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ORIGINAL ARTICLE

Adolescents' Internet Addiction, Cyber Bullying, and Cyber Victimization in Terms of Various Variables

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Main Points

- In this study, moderate significant relationships were found between cyberbullying and internet addiction and also cyber victimization and internet addiction.
- In this study, it was determined that internet addiction was higher in female students than male students.
- While there was no significant relationship between adolescents' time spent on the internet and their cyber victimization levels, there was a significant positive relationship between cyberbullying and internet addiction.

Abstract

This study aims to investigate the relationship between internet addiction and cyberbullying and cyber victimization in adolescents. It is a descriptive study in a correlational survey model. The study was carried out on 589 students in 3 high schools. Demographic Information Form, Cyber Bullying Scale, Cyber Victimization Scale, and Internet Addiction Scale Short Form were used as data collection tools. Spearman rho was used to conduct correlation analysis and Mann – Whitney *U* and Kruskal – Wallis were used to test the significance of the differences between the groups. In this study, moderate significant relationships were found between cyberbullying and internet addiction and also cyber victimization and internet addiction. As a result of the comparisons made in terms of socio-economic status, it is seen that internet addiction does not differ significantly according to the socio-economic status of adolescents and the behavior of the families toward their children's internet using behavior. In addition, there was no difference in cyberbullying, cyber victimization, and internet addiction levels of adolescents in terms of the educational status of parents. On the other hand, it was determined that internet addiction was higher in female students than male students.

Keywords: Adolescent, cyberbullying, cyber victimization, internet, internet addiction

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Introduction

The use of internet has become increasingly widespread in the world and in our country because of the facilities it provides. Indeed, according to the results of the Turkey Statistical Institute (TUIK)'s Household Information Technology Internet Using Research, the rate of internet use for the age group 16-74 in our country is 82.6% (TUIK, 2021). The internet, in spite of its benefits, brings some problems when used without any control.

Internet addiction can be defined as an inability to control internet overuse, perceiving the time spent without the internet as insignificant, and feeling excessive nervousness and aggression when deprived of the internet which can result in a gradual deterioration of work, social, and private life of the person (Shapira et al., 2003; Young, 2004). The term "internet addiction," referred to as excessive computer usage, not being able to live without computer (Black et al., 1999), pathological internet usage (Morahan-Martin & Schumacher, 2000),

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problematic internet usage (Davis et al., 2002), and virtual dependency (Greenfield, 1999), was first acknowledged in 1995 by Ivan Goldberg as a specific disease (Çam & Nur, 2015).

Adolescents are the riskiest group in terms of internet addiction. In a study concerning internet abuse by high school students (Pallanti et al., 2006), adolescence appears to be a critical period of weakness based on social and neurobiological factors in terms of addiction. In addition, there is a significant relationship between internet addiction and escape from reality, non-functional social behavior, depressive mood, loneliness, compulsiveness, and vulnerability to interpersonal threats (Whang et al., 2003). Another variable that is directly or indirectly related to the time spent on the internet is cyberbullying or being exposed to cyber victimization.

According to Willard (2004, p. 2), cyberbullying can be described as "sending harmful or frightening text or images using the internet or other digital media" and behaviors that involve bothering a person online, ridiculing him/her, calling someone with bad nicknames, threatening others, and telling unwanted, sexually disturbing things to others (Patchin & Hinduja, 2006).

The term "cyber victim" (the one who is exposed to cyberbullying) has been considered to have permanent and deliberate damage in various studies (Brown et al., 2014; Hinduja, & Patchin, 2008). Bullying among high school students is frequently experienced through SMS or specifically e-mails containing sexually explicit profanity or threats among males and disturbance from private numbers among girls (Şahin et al., 2010). While there are cases in which victims suffer from disappointment, anger, and sorrow (Patchin & Hinduja, 2006), they also experience a decrease in academic success and problems in school attendance (Raskauskas & Stoltz, 2007), high levels of social anxiety (Juvonen & Gross, 2008), being more prone to showing depressive attitudes (Campbell et al., 2012). In some studies, it has been shown that children with cyberbullying experiences generally have either poorer family control or more disciplined families and family structures are weaker than the children who are not related to cyberbullying (Wong, 2010; Ybarra & Mitchell, 2004).

Although there are many studies in the literature about internet addiction (Mossbarger, 2008; Yen et al., 2007) and cyberbullying (Li, 2010), the relatively low number of studies revealing the relationship between cyberbullying and cyber victimization and internet addiction variables (Erdur-Baker & Kavşut, 2007; Ybarra, 2004) is remarkable. The findings of the study on internet addiction, cyber bullying and cyber victimization of adolescents who use the internet frequently can provide important data for preventing cyberbullying and guiding the development of intervention programs.

In this study, high school students' internet addiction, cyberbullying, and cyber victimization cases were examined and they are further investigated through variables such as gender, grade, and family. Thus, the following research questions were stated:

1. Is there a meaningful relationship between adolescents' internet addiction and cyberbullying and cyber victimization?
2. Is there a meaningful relationship between adolescents' cyberbullying and their cyber victimization?
3. Is there a significant difference in the SES of adolescents' internet addiction, cyberbullying, and cyber victimization?
4. Is there a significant difference in internet addiction, cyberbullying, and cyber victimization in terms of adolescents' parents being together or separate?
5. Is there a significant difference in internet addiction, cyberbullying, and cyber victimization in terms of adolescents' parents' educational status?
6. Is there a significant difference in adolescents' internet addiction, cyberbullying, and cyber victimization in terms of grade level?
7. Is there a significant difference in adolescents' internet addiction, cyberbullying, and cyber victimization in terms of gender?
8. Is there a meaningful relationship between the time spent using internet by adolescents' cyberbullying, cyber victimization, and internet addiction?
9. Is there a significant difference in adolescents' internet addiction, cyberbullying, and cyber victimization in terms of the behavior of families toward the control of internet use?

Methods

Research Model

This research aimed to investigate the relationship between internet addiction and cyberbullying and cyber victimization in adolescents. It is a descriptive study in a correlational survey model.

Participants

The minimum population for this study was determined as 436 with G*Power program by taking impact size 0.20, $\alpha = 0.05$, power $(1 - \beta) = 0.95$ at a confidence level of 95%. The study was carried out with 589 students in 3 high schools, which were easily accessible in Ankara and Aydin provinces. These places were chosen because they were easy to reach by the researchers. The descriptive characteristics of the study group are shown in Table 1. A signed consent form was obtained from all participants stating that they agreed to participate in the study prior to data collection. Ethics committee approval was received for this study (July 05, 2021).

When Table 1 is examined, it is seen that the participants are from two different high school types, the gender is equivalent, the average age is 16 ($S_x = 1$), and the grade level is mainly ninth and tenth grade. The low number of 12th grade students in the study can be explained by the general absenteeism problem at this grade level.

Data Collection Tools

Demographic Information Form: In the demographic information form, there are questions related to students' age, gender, grade, mother's and father's education/occupation, the status of the parents (parents' being together or separated), who they live with, and the income level of the family. In addition, there are also questions about the number of books bought by families in their homes in a year, the frequency of participation in social activities, the time spent on the internet, and the time spent with friends outside the internet.

Cyber Bullying Scale: In this study, the "Cyber Bullying Scale" developed by Arıcak et al. (2012) was used. The scale consists of

Table 1.
The Descriptive Characteristics of the Study Group

Variables		*n*	%
School type	Vocational and technical Anatolian high school	390	66.2
	Anatolian high school	199	33.8
Gender	Female	275	46.7
	Male	309	52.5
	Non-specified	5	0.8
Age (average: 15.9 ± 1.0)	14	22	3.7
	15	215	36.5
	16	200	34.0
	17	86	14.6
	18	53	9.0
	19	4	0.7
	Non-specified	9	1.5
Class level	9th grade	292	49.6
	10th grade	176	29.9
	11th grade	83	14.1
	12th grade	32	5.4
	Non-specified	6	1.0

24 items answered using 4 scales (never, sometimes, often, and always) in one factor and "never" is rated as 1, and "always" is rated 4 points. The rise of points indicates an increase in cyberbullying. The factor loadings of the items under one-factor range from .49 to .82. The Cronbach alpha coefficient calculated for the whole scale was .95; the test – retest reliability coefficient was .70. The Cronbach's alpha coefficient obtained was .95 for the whole scale in this study.

Cyber Victimization Scale: In this study, "Cyber Victimization Scale" developed by Arıcak et al. (2012) was used. The scale consists of 24 items answered with "yes" and "no" in one factor. Exploratory factor analysis was done in the context of basic components analysis for all items. The "yes" response is 2 points, and "no" response is 1 point. The increase in points upwards means that the levels of victimization have increased. The factor loadings of the items under the single factor range from .43 to .67. The Cronbach alpha coefficient for all of the scales was .89. The test – retest reliability coefficient was found to be .75. The Cronbach's alpha coefficient obtained was .94 for the whole scale in this study.

Internet Addiction Scale Short Form: Internet Addiction Scale Short Form, developed by Young (1998) and adapted by Pawlikowski et al. (2013) into the short form and adapted by Kutlu et al. (2016) to Turkish, was used in this research. The scale consists of 12 items in 5 Likert scale (1 = never, 5 = always). Higher scores on the scale indicate higher internet addiction. The factor loadings of the one-factor structure vary between .56 and .82. As a result of the confirmatory factor analysis, the compliance index values of the one-dimensional YBT-KF model were χ^2 = 141.93, *df* = 51, RMSEA = 0.080, GFI = 0.90, CFI = 0.90, and IFI = 0.90. Since the obtained RMSEA value was at the limit of 0.08 and the GFI, CFI and IFI values were within the limit of 0.90, it was considered sufficient. In addition, the chi-square/df ratio is 2.78, which is below the acceptable value of 3. The Cronbach's alpha coefficient obtained was .88 for the whole scale in this study.

Statistical Analysis

After collecting the data, the value and missing data were checked. The data were arranged and prepared for analysis. Then, the distribution of the normality was examined, and since it was found that there was no normality in most of the distributions and in the correlation coefficients, Spearman rho was calculated as correlation analysis; Mann – Whitney *U* for testing the significance of the differences between the two groups; Kruskal – Wallis analysis was used to test the significance of the differences between three or more groups. The Mann – Whitney *U* test was used as a post hoc test for the variables that were significant after the Kruskal – Wallis test and Bonferroni correction was applied. In this study, to determine the SES, the level of monthly income, the frequency of participation in social activities, the number of reading books that were bought, the mother's education level, and father's education level variables were calculated and the clustering analysis was used to determine two levels of SES.

Results

Objectives 1 and 2

Findings of the questions: "Is there a significant relationship between adolescents' internet addiction, cyberbullying and cyber victimization?" and "Is there a significant relationship between adolescents' cyberbullying and cyber victimization?"

These correlations for this sub-objective were calculated with Spearman's rho.

When Table 2 is examined, it was found that there was a moderately significant relationship at 46% (R^2 = .21) between variables cyberbullying and cyber victimization ($p < .05$), cyber victimization and internet addiction at 29% (R^2 = .08) level and cyberbullying and internet addiction at a 32% (R^2 = .10) level ($p < .05$). When the correlation values were examined, it was observed that there were moderate and significant relationships even if they are not high.

Table 2.
Correlation Values of Adolescents' Internet Addiction, Cyberbullying, and Cyber Victimization

Spearman's rho	*n* = 589	Cyber Victimization	Internet Addiction
	Cyber bullying	.462**	.326**
	p	.000	.000
	Cyber victimization		.294**
	p		.000

**$p < .05$

Table 3.
Test of Differences in Internet Addiction, Cyberbullying, and Cyber Victimization According to Adolescents' SES

Two-Step Cluster Number $n = 568$		Mean Rank	Rank Sums	Mann – Whitney U	p
Cyber bullying	Low SES	174.36	34,000.00	14,890.000	.003
	Middle SES	204.69	37,253.00		
Cyber victimization	Low SES	176.35	34,388.50	15,278.500	.016
	Middle SES	202.55	36,864.50		
Internet addiction	Low SES	180.95	35,285.50	16,175.500	.137
	Middle SES	197.62	35,967.50		

SES = socio-economic status.

Objective 3
Findings of the question: "Is there a significant difference in internet addiction, cyberbullying and cyber victimization according to SES of adolescents?"

The findings for this sub-objective were calculated by the Mann – Whitney U test.

When Table 3 is examined, internet addiction levels of adolescents does not differ significantly according to SES ($U = 16{,}175.50$; $p > .05$), while cyberbullying significantly differs according to SES ($U = 14{,}890.00$; $p < .05$) and cyber victimization levels are significantly different ($U = 15{,}278.50$; $p < .05$) according to SES. When the mean ranks are examined, it is seen that the adolescents in the middle SES are significantly higher than those in the lower SES, both in terms of cyberbullying and cyber victimization.

Objective 4
Findings of the question: "Is there a significant difference in internet addiction, cyberbullying, and cyber victimization in terms of adolescents' parents being together or separated?"

When Table 4 is examined, cyberbullying ($U = 17{,}736.00$; $p > .05$), cyber victimization ($U = 16{,}155.00$; $p > .05$), and internet addiction ($U = 16{,}956.00$; $p > .05$) do not differ significantly according to the parental status of adolescents.

Objective 5
Findings of the question: "Is there a significant difference in internet addiction, cyberbullying, and cyber victimization in terms of adolescents' parents' educational status?"

The findings of this sub-objective were calculated by Kruskal – Wallis test. While the calculation is done, five people are not included in the calculations because one mother has a post-graduate degree, three fathers are illiterate, and one father has a post-graduate degree.

When Table 5 is examined, there is a significant difference in cyberbullying according to mother's education level [$\chi^2(4) = 11.50$, $p < .05$]; there was no significant difference in cyber victimization [$\chi^2(4) = 5.31$, $p > .05$]; there was no significant difference in internet addiction [$\chi^2(4) = 5.93$; $p > .05$]. Although the situations of cyberbullying differed significantly according to mothers' education levels, when Bonferroni correction was done, there was not significant difference in education levels.

When Table 6 is examined, there is a no significant difference in cyberbullying [$\chi^2(3) = 7.42$, $p > .05$]; cyber victimization [$\chi^2(3) = 2.10$, $p > .05$], and internet addiction [$\chi^2(3) = 2.84$; $p > .05$] according to fathers' education level.

Objective 6
Findings of the question: "Is there a significant difference in adolescents' level of internet addiction, cyberbullying, and cyber victimization in terms of grade level?"

The findings of this sub-objective were calculated by Kruskal – Wallis Test.

Table 7 shows that there is a significant difference in cyberbullying according to grade level [$\chi^2(3) = 8.23$, $p < .05$]; there was no significant difference in cyber victimization [$\chi^2(3) = 3.55$, $p > .05$]; and there was a significant difference in internet addiction [$\chi^2(3) = 28.07$; $p < .05$]. As a result of post hoc analysis (Mann – Whitney U test with Bonferroni correction), which was used to determine in which grade levels cyberbullying and

Table 4.
The Findings for This Sub-objective Were Calculated by Mann – Whitney U Test

	Parents $n = 568$	Mean Ranks	Rank Sums	Mann – Whitney U	p
Cyber bullying	Parents together	284.74	141,232.00	17,736.000	.920
	Separate parents	282.83	20,364.00		
Cyber victimization	Parents together	281.07	139,411.00	16,155.000	.172
	Separate parents	308.13	22,185.00		
Internet addiction	Parents together	286.31	142,011.50	16,956.500	.489
	Separate parents	272.01	19,584.50		

Table 5.
Differences in Internet Addiction, Cyberbullying, and Cyber Victimization Variables According to the Educational Status of Mothers of Adolescents

	Educational Status of Mothers $n = 571$	Mean Ranks	Kruskal – Wallis Chi-Square	p
Cyber bullying	Illiterate	240.76	11.50	.022
	Primary school	264.84		
	Secondary school	289.46		
	High school	313.04		
	Bachelor's degree	306.48		
Cyber victimization	Illiterate	230.72	5.31	.257
	Primary school	281.93		
	Secondary school	279.98		
	High school	303.14		
	Bachelor's degree	303.59		
Internet addiction	Illiterate	253.26	5.93	.205
	Primary school	277.03		
	Secondary school	284.23		
	High school	294.04		
	Bachelor's degree	355.04		

Table 6.
Differences in Internet Addiction, Cyberbullying, and Cyber Victimization Variables According to the Educational Status of Fathers of Adolescents

	Educational Status of Fathers $n = 557$	Mean Ranks	Kruskal – Wallis Chi-Square	p
Cyber bullying	Primary school	260.00	7.42	.060
	Secondary school	271.62		
	High school	302.40		
	Bachelor's degree	293.38		
Cyber victimization	Primary school	279.18	2.10	.552
	Secondary school	268.52		
	High school	292.37		
	Bachelor's degree	278.36		
Internet addiction	Primary school	270.29	2.84	.418
	Secondary school	275.85		
	High school	280.70		
	Bachelor's Degree	314.17		

internet addiction variables were found to have significant differences; in the cyberbullying variable, the 9th grade was significantly higher than the 11th grade and the 9th, 10th, and 12th grades had significantly higher internet addiction levels than the 11th grade.

Objective 7

Findings of the question: "Is there a significant difference in adolescents' level of internet addiction, cyberbullying, and cyber victimization in terms of gender?"

The findings of this sub-objective were calculated by Mann – Whitney U test.

Table 8 shows that there is no significant difference in cyberbullying according to gender (U = 39,794.00; $p > .05$); there were no significant differences in cyber victimization (U = 41,637.00; $p > .05$); and there is a significant difference in internet addiction (U = 31,274.50; $p < .05$). When the mean ranks are examined, it is seen that internet addiction is higher in female students than male students.

Objective 8

Findings of the question: "Is there a meaningful relationship between the time spent using internet by adolescents' cyberbullying, cyber victimization and internet addiction?"

Table 7.
Differences in Internet Addiction, Cyberbullying, and Cyber Victimization Variables According to the Educational Status of Fathers of Adolescents

	Class Levels $n = 582$	Mean Ranks	Kruskal – Wallis Chi-Square	p	Significant Differences
Cyber bullying	Grade 9	303.54	8.23	.041	9>11
	Grade 10	295.21			
	Grade 11	255.97			
	Grade 12	253.77			
Cyber victimization	Grade 9	286.76	3.55	.315	
	Grade 10	304.67			
	Grade 11	295.97			
	Grade 12	250.56			
Internet addiction	Grade 9	293.88	28.07	.000	9>11; 10>11; 12>11
	Grade 10	324.76			
	Grade 11	207.18			
	Grade 12	305.67			

Table 8.
Test of Differences in Internet Addiction, Cyberbullying, and Cyber Victimization According to Adolescents' Gender

	Gender $n = 584$	Mean Ranks	Rank Sums	Mann – Whitney U	p
Cyber bullying	Female	302.29	83,131.00	39,794.000	.149
	Male	283.78	87,689.00		
Cyber victimization	Female	289.41	79,587.00	41,637.000	.663
	Male	295.25	91,233.00		
Internet addiction	Female	333.27	91,650.50	31,274.500	.000
	Male	256.21	79,169.50		

Correlation for this sub-objective was calculated by Spearman's rho.

When Table 9 is examined, there is a moderate significant relationship between adolescents' time on the internet and internet addiction ($p < .05$); there was a low but significant relationship with cyberbullying ($p < .05$); and there is no significant relationship with cyber victimization ($p > .05$).

Table 9.
The Correlation Values of Adolescents' Time on the Internet and Cyberbullying, Cyber Victimization, and Internet Addiction

Spearman's rho	$n = 536$	Time on the Internet, Hour/Day
	Cyber bullying	.185**
	p	.000
	Cyber victimization	.074
	p	.085
	Internet addiction	.329**
	p	.000

*$p < .05$; **$p < .01$

Objective 9
Findings of the question: "Is there a significant difference in adolescents' internet addiction, cyberbullying and cyber victimization in terms of the behavior of families toward the control of internet use?"

The findings of this sub-objective were calculated by Kruskal – Wallis test.

When Table 10 is examined, there is no significant difference in cyberbullying according to the behavior of the children of the family regarding internet use [$\chi^2(2) = 0.06$, $p > .05$]; there was no significant difference in cyber victimization [$\chi^2(2) = 0.45$, $p > .05$]; and there was no significant difference in internet addiction [$\chi^2(2) = 3.33$; $p > .05$].

Discussion, Limitations, and Directions/Suggestions for Future Research

In this study, adolescents' internet addiction, cyberbullying, and cyber victimization were investigated in terms of their relationship between each other and gender, grade level, and family variables. The results of the study showed that there was a significant moderate relationship between cyberbullying and cyber victimization. Similarly, different studies indicate significant relationships between cyberbullying and cyber victimization variables in

Table 10.
The Differences Between the Behaviors of Families About Internet Use of Their Children and Internet Addiction, Cyberbullying, and Cyber Victimization

	The Behaviors of Families About Internet Use of Their Children $n = 581$	Mean Ranks	Kruskal – Wallis Chi-Square	p
Cyber bullying	Free	290.51	.06	.970
	Limiting	290.38		
	Prohibiting	295.45		
Cyber victimization	Free	288.82	.45	.797
	Limiting	293.62		
	Prohibiting	299.99		
Internet addiction	Free	281.08	3.33	.189
	Limiting	294.48		
	Prohibiting	322.35		

related literature (Antoniadou et al., 2016; Brewer & Kerslake, 2015).

In this research, moderate significant relationships were found between cyberbullying and internet addiction and also cyber victimization and internet addiction. It can be said that this finding is similar to the studies that examined the relationship between cyberbullying and the frequency of internet usage/duration (Li, 2007; Peker, 2015; You & Lim, 2016). These findings suggest that the time spent on the internet poses a risk for cyberbullying and cyber victimization.

As a result of the comparisons made in terms of SES, it is seen that internet addiction does not differ significantly according to the SES of adolescents. In the study by Kayri and Günüç (2016), it was revealed that the children of families with high SES were more likely to be addicted to the internet. However, in this study, cyberbullying and cyber victimization are significantly different according to the SES of adolescents. Erdur-Baker and Kavşut (2007) and Korkmaz (2016) found that there is no significant difference between SES and students' cyberbullying and victimization. Özer and Cemaloğlu (2016) showed that middle-income students had higher levels of cyber victimization.

While it was found that there was no significant difference in cyberbullying and cyber victimization and internet addiction levels of adolescents according to whether the parents of adolescents were together or separated in the research, Låftman et al. (2013) reached the conclusion that the students whose parents were separated practiced more cyberbullying and were exposed to more cyber victimization. Similarly, there was no difference in cyberbullying, cyber victimization, and internet addiction levels of adolescents in terms of educational status of mothers and fathers.

While there was a significant difference in cyberbullying and internet addiction levels of adolescents according to their grade level, there was no significant difference in cyber victimization. Few studies showed that as the grade level of students increases, bullying behavior increases (Balaban-Salı et al., 2015; Kowalski & Limber, 2007).

In the study, there were no significant differences in adolescents' cyberbullying and cyber victimization according to gender. Similarly, studies have shown that the risk of exposure to cyberbullying is equal for girls and boys (Antoniadou et al., 2016; Li, 2006; Patchin & Hinduja, 2006). However, some studies (Agatston et al., 2007; Keith & Martin, 2005) show that women do more cyberbullying, while others (Erdur-Baker & Kavşut, 2007; Li, 2007) show that men do more cyberbullying. The result of the study indicates that there is no significant difference in the cyberbullying and cyberbullying of adolescents according to gender and this can be associated with equal access to the internet for adolescents regardless of their gender.

In this research, it was determined that internet addiction was higher in female students than male students. While in some studies, it was stated that men were more likely to be addicted to the internet than women (Say & Batıgün, 2016; Yılmaz et al., 2014); another study (Leung, 2004) showed that females are more internet addicts than males. In addition, there are studies showing that internet addiction does not differ according to gender (Batıgün & Hasta, 2010). In this research, it is thought that female students have more internet addiction scores because they spend more time on social media, while male students prefer to play more computer games.

While there was no significant relationship between adolescents' time spent on the internet and their cyber victimization levels, there was a significant positive relationship between cyberbullying and internet addiction. There are similar results in the literature (Erdur-Baker & Kavşut, 2007; Hinduja & Patchin, 2008; Peker, 2015; You & Lim, 2016). In the study, it was found that there was a positive relationship between internet addiction levels of adolescents and time spent on the internet. These findings are similar to results of some studies in the literature (Günlü & Ceyhan, 2017; Üneri & Tanıdır, 2011).

In the study, it was found that there was no significant difference between cyberbullying, cyber victimization, and internet addiction levels of adolescents according to the attitudes of the families toward their children's internet using behavior. However,

the fact that families do not interfere with their children's use of internet may make adolescents risky for internet addiction, cyberbullying, and cyber victimization. Therefore, parents' intervention can be effective in protecting adolescents from bullying and addiction.

Nowadays, the accessibility of information technologies has made adolescents, who use these technologies, intensively risky in terms of cyberbullying, cyber victimization, and internet addiction. In this sense, it is thought that research results will be effective in creating awareness and directing intervention programs. However, the results of this study are limited to nearly 600 high school students and the data collection tools. Students with larger samples and different age groups will be beneficial to reveal the relations and the causes of internet addiction, cyberbullying, and victimization. Further studies on the subject and the use of a combination of quantitative and qualitative research methods will be useful in clarifying the situation and understanding the underlying causes of behaviors in question.

Ethics Committee Approval: Ethical committee approval was received from the Ethics Committee of Ankara University (Approval No: July 05, 2021/252).

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