

Purposes, Causes and Consequences of Excessive Internet Use among Turkish Adolescents

Filiz AKAR*

Suggested Citation:

Akar, F. (2015). Purposes, causes and consequences of excessive internet use among Turkish adolescents. *Eurasian Journal of Educational Research*, 60, 35-56
Doi: 10.14689/ejer.2015.60.3

Abstract

Problem Statement: Excessive internet use, particularly problematic and negative consequences of internet use, is rapidly increasing among children and adolescents throughout the World and in Turkey. While the internet provides potential advantages for users in terms of the academic support, sharing ideas & feelings, and freedom of expression, it also has some adverse effects such as wasting time, exhibiting antisocial behaviors, and causing relationship problems. Excessive use could also be manifested as absenteeism, academic failure and problems in interpersonal relationships with other students. In this context, determining the motivations behind the excessive use of the internet could be beneficial in an educational setting.

Purpose of the Study: The purpose of this study is to determine the aims, causes and consequences of excessive internet use among adolescents and examine the aims of excessive internet use in terms of gender and grade level.

Method: In this study, a quantitative method was used as the research design. As the research aims require in-depth opinions, data triangulation was also used. The study group consisted of 91 high school students who use the internet excessively. The study group were selected by screening 1,587 students living in the Istanbul province during the 2012-2013 Academic year who were internet users for "41 hours or more a week." Data was collected by the Internet Use Purposes Scale (IPUS) and a semi-structured questionnaire.

* Dr., Bozok University, Faculty of Education, Department of Educational Sciences, E-mail: cologne97@yahoo.com

Findings: The purposes of excessive internet use among these adolescents were socialization, learning and general culture, meeting psychological needs, entertainment, and education. There are a significant differences between the opinions of the adolescents in the entertainment and learning & general culture sub-dimensions in terms of gender and in the psychological needs sub-dimension in terms of grade level. Causes of excessive internet use are grouped under the main categories of learning and development needs, socialization need, psychological reasons and seeking entertainment. Consequences of excessive internet use fall under the main categories of social, physical health, psychological and mental problems.

Conclusions and Recommendations: In view of the purposes, causes and consequences of excessive internet use in adolescents, the need to socialize and learn are emphasized in terms of purposes and causes. Boys use internet excessively more often than girls for the aims of entertainment and information gathering. Psychological needs are prevalent in 9 and 12 grades; excessive use causes multifaceted adverse effects on adolescents, including social, physical, academic, psychological and mental problems. In this context, meaning of "knowledge" and "socialization" for the adolescents should be researched by the academia. Programmes should be designed to meet the students' learning and psycho-social developmental needs at schools and in real life. Artistic, sports and cultural activities must be increased in real life and school settings.

Keywords: Internet addiction, adolescent, guidance and psychological counseling, school psychology

Introduction

The young generation now uses electronic tools more than ever to communicate with their peers (Baso, 2008). Just because these cyber children are equipped with technology does not necessarily mean that they can use it with equal maturity (Myers, McCaw & Hemphill, 2011). While the internet provides potential advantages for educational institutions in terms of the students' access to knowledge and information previously inaccessible, it also proves to have some adverse effects such as wasting time or antisocial behavior (Hazelhurst, Johnson & Sanders, 2011). This conflict regarding internet use is described as "two sides of the same coin" (Ling, Ramadass, Altaher & Arjuman, 2011).

Particularly, excessive internet use during adolescence is gradually increasing. Excessive use brings with it unfavorable academic, social and psychological consequences as well as the risk of internet addiction. Favorable aspects of the internet can be described as a "meeting point of people across the globe having the same understanding, freedom of expression, comfort to ease frustrations" (Ling et al. 2011), ability to communicate with people sharing same interests, abilities and values

(Barg & McKenna, 2014), increased communication, information sharing, and academic advantages (Balta & Horzum, 2008). On the other hand, excessive internet use leads to psychological, social and academic problems (Young, 1998, as cited by Wanajak, 2011, iii).

Children and adolescents are the most frequent and widespread users of technology. Also, they also constitute the largest group exposed to the effects and risks as they have yet to complete their development process (Watson, 2005; Brey, 2006; Xiong, 2011; Karaman, 2013). A study has revealed that 29% of internet users are at risk of developing addictive internet behaviors (Ling et al. 2011). Another study conducted on an adolescent group of 11–16 year olds in 25 European countries has found that 25% of the adolescents participating from Turkey show most of the excessive internet use symptoms and that 2% of the Turkish participants are among the five countries that show all symptoms (Smahel, Helsper, Green, Kalmus, Blinka & Olaksson, 2012; Lobe, Livingstone, Olafstone & Vodeb, 2012).

The literature describes use of internet with negative consequences as “pathological internet use” (Young, 1998; Watson, 2005), “problematic internet use” (Tam & Walter, 2013), “Internet use disorder” (Hinich, 2011), etc. However, the extent of adverse effects of internet use on adolescents depends on the time spent on internet, the purpose and intention, and excessive and uncontrolled use. Therefore, this study prefers to use the term “excessive internet use.”

“Excessive internet use” is described as “obsessive, uncontrolled, excessive and problematic behavior arising from use of digital technologies” (Lobe, et al., 2012). Excessive internet use not only means use of the internet for extended periods, but also a condition of “inability to control online activities, with an emphasis on negative consequences arising from lack of self-control” (Smahel et al., 2012) “Excessive and inefficient use” of the internet is considered to be a “symptom of internet addiction” (Hansen, 2002), a “potential addiction” (Griffiths, 2000). It is a problematic condition in the frame of its “adverse effects on balanced life”, “posing an addiction risk”, “self-control ability in online activities”, and “use with negative consequences” (Watson, 2005; Brey, 2006; Xiong, 2011; Smahel et al., 2012). Excessive internet use in children and adolescents is under scrutiny across the world in terms of its adverse effects, hazards and addiction risks. A large-scale study conducted on children and adolescents of 9–16 years of age in 25 European countries has revealed that Turkey, Spain, Ireland and Portugal are the countries in the primary group to which excessive internet use poses as an important problem, despite their low level of internet use (Lobe et al., 2012).

Excessive internet use is not only associated with the time spent on internet. Nevertheless, time spent on internet is one of the measures to determine excessive use or addiction. Use of the internet for 40 hours or more a week suggests excessive internet use and internet addiction. Internet use for more than 40 hours a week except for professional use signals the presence of an internet-use disorder (Hinich, 2011). A typical internet addict spends 40–80 hours a week on the internet and may

not even move away from the computer up to consecutive 20 hours (Öztürk, Odabaşoğlu, Eraslan, Genç & Kalyoncu, 2007).

Favorable or unfavorable effects of excessive internet use on users are not only associated with the time spent but also with the intention and purpose. "Intention behind the behavior of internet use," "controlled internet use" (Ling et al., 2011), personal characteristics (Weinstein & Lejoyeux, 2010), social anxiety, family factors, and the user's most common types of use are important factors in determining the advantages and disadvantages of internet use for users.

The literature groups the research on adolescents' purposes of internet use under some main headings. Adolescents use the internet for purposes of education, learning and information dissemination (Wanajak, 2011), communication (Livingstone & Bober, 2004), entertainment (Wanajak, 2011; Deniz, 2010), gaming and gambling, (Griffiths, King & Delfabbro, 2009), socialization and psychological needs (Watson, 2005), etc. A study conducted by Aydın (2011) on 280 high school students investigated purposes of internet use among adolescents under the headings of homework/research, gaming, communication/chat and cyber-crimes. Adolescents are expected use the internet for academic success and to support their classes; however, they use it mostly outside school (Donoso & Roe, 2006) for non-academic purposes such as avoiding boredom, sexual content (Griffiths, 2000) and entertainment (Lobe, et al., 2012; Donoso & Roe, 2006). A study conducted by Livingstone and Bober (2004) on 1,511 students of 9-19 years of age has indicated that children and adolescents use the internet primarily for education and informal learning and secondarily for communication and participation. According to the opinions emphasizing socialization and making new friends on internet, while internet addicts use the internet for building new relationships, non-addicted users use it to maintain their existing relationships (Chou & Hsiau, 2000; as cited by Watson, 2005). Individuals tend to use the internet to avoid stress and may develop internet addiction when they feel isolated and alienated and seek satisfaction (Watson, 2005).

In the context of excessive internet use, the user's characteristics, the intention behind internet use and purposes of use are observed to be significant. According to Watson (2005), young people have developed a multi-dimensional communication model and created a circle for themselves. On the other hand, families and teachers are quite uninfluential and weak against this circle created by young people. Educators and experts must properly evaluate the causes of internet use. Frequency of internet use among adolescents has reached such a magnitude that they are able to connect to the internet on their phones even during classes most of the time, which can lead to disciplinary procedures and violent events due to misunderstandings over virtual communications, which causes adverse effects on young people's academic lives and family and social communications. Excessive internet use poses as a serious psychological threat to the psychological health of young people. Unless measures are taken, excessive internet use may become a phenomenon with a risk of turning into an addiction among children and adolescents, thus leading to unfavorable psychosocial, physical, mental and academic effects. In this context, it is

crucial to understand the purposes, causes and consequences of excessive internet use among young people.

This study aims to determine the purposes, causes and consequences of excessive internet use among adolescents and determine their purposes of internet use based on variables of gender and grade level. For this purpose, answers to the following questions were sought.

1. What are the purposes of internet use among the adolescents with excessive internet use?
2. Do their purposes change based on their gender and grade level?
3. What are the causes of excessive internet use?
4. What are the consequences of excessive internet use?

Method

Research Design

The method employed was screening as the present study aims to describe the existing situation. The study was conducted using a quantitative research method. As the sub-objectives require qualitative data containing in-depth opinions, data triangulation was achieved in data collection by using a semi-structured form.

Study Group

Three criteria were considered when determining the study group. First, internet use of participants for 41 hours or more a week was adopted as the risk level for internet addiction. Second, students from different high school types were represented. Third, participation on voluntary basis was sought in the study. The study group consisted of 91 volunteer students who were selected through screening 1,587 students in the three sub-provinces of the Istanbul Province in the 2012–2013 Academic year and who were internet users for “41 hours or more a week.”

Instrument & Procedure

Quantitative and qualitative data was collected using the “Internet Use Purposes Scale (IPUS)” developed by the researcher, and the qualitative data was collected using a semi-structured form. The Internet Use Purposes Scale (IPUS) comprises a total of 48 items in three sections entitled Personal Information, Internet Use Level, and Internet Use Purposes. The third section of the Internet Use Purposes Scale is a Likert-type scale. The scale comprises five sub-dimensions entitled Education (8 items), Entertainment (8 items), Psychological Needs (5 items), Socialization (4 items), Learning and General Culture (4 items), and 29 items in total. The structure validity of the scale was investigated using exploratory and confirmatory factor analysis. As a result of the exploratory factor analysis: The total variance explained by the structure was comprised of five major factors with the eigenvalue greater than

1 was found to be 53.72%. Load values in the five factors vary between .42 and .82, and the variance explained by sub-scales varies between 17.18% and 7.57%. The confirmatory factor analysis revealed at the second level DFA result that the five-dimensional structure represented an acceptable fit (RMSEA=.068, RMR =.13, NFI=.88, CFI=.92, IFI=.92, RFI=.86 AGFI=.81, GFI =.84). The Cronbach-Alpha reliability coefficients of the sub-dimensions in the scale vary between $\alpha=.70$ and $\alpha=.89$. The Cronbach-Alpha reliability coefficient of the entire scale is $\alpha=.86$. The qualitative data was collected in the study using a semi-structured form. Due to long distances between the schools in the sub-provinces of Istanbul, data was collected with the assistance of school psychological counselors who had been previously trained.

Data Analysis

Opinions regarding the purposes of internet use were analyzed using descriptive statistics, such as arithmetic mean, standard deviation and percent. When comparing the opinions regarding the purposes of internet use, a t-test was performed based on gender, and Kruskal Wallis test was used based on grade level. The significant difference was analyzed using a Mann Whitney U test based on binary combinations. In order to identify the causes and consequences of excessive internet use, the qualitative data collected by written responses through semi-structured forms was analyzed using a content analysis technique.

Results

This section contains the findings based on quantitative and qualitative data in line with the sub-objectives of the present study. First, findings regarding the purposes of internet use among adolescents using the internet excessively are presented followed by a comparison of the purposes of internet use according to gender and grade level. Last, the qualitative dimension of the study contains the findings on causes and consequences of excessive internet use among the adolescents.

The first sub-objective of the study is to identify the purposes of internet use among the adolescents with excessive internet use. The response to this question is first provided with the descriptive statistics over the total scores in the sub-dimensions of the students using the internet, and then the items with highest and lowest agreement rates were analyzed on an itemized basis. Table 1 provides the descriptive statistics regarding the purposes of internet use among the adolescents using the internet excessively.

Table 1*Descriptive Statistics Regarding Purposes of Internet Use among Adolescents*

Dimensions	\bar{X}	S	Order of Importance
1. Education	2.60	6.56	5
2. Entertainment	2.86	5.81	4
3. Psychological Needs	3.82	5.11	3
4. Socialization	4.16	3.19	1
5. Learning and General Culture	4.15	3.87	2

As seen in Table 1, the mean score regarding purposes of internet use among adolescents using the internet excessively is ($\bar{X}=2.60$) in the Education dimension ($\bar{X}=2.86$ in the Entertainment dimension, ($\bar{X}=3.82$) in the Psychological Needs dimension, ($\bar{X}=4.16$) in the Socialization dimension and ($\bar{X}=4.15$) in the Learning and General Culture Dimension. Adolescents using the internet excessively use it "most of the time" to satisfy their "Socialization", "Learning and General Culture," and "Psychological needs," and "some of the time" for "Education" and "Entertainment." According to the order of importance, the adolescents use internet for "Socialization" the most and for "Education" the least.

The first six items with the highest agreement rate in all sub-dimensions are "to talk with friends" ($\bar{X}=4.42$), "to watch video sharing sites (you tube, etc.)" ($\bar{X}=4.26$), "to chat (on social networks)" ($\bar{X}=4.24$), "to kill time" ($\bar{X}=4.05$), "to relax" ($\bar{X}=3.72$) and "to socialize" ($\bar{X}=3.67$). The first six items with the lowest agreement are "to gamble" ($\bar{X}=2.02$), "to prepare for a new class topic" ($\bar{X}=2.09$), "to watch video lectures" ($\bar{X}=2.36$), "to make up classes" ($\bar{X}=2.41$), "to study for classes" ($\bar{X}=2.47$) and "to do exercises for classes" ($\bar{X}=2.48$).

According to these findings, adolescents who excessively the use internet use it "completely" to talk with friends, watch videos, chat (on social networks) and kill time; "to a considerable degree" to relax and socialize, and "very rarely" to gamble, study for classes, and do exercises for classes. Most of the items with the highest agreement are, on item basis, in "socialization" and "psychological needs" dimensions, the most of the items with the lowest agreement are in the "education" dimension.

The second sub-objective of the study is to investigate if the purposes of internet use among the adolescents who use the internet excessively differ based on gender and grade level. Below, Table 2 contains the T-test results in relation to gender are presented for independent samples regarding comparison of the purposes of internet use among the adolescents who use the internet excessively.

Table 2

Comparison of the Purposes of Internet Use among the Adolescents in Relation to Gender (T-test results for independent samples)

Sub-dimensions	Gender	N	\bar{X}	S	sd	t	p
Education	1. Female	30	19.68	5.92	89	1.20	.230
	2. Male	61	21.44	6.82			
Entertainment	1. Female	30	20.63	5.54	89	2.69	.008
	2. Male	61	24.02	5.66			
Psychological Needs	1. Female	30	15.63	6.00	45.893	1.53	.131
	2. Male	61	17.54	4.54			
Socialization	1. Female	30	16.24	3.55	89	.78	.435
	2. Male	61	16.80	3.01			
Learning and General Culture	1. Female	30	12.46	4.38	45.604	2.92	.005
	2. Male	61	15.11	3.29			

According to the T-test results for independent samples presented in Table 2, there is a significant difference between the opinions of the students who use internet excessively in the Entertainment [$t(89) = 2.69$; $p < .01$] and Learning and General Culture [$t(45.604) = 2.92$; $p < .01$] sub-dimensions. When the group means are examined, the mean of the males ($\bar{X} = 24.02$) is higher than that of the females ($\bar{X} = 20.63$) in the Entertainment sub-dimension, and the mean of the males ($\bar{X} = 15.11$) is again higher than that of the females ($\bar{X} = 12.46$) in the Learning and General Culture sub-dimension. There is no significant difference between the opinions of the students who use the internet excessively in the Education [$t(89) = 1.20$; $p > .01$], Psychological Needs [$t(45.893) = 1.53$; $p > .01$] and Socialization [$t(89) = .78$; $p > .01$] sub-dimensions. Accordingly, gender is a factor that affects the excessive internet use levels among adolescents for purposes of Entertainment and Learning and General Culture, and males who use internet excessively use internet significantly for purposes of Entertainment and Learning and General Culture in comparison to females.

Below, Table 3 contains the results of the *Kruskal Wallis H Test* in comparison of the purposes of internet use among adolescents who use internet excessively in relation to their grade level.

Table 3

Comparison of the Purposes of Internet Use among Adolescents in Relation to Grade Level (Kruskal Wallis H Test)

Sub-dimensions	Grade Level	N	Mean	sd	χ^2	p	Significant Difference
Education	1. 9 grade	14	42.32	3	1.215	.729	
	2. 10 grade	24	49.04				
	3. 11 grade	27	42.81				
	4. 12 grade	26	48.48				
Entertainment	1. 9 grade	14	43.75	3	7.482	.058	
	2. 10 grade	24	43.85				
	3. 11 grade	27	38.15				
	4. 12 grade	26	57.35				
Psychological Needs	1. 9 grade	14	60.29	3	9.483	.024	1--4, 3--4
	2. 10 grade	24	46.77				
	3. 11 grade	27	34.72				
	4. 12 grade	26	49.31				
Socialization	1. 9 grade	14	51.18	3	3.884	.274	
	2. 10 grade	24	50.69				
	3. 11 grade	27	38.02				
	4. 12 grade	26	47.17				
Learning and General Culture	1. 9 grade	14	39.29	3	1.753	.625	
	2. 10 grade	24	48.02				
	3. 11 grade	27	44.02				
	4. 12 grade	26	49.81				

According to the results of this analysis, adolescents' opinions on internet use significantly vary in the "psychological needs" sub-dimension in relation to their grade level [χ^2 (sd=3, n=91) =9.48, p<0.05]. According to the mean rank of the groups, 9 grade students use the internet for the purposes in the psychological needs sub-dimension the most. According to the results of a Mann Whitney U test performed on the binary combinations of the groups to determine the source of the significant difference observed between the groups, there are significant differences between 9 grade and 12 grade students (U=9.48, p<0.5) and 11 grade and 12 grade students

($U=9.48$, $p<0.5$) in terms of the purposes of internet use in the psychological needs dimension. Considering their mean ranks, for purposes of psychological needs, 9 grade students use internet more than 12 grade students, and 12 grade students use more than 11 grade students. It is understood that 9 and 12 grade students who use internet excessively use it more for purposes of psychological needs and that their intended internet use is influenced by their psychological needs.

Adolescents' opinions regarding causes of their excessive internet use, which is the third sub-objective of the study, were analyzed with content analysis. Descriptive statements for each main category are also provided. Findings regarding causes of their excessive internet use are provided in Table 4.

Table 4

Causes of Adolescents' Excessive Internet Use

Main Category	Subcategories	(f)	Quotations
1. Learning and Development Needs	Learning and Self Improvement	28	
	Following up the agenda	20	
	Learning new things	12	
	Keeping abreast of technology and science	9	"I get all the information I want, I find whatever I want." (male, 16 years old)
	Doing research	9	
	Learning to inform others	4	
	Reading e-newspapers, books	3	
	Following cultural events	2	
	Total	87(34%)	
2. Socialization Need	Talking with friends	27	"If I had become social at the time, the only media where I could find people with the same mindset as I was on the internet. Even one person who had the same mindset would have been enough"
	Chatting on social networks (Facebook, Twitter)	18	(male, 16 years old)
	Browsing forums and blogs	5	
	Staying informed about friends	5	
	Searching friends	4	
	Sharing different ideas	2	"Since my circle of friends is not good, I use the internet more." (male, 16 years old)
	Failure to become social in the past	1	
	Total	61(24%)	

Tabel 4. Continued

3. Psychological reasons	Killing time out of boredom	33	"Actually, there is no specific reason: I spend time on the internet because there is nothing else to do. I don't like hanging out. I am good friends with my computer and phone." (male, 16 years old)
	Forgetting/getting away from problems	8	
	Finding nothing else to do	5	
	Relaxing, getting rid of stress	3	
	Loneliness	2	
	Feeling a sense of freedom	2	
	Total	53(21%)	
4. Seeking Entertainment	Watching movies, shows, videos	19	"I get on internet to learn what others do, where they go, and with whom." (female, 16 years old)
	Playing games	18	
	Entertainment	15	
	Shopping Easily	1	
	Total	52(21%)	

As seen in Table 4, causes of excessive internet use are grouped under Learning and Development needs, Socialization needs, Psychological reasons and Seeking Entertainment. The highest frequency is in the Learning and Development needs and the Socialization categories. The lowest frequency is in the Seeking Entertainment main category. The sub-categories with the highest frequency are Killing time out of boredom ($f=33$), Learning and self-improvement ($f=28$), Talking with friends ($f=27$), and Following up the agenda ($f=20$).

Findings regarding the consequences of excessive internet use, the fourth sub-objective of the study, are provided in Table 5.

Table 5
Consequences of Adolescents' Excessive Internet Use

Main Category	Subcategories	(f)	Quotations
1. Social Consequences	<i>Negative Opinions</i>	122	
	Unsociability	44	"You become unsociable while trying to be sociable" (male, 17 years old)
	Distancing/ drifting away from family	30	
	Being exposed to reaction from the environment and discomfort	21	"I don't have any idea as to how to spend time or I have never tried" (male, 18 years old)
	Conflicting with the family	15	
	Wasting time/leading a life in vain	7	"It may be unsociable, but it may prove useful in the future. It distances you from the outside environment and you get to live a cleaner life. I am aware that this is very harmful to me and people around me." (male, 16 years old)
	Delaying/ not fulfilling responsibilities	5	
	<i>Positive Opinions</i>	26	
	Socialization/getting to know new people	18	
	Making new friends	6	
Staying in contact with friends	2		
Total		148(51%)	
2. Physical health problems	Eye health deterioration	21	"I constantly have a headache; my eye health has also deteriorated." (male, 16 years old)
	Back and leg pain	11	
	Health problems	9	
	Headache	5	
	Fatigue	2	
	Intestinal disorder	1	
	Insomnia	1	
Total		50(18%)	
3. Academic Consequences	<i>Negative Opinions</i>	28	"Its consequence for me is that I have less interest in school; if this education system changed and also if had more interest in school, I could reduce internet use." (male, 16 years old)
	Neglecting classes/homework	23	
	Not studying classes	5	
	<i>Positive Opinions</i>	17	
	Learning a foreign language	6	
	Improving foreign language skills	6	
Doing homework, studying	5		
Total		45(16%)	

Tabel 5. Continued

4. Psychological Problems	(Risk of) turning into an addiction	12	
	Stupefying effect/ Breaking away from life	13	"The exam stress is too much; it is better to relax on internet than on using alcohol and drugs." (male, 16 years old)
	Lack of communication	6	
	Loss of self-control	2	
	Bad temper	1	
	Feeling bad when not on the internet	1	
	Total	35(12%)	
5. Mental Problems	Slowdown in mental activities	3	"My brain is fully focused on there. It takes a while for me to understand when someone says something to me; I react late although I hear what is said." (male, 18 years old)
	Difficulty in comprehension-reaction	2	
	Difficulty in expression and speech	1	
	Amnesia	1	
	Inability to focus on someone	1	
	Total	8 (3%)	

When Table 5 is examined, the consequences of excessive internet use gather around the main categories of Social, Physical health, Psychological and Mental consequences. The main categories with the highest frequency are Social Consequences and Physical health problems. The lowest frequency is in the Mental problems main category. The sub-categories with the highest frequency in these main categories are Unsociability ($f=44$), Distancing-drifting away from family ($f=30$), Eye health deterioration ($f=21$), Being exposed to reaction from the environment ($f=21$), and Neglecting classes and homework ($f=23$).

Discussion and Conclusion

The purposes of excessive internet use are provided in five main dimensions in Figure 1. The internet is used most for socialization and then for learning and general culture. The study findings are parallel with the literature. Other studies have found that internet users use the internet to kill time, to talk with friends, and for psychological needs and socialization (Ling et al., 2011; Watson, 2005). It may also be said that components corresponding to psychological needs play a role more in the relationship established by the adolescents that use internet excessively and that they tend to manage their relationships on internet rather than in real life and feel the need to socialize.

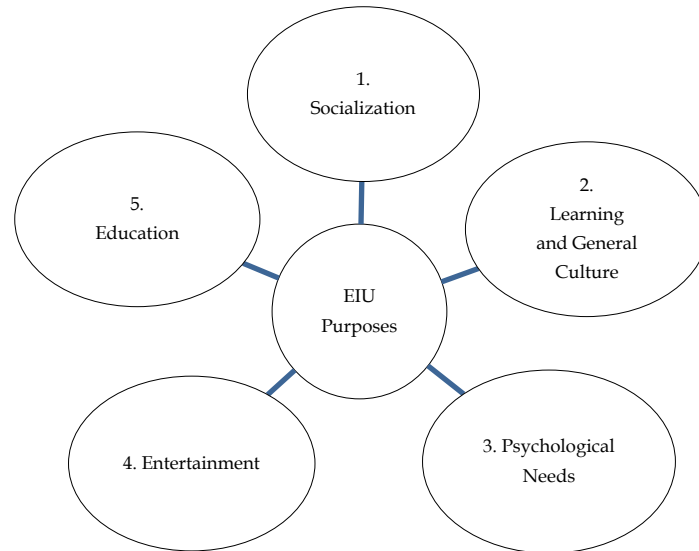


Figure 1. Purposes of excessive internet use

Using the internet for “educational” purposes is the lowest ranked dimension of the list and is “infrequent” among adolescents that use the internet excessively. Another study has found that there is a significant relationship between excessive internet browsing and academic failure and that internet use among successful students is quite limited (Hazelhurst, Johnson & Sanders, 2011). On the other hand, use of the internet for learning purposes ranks second in this study. This reveals that, among adolescents who use internet excessively, internet use for “educational” purposes ranks last (infrequent) and its use for “learning” purposes ranks second and is frequent “to a considerable degree.” This finding points to the fact that the meaning of “knowledge” and “education” must be investigated by another study in the context of excessive users. The findings for purposes of excessive internet use suggest two conclusions. The first is that adolescents who use the internet excessively tend to socialize in virtual life instead of real life. The second is that the internet is used as a means to satisfy the need to learn. In this respect, educational institutions must re-visit the function and content of knowledge and education again.

Gender is a variable that affects internet-use purposes. Males use the internet more than females for purposes of “Entertainment and Learning and General Culture. The study by Aydn (2010) has found that male students spend time on the computer more for Entertainment needs in comparison to female students. Another study has found that internet use for entertainment purposes is higher in males (56.4%) than females (% 43.6) (Kurulgan & Argan, 2007). In this context, the results are parallel with the literature in terms of the gender variable. Social gender roles and raising children based on gender discrimination impel men to demonstrate more disadvantageous behavior in self-expression in comparison to females.

This study has revealed that grade level affects purposes of internet use based on psychological needs, and that 9 grade students and 12 grade students use the internet more for purposes based on psychological needs. According to Smahel et al. (2012), excessive internet use is best described by psychological approaches. Such approaches suggest that individuals use the internet excessively to compensate for social and psychological challenges and shortcomings that damage their well-being. Students start 9 grade after a challenging exam process, and adolescents in 12 grade start to feel concerned about the future. In this respect, the internet is a psychological relief platform for excessive users. The fact that the subcategory with the highest frequency is "to kill time out of boredom" suggests inadequacy of social, artistic and sports activities for adolescents as well as lack of social skills in adolescents.

For purposes of comparison, the main categories for causes and consequences of excessive internet use are provided respectively in Figure 2 and Figure 3.

As seen in Figure 2, causes of excessive internet use are respectively Learning and Development needs, Socialization needs, Psychological reasons and Seeking Entertainment. In the study, while "socialization and learning" are prevalent in terms of purposes, the "psychological needs" dimension is prevalent according to the grade level variable. When the causes are examined, learning and general culture need is the first cause of excessive internet use. A study conducted by Flipovic (2013) has revealed that the most important factor that drives frequent internet users to use internet is learning. However, in this study, 75% of the participants have low academic success. Şenyuva & Kaya (2013) has also found that students see "internet as information source.. In this context, adolescents seem to learn on the internet instead of at school.

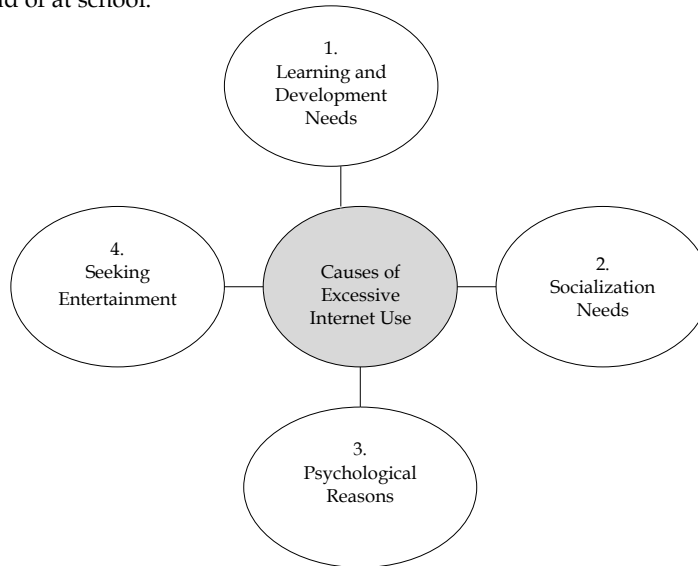


Figure 2. Causes of excessive internet use

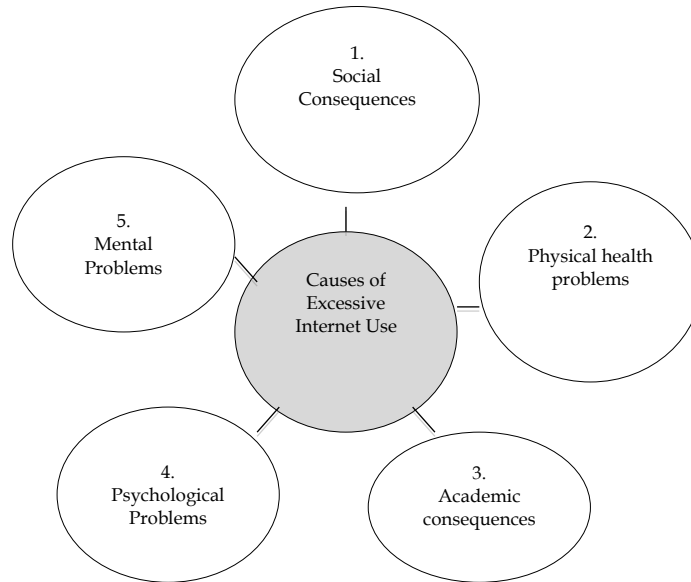


Figure 3. Consequences of excessive internet use

As seen in Figure 3, excessive internet use leads respectively to Social Consequences, Physical health problems, Academic consequences, Psychological problems, and Mental Problems in adolescents. These consequences indicate that excessive internet use has a multifaceted impact on the development of adolescents and that excessive users need psychosocial support in the delicate adolescent period. According to the findings in the literature, excessive internet use leads to loneliness, depression, drifting away from family and friends, weakening of ties with relatives and society (Bargh & McKenna, 2004), and neglecting roles and duties (Brey, 2006). Regarding psychological needs, Çelik, Atak & Ergüzen (2012) also found that adolescents' emotional instability was the leading predictor of being cyberbullied. Excessive internet use has adverse effects on mental performance and the working memory (Xiong, 2011) and leads to sleep disorders, weight loss, headaches, back pain, loss of concentration, focusing difficulties, and loss of productivity/performance (Ling et al., 2011).

In view of the above purposes, causes and consequences in adolescents who use the internet excessively, the need to socialize and learn are emphasized in terms of purposes and causes; psychological needs are prevalent in 9 and 12 grades; excessive use causes multifaceted adverse effects on adolescents, including social, physical, academic, psychological and mental problems. In this context, measures must be taken to meet the students' learning and development needs at schools and in real life; programs must be in place to develop their social skills; artistic, sports and

cultural activities must be increased. These necessities are as crucial as improving the quality of education. This issue mandates that measures be taken at the macro level in view of its future risks. The characteristics, psychosocial needs, and the conception of knowledge, education and socialization of the generation Z that will start high school now must be examined by the educational experts and the academia.

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Ergenlerin Aşırı İnternet Kullanım Amaçları, Nedenleri ve Sonuçları

Atf:

Akar, F. (2015). Purposes, causes and consequences of excessive internet use among Turkish adolescents. *Eurasian Journal of Educational Research*, 60,35-56
Doi: 10.14689/ejer.2015.60.3

Özet

Problem Durumu

Günümüzde gençler, teknolojiyi ulusal ve küresel düzeyde yaygın olarak kullanmaktadır. Ancak siber çocukların teknoloji ile donanmış olması, onu aynı olgunlukla kullanacakları anlamına gelmemektedir (Myers, McCaw & Hemphill, 2011). Çünkü internet, kullanım alışkanlıkları ve kullanıcı özelliklerine bağlı olarak “madalyonun iki yüzü” (Ling ve diğ.,2011) şeklinde ifade edilen olumlu ve olumsuz etkilere neden olmaktadır. İnternetin “Aynı anlayıştaki kişilerle küresel ağlarda buluşma, görev ve işlerin etkililiğini sağlama, fikirleri özgürce ifade etme, hayal kırıklıklarını teselli etme(Ling, Ramadass, Altaher & Arjuman, 2011); benzer ilgi ve yeteneklere sahip kişilerle bağlantı kurma (Berg & McKenna, 2004); iletişimi artırma, bilgi paylaşımı, akademik alanda yarar sağlama (Balta ve Horzum, 2008) gibi olumlu etkileri bulunmaktadır. Ancak başta internet bağımlılığı olmak üzere amacı dışında aşırı kullanıldığında internet, sosyal izolasyon, sanal zorbalık, kişilerarası ilişkilerde sorunlar, stres, uyku bozukluğu, depresyon, rol ve görevleri ihmal etme, öğrenme ve bilişsel yetenek kullanımı gibi psikolojik, sosyal ve akademik sorunlara yol açmaktadır (Young, 1998, Akt. Vanajak, 2011; Brey, 2006; Stevens ve Morris, 2007; Xiong, 2011).

Aşırı internet kullanımı “internetin veya diğer dijital teknolojilerin kullanımından kaynaklanan saplantılı, kontrolsüz, aşırı veya sorunlu davranış” olarak tanımlanmaktadır (Lobe, Livingstone, Olafsson ve Vodeb, 2012).İnternetin, profesyonel kullanım dışında haftada 40 saatten fazla kullanımı, internet kullanım bozukluğu probleminin varlığı konusunda bir sinyaldir(Hinic,2011). Çocuklar ve ergenler gerek en sık ve yaygın teknoloji kullanıcıları, gerekse gelişim süreçlerini tamamlamamış olmaları bakımından etki ve risklere açık en geniş grupları oluşturmaktadır(Watson, 2005; Brey, 2006; Xiong, 2011).Türkiye’de de bu bağlamda aile ve okul ortamında sorunlar yaşanmaktadır. Aşırı internet kullanıcısı olan öğrenciler, cep telefonları ile ders sırasında bile kolayca internete ulaşabilmekte, aynı sınıftaki arkadaşları ile iletişimini yüz yüze değil, internet üzerinden sürdürebilmektedir. 25 Avrupa ülkesinden 11-16 yaş grubu ergenlerle yapılan araştırmada, Türkiye’den katılan ergenlerin, %25’inin, aşırı internet kullanımı semptomlarının çoğunu gösterdiği, her dört ergenden birinin aşırı internet kullanıcısı olduğu bulunmuş, aynı zamanda Türkiye, katılımcılarının % 2’si semptomların tümünü gösteren, beş ülke içinde yer almıştır (Smahel ve diğ. 2012).

Aşırı internet kullanımı sadece süreyle ilgili değildir. Amaç, davranışların ardındaki niyet (Ling ve diğ. 2011), kişisel özellikler (Weinstein ve Lejoyeux, 2010), sosyal

kaygı, ailevi faktörler, kişinin hangi tip kullanıma eğilimli olduğu internetin yararlı mı zararlı mı olacağı noktasında önemli faktörlerdir. Bu bağlamda interneti aşırı kullanan ergenlerin sadece kullanım süreleri değil, internet kullanım nedenleri, amaçları ve aşırı kullanımın sonuçlarının neler olduğu önem taşımaktadır.

Araştırmanın Amacı

Aşırı internet kullanan ergenlerin; interneti kullanma amaçlarının, nedenlerinin ve sonuçlarının neler olduğunun saptanması ile internet kullanım amaçlarının cinsiyet ve sınıf düzeyi değişkenlerine göre incelenmesidir.

Araştırmanın Yöntemi

Çalışma nicel araştırma yöntemi ile yürütülmüştür. Alt amaçlarının derinlemesine görüşleri içeren nitel verileri gerektirmesi nedeniyle, yarı yapılandırılmış form aracılığıyla veri toplamada çeşitlilik sağlanmıştır. Araştırmanın çalışma grubunu haftalık internet kullanım süresinin "internet bağımlılığı için risk kabul edilen 41 saat ve üstü olma", "farklı lise türlerinin temsili" ve "gönüllülük" ölçütlerine göre 2012-2013 Eğitim öğretim yılında, İstanbul İli'nde üç ilçede 1587 lise öğrencisi arasından yapılan tarama ile belirlenen 91 lise öğrencisi oluşturmuştur. Araştırmada nicel veriler, araştırmacı tarafından geliştirilmiş olan "İnternet Kullanım Amaçları (İKA) Ölçeği" ile toplanmıştır. Aşırı internet kullanımının nedenleri ve sonuçlarını belirlemek amacıyla kullanılan nitel veriler ise yarı yapılandırılmış form aracılığı ile yazılı olarak toplanmıştır. İnternet kullanım amaçlarına ilişkin görüşler, betimsel istatistikler; internet kullanım amacına ilişkin görüşlerin cinsiyete göre karşılaştırmasında t-testi; sınıf düzeyine göre karşılaştırmasında Kruskal Wallis testi kullanılmış, anlamlı fark Mann Whitney U testi ile analiz edilmiştir. Nitel veriler, içerik analizi tekniği ile çözümlenmiştir.

Araştırmanın Bulguları

Aşırı internet kullanan ergenlerin internet kullanım amaçları sırasıyla **Sosyalleşme** ($\bar{x}=4.16$), Bilgilenme ve Genel Kültür ($\bar{x}=4.15$), Psikolojik ihtiyaçlar ($\bar{x}=3.82$), Eğlence ($\bar{x}=2.86$) ve **Eğitimdir** ($\bar{x}=2.60$). Eğlence [$t(89) = 2.69$; $p<.01$] ile Bilgilenme ve genel kültür [$t(45,604) = 2.92$; $p<.01$] alt boyutlarında aşırı internet kullanıcısı öğrencilerin görüşleri arasında cinsiyete göre anlamlı fark vardır. "Eğlence" ile "Bilgilenme ve Genel kültür" alt boyutlarında erkeklerin ortalaması kızlardan yüksektir [Eğlence $E(\bar{x}=24.02)-K(\bar{x}=20.63)$], [Bilgilenme ve genel kültür $E(\bar{x}=15.11),K(\bar{x}=12.46)$]. "Psikolojik ihtiyaçlar" boyutunda, Aşırı internet kullanan ergenlerin internet kullanım amaçları konusundaki görüşlerinde sınıf düzeyine göre anlamlı fark vardır [χ^2 ($sd=3$, $n=91$) = 9.48 , $p< 0.05$]. Anlamlı farkın kaynağını bulmak amacıyla uygulanan Mann Whitney U testi sonuçlarına göre psikolojik ihtiyaçlar boyutundaki amaçlarla internet kullanımında 9. sınıf ile 12. sınıf öğrencileri ile ($U=9.48$, $p<0.5$), 11. sınıf ile 12. sınıf öğrencileri arasında ($U=9.48$, $p<0.5$) anlamlı fark vardır. Ergenlerin aşırı internet kullanım nedenleri sırasıyla **Bilgilenme ve Gelişme İhtiyacı** ($f=148$; %51), **Sosyalleşme ihtiyacı** ($f=61$; %24), **Psikolojik nedenler** ($f=53$; %21) ve **Eğlence arayışı** ($f=52$; %21) ana kategorilerinde toplanmaktadır. Ergenlerde aşırı internet kullanımı sonuçları ise **Sosyal sonuçlar** ($f=148$; %51), **Fiziksel sağlık**

sorunları(f=50;%18), **Akademik sonuçlar** (f=45;%16), **Psikolojik sorunlar**(f=35;%12) ve **Zihinsel sorunlar**(f=8;%3) ana kategorilerinde toplanmaktadır.

Araştırmanın Sonuçları ve Önerileri

Aşırı internet kullanan ergenler, sırasıyla Sosyalleşme, Bilgilenme ve Genel Kültür, Psikolojik İhtiyaçlar, Eğlence ve Eğitim amacıyla interneti kullanmaktadır. Sosyalleşme ilk sıradaki, eğitim son sıradaki kullanım amacıdır. Kullanım nedenleri incelendiğinde ise yine ergenlerin interneti, öncelikle bilgilenme ve sosyalleşme nedeniyle kullandığı görülmektedir. Alanyazınla paralellik gösteren bu sonuçlara göre aşırı internet kullanımının iki sonuca işaret ettiği söylenebilir. Birincisi aşırı internet kullanan ergenler gerçek yaşam yerine sanal yaşamda sosyalleşme eğilimindedir. İkincisi aşırı kullanıcılar için internet, bilgilenme ihtiyacını karşılayan bir mecra olarak kullanılmaktadır. Bu anlamda eğitim kurumlarının bilgi ve eğitimin işlev ve içeriğini tekrar gözden geçirmelerinde yarar bulunmaktadır.

Erkekler, kızlara göre interneti “Eğlence” ile “Bilgilenme” amacıyla daha fazla kullanmaktadır. 9. Sınıf ve 12. Sınıftaki ergenler ise interneti daha çok psikolojik ihtiyaçlara dayalı amaçlarla kullanmaktadır. Mehroof ve Griffiths’in (2010) psikolojik kuramına göre insanlar, sosyal ve psikolojik zorlukları telafi etmek için interneti aşırı kullanırlar(Akt: Smahel ve diğ.,2012). Ergenlik dönemi, baş edilmesi gereken bir değişim dönemidir. Bunun yanı sıra 9. ve 12. Sınıf adaptasyon ve gelecek kaygısı yaşadıkları sınıf düzeyleridir. Bu anlamda internetin, psikolojik rahatlama alanı olarak algılandığı ve psikolojik faktörlerin internetin aşırı kullanımda önemli olduğu görülmektedir. Aşırı internet kullanımı, ergenler üzerinde sırasıyla Sosyal Sonuçlar, Fiziksel sağlık sorunları, Akademik sonuçlar, Psikolojik sorunlar, Zihinsel Sorunlara yol açmaktadır. Bu sonuçlar, aşırı internet kullanımının ergenlerin gelişimleri üzerinde çok yönlü bir etkiye sahip olduğuna ve hassas bir dönem olan ergenlikte aşırı kullanıcıların psiko sosyal destek ihtiyacına işaret etmektedir.

Aşırı internet kullanan ergenlerde amaç, neden ve sonuçlar değerlendirildiğinde; amaç ve nedenler bağlamında sosyalleşme ve bilgilenme ihtiyacı vurgulanmakta, 9. ve 12. Sınıflarda psikolojik ihtiyaçlar öne çıkmakta, aşırı kullanım ergenler üzerinde sosyal, fiziksel, akademik, psikolojik ve zihinsel sorunları kapsayan çok yönlü olumsuz etkilerle sonuçlanmaktadır. Bu bağlamda öğrencilerin bilgilenme ve gelişme ihtiyacının okullarda ve gerçek yaşamda karşılanabilmesine dönük tedbirlerin alınması, gerçek yaşam becerileri geliştirme programlarının uygulanması, sanatsal, sportif, kültürel faaliyetlerin artırılması en az öğretim kalitesini arttırmaya dönük yaklaşımlar kadar önemlidir. Konu geleceğe yönelik taşıdığı riskler açısından makro düzeyde tedbirleri almayı gerektirmektedir. Şu anda liselerde eğitim görmeye başlamış olan Z neslinin özelliklerinin, psiko sosyal ihtiyaçlarının, bilgi, eğitim ve sosyalleşmeye hangi anlamları yüklediklerinin eğitim uzmanları ve akademisyenlerce incelenmesi yararlı olacaktır.

Anahtar Kelimeler: İnternet bağımlılığı, ergenlik, okul psikolojisi, rehberlik ve psikolojik danışma