4), 323-348.

Özen, Ü. (2009). Yalnızlık olgusu ve sanal sohbetin yalnızlığın paylaşımına etkisi: Üniversite öğrencileri üzerinde bir araştırma. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, *23* (4), 15-25.

Öztürk, Ö., Odabaşıoğlu, G., Eraslan, D., Genç, Y. ve Kalyoncu, Ö. A. (2007). İnternet bağımlılığı: Kliniği ve tedavisi. *Bağımlılık Dergisi*, *8* (1), 36-41.

Parman, T. (1996). Narsisistik süreç olarak ergenlik: bir giriş yazısı. *Ege Psikiyatri Sürekli Yayınları*, *1* (3), 431-436.

Patchin, J. W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice*, *4* (2), 148-169.

Patchin, J. W., & Hinduja, S. (2010). Cyberbullying and self-esteem. *Journal of School Health*, *80* (12), 614-621.

Piksin, M. (2002). School bullying: Definition, types, related factors, and strategies to prevent bullying problems. *Educational Sciences: Theory & Practice*, *2*, 555-562.

Rahey, L. A. (2007). *The direct and moderating eff ect of bullying on adolescent health.* Queen's University Kingston, Ontario, Canada. Retrieved August 13, 2008 from http://qspace.library.queensu.ca/handle/1974/447.

Scaglione, J., & Scaglione, A. R. (2006). *Bully-proofing children: A practical, hands- on guide to stop bullying*. Lanham, MD: Rowman & Littlefield Education..

Shariff, S. (2005). Cyber-dilemmas in the new millennium: School obligations to provide student safety in a virtual school environment. *McGill Journal of Education*, 467-487.

Stover, D. (2006). Treating cyberbullying as a school violence issue. *Education Digest*, *72* (4), 40-42.

Strom, P. S., & Strom, R. D. (2005). Cyberbullying by adolescents: A Preliminary assessment. *Th e Educational Forum*, *70* (1), 21-36.

Şahin, M., Sarı, S. V., Özer, Ö. ve Er, S. H. (2010). Lise öğrencilerinin siber zorba davranışlarda bulunma ve maruz kalma durumlarına ilişkin görüşleri. *Süleyman Demirel Üniversitesi Fen Edebiyat Fakültesi Sosyal Bilimler Dergisi*, *21*, 257-270.

Timuroğlu, K. ve İşcan, Ö. F. (2008). İşyerinde narsisizm ve iş tatmini ilişkisi. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, *22* (2), 239-264.

Tutgun, A., Deniz, L., & Moon, M. (2011). A comparative study of problematic internet use and loneliness among Turkish and Korean prospective teachers. *TOJET: The Turkish Online Journal of Educational* Technology, *10* (4), 14-30.

Twenge, J. M. ve Campbell, W. K. (2010). *Asrın vebası: Narsisizm illeti* (çev. Ö. Korkmaz). İstanbul: Kaknüs.

Valkenburg, P. M. & Soeters, K. E. (2001). Children's positive and negative experiences with the internet. *Communication Research*, *28*, s.652-675.

Walrave, M., & Heirman, W. (2011). Cyberbullying: Predicting victimisation and perpetration. *Children. & Society*, *25* (1), 59-72.

Willard, N. (2007). *Educator's guide to cyberbullying and cyberthreats 2007*. Retrieved August 3, 2008, from http://www.cyberbully.org/cyberbully/docs/cbcteducator.

Xiuqin, H., Huimin, Z., Mengchen, L., Jinan, W, Ying, Z., & Ran, T. (2010). Mental health, personality, and parental rearing styles of adolescents with Internet addiction disorder. *Cyberpsychology, Behavior, and Social Networking*, *13* (4), 401-416.

Ybarra, M. L. (2004). Linkages between depressive symptomatology and internet harassment among young regular internet users. *CyberPsychology & Behavior*, *7*, 247-57.

Ybarra, M. L., Diener-West, M., & Leaf, P. J. (2007). Examining the overlap in internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health*, *41*, 42-50.