Ilkogretim Online - Elementary Education Online, 2020; 19 (2): pp. 733-744
http://ilkogretim-online.org.tr
doi:10.17051/ilkonline.2020.693225

Investigating variables related to cyber bullying and exposure to cyberbullying behaviors in adolescents (TRNC sample)*

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Abstract. The aim of this study is to investigate whether cyber bullying behaviors differ in terms of different socio-demographic variables in the secondary adolescent students. The research was conducted in the Turkish Republic of Northern Cyprus in the 2017-2018 academic year. It was conducted in high schools and secondary schools. The sample of the study consists of 145 students aged 13-17 who are 8th, 9th, 10th and 11th grade students. 63.4% of the participants were female and 36.6% were male. It is a descriptive study using quantitative research method. In the study, Personal Information Form, Revised Cyber Bullying Inventory (Topçu and Erdur-Baker, 2018) were used. Independent sample t test, One Way Analysis of Variance was used. There were no significant differences between the variables such as age, number of siblings, family income level, parents' occupational status, maternal occupational status and cyberbullying/doing. Although there is no significant difference in age, cyberbullying is observed in 15 years of age.

Keywords: Cyber bullying, exposure to cyber bullying, doing cyber bullying, secondary school students

Received: 21.11.2019	Accepted: 15.01.2020	Published: 15.03.2020

INTRODUCTION

The term cyberbullying was first used by Canadian Canadian Bill Belsey to refer to bullying through technology. Violation of the rights and oppression have created the notion of "cyberbullying", a form of bullying that is accepted in today's world, or, as in some sources, "virtual bullying" (Tamer and Vatanartıran, 2014). Breaking and changing the passwords of social accounts, deleting the names in the contact list, sending offensive messages to the person's name and his / her friends, sending personal conversations to others, sending sexual or private photos- private messages to others, sending threatening e-mails and humiliating a person on a virtual chat platform can be accounted for the examples of cyber bullying (Aksaray, 2011). Research has revealed that both the victim and the bully are emotionally, socially, academically harmed.

It has been revealed that people who do not engage in cyber bullying and are not exposed to cyber bullying show less psychiatric symptoms than bullies and victims (Eroğlu and Güler, 2015). 9,6% of the children from Turkey who participated in the European Union Kids Online research expressed that they had encountered a sad situation on the internet. As the age increases in children, the rate of exposure to the risk increases accordingly. The research supporting this was carried out in 25 European countries and It was found that 14-10% of children aged 9-10; 33% of the children aged 11-12; 49% of the children aged 13-14 and 63% of the children aged 15-16 stated that they had faced some of the risks of the internet (Aydın, 2013). Virtual bullying causes the decline in victims' life quality and experiencing some psychological problems. In addition, it is an obstacle for them to continue a healthy life again. (Yenilmez and Seferoğlu, 2013). Children who are not informatics literate and who are at the

* This study consists of a part of the masters' thesis of the first author conducted under the supervision of Prof. Dr. Nergüz Bulut Serin.

basis of the research face mostly pedophilia cases, violent images and shares, harassment, and unconscious purchasing situations on their smart phones (Karahisar, 2014).

Cyber bullying is more common among peers and in schools. In this sense, it is very important to carry out preventive activities in schools. School employees, educators, parents and students should be informed about what they have to do before cyber bullying happens, the harmful effects of bullying on individuals and society, and the rights and responsibilities of the individual in the process (Baştürk Akça, Sayımer, Balaban Salı, and Bircan Ergün, 2014). Preventive efforts are more useful than taking action after psychological, sociological, familial and economic devastations occur. The more information an individual get about the characteristics, effects and factors of cyber bullying, the more it is useful in creating intervention programs. Researchers who carry out studies related to the topic should share their findings with educators and school administrators. It is also very important that these intervention activities take place with the participation of educators, guidance teachers, administrators and parents (Korkmaz, 2016).

Social networks are the environments where cyber-bullying and cyber-victimization mostly occur. Virtual-social internet environments, which enable users to communicate, create groups and pages and share via a secret or public social media account, are defined as social networks (Küçük and Şahin, 2015). As in the whole world, Turkey and North Cyprus are the places where smart phone use among students showed much increase compared to previous years. The fact that students are freer on this issue is considered as a factor that increases the incidence of cyber bullying. Nowadays, it is seen that with the increasing problematic internet use, the traditional bullying has been transferred to the virtual environment and the damage has reached significant dimensions (Yılmaz, 2017). This was discussed in Turkey for the first time in 2006 by the Ministry of Education in the symposium called "Violence and School: Violence against Children at School and Its Environment and Measures That Could Be Taken" (Yavuzer and Şirin, 2013). In the adolescent group in Turkey in recent years cyberbullying should both TRNC and researches were made abroad (Akbaba & Eroğlu, 2013; Altan & Eldeleklioğlu, 2019; Alikaşifoğlu, 2008; 2010; Austin & Sciarra, 2013; Baştürk, Akça, Sayımer, & Ergül, 2015; Burnukara & Uçanok, Çetinkaya, 2010; Dalmaç, Polat & Bayraktar, 2016; İnselöz Türkileri & Uçanok, 2013; Kapçı, 2004; Kroon, 2011; Çivilidağ & Cooper,2013; Mutluoğlu, 2007; Navarro, Ruiz-Oliva, Larrañaga & Yubero, 2015; Özer,2016; Peker, 2015; Serin, 2012; Serin, Serin & Özbaş, 2015; Serin,2011;Valkenburg & Soeters, 2001).

Attempts made in this regard is still insufficient in Turkey and TRNC (Baştürk et al., 2015). Preventing violence through media broadcasting, awareness raising publications, dissemination of centers where leisure time can be utilized, improving social environments of schools can be other topics to pay attention (Alikasifoğlu, 2008). There are many studies investigating cyber bullying in the world. As in the TRNC and Turkey, Studies around the world have focused on adolescents and school-age children. There may be some socio-demographic variables that trigger bullying behavior in the relevant literature or that reduce/ eliminate the frequency of this behavior positively. Gender related studies are found in the related literature. In a study, 60% of the victims of cyberbullying are girls and 52% of cyberbullies are male (Baker and Kavşut, 2007). Manap (2012) found that cyberbullying rates increased with the increase in grade level frequency of using internet and social media sites and socioeconomic level among primary school students. Akbaba and Eroğlu (2013) found that the low level of parental education of primary school children increased their cyberbullying behaviors. Ertaş (2012), in his study conducted in Northern Cyprus, it was found that there is no significant difference between exposure to cyber bullying with variables such as age, number of siblings, family income level, parental education level, parental occupation status. The reason why researchers focus on the school environment, adolescents, children and young people is that they assume that cyber bullying can be more prevalent in these environments and individuals.

The Aim of the Research

The first aim of the study is to investigate whether cyber bullying behaviors differ in terms of various socio-demographic variables in students of secondary education schools (secondary and high schools) of the Turkish Republic of Northern Cyprus Ministry of National Education.

Sub-Aims of the Research

1. What is the students' level of cyberbullying and their exposure to cyberbullying?
2. Is there a significant difference in cyberbullying behaviors of the students according to their gender?
3. Is there a significant difference in cyberbullying behaviors of the students according to their grade levels?
4. Is there a significant difference in cyberbullying behaviors of the students according to their age?
5. Is there a significant difference in cyberbullying behaviors of the students according to number of their siblings?
6. Is there a significant difference in cyberbullying behaviors of the students according to the income level of their family?
7. Is there a significant difference in cyberbullying behaviors of the students according to the profession of their parents?
8. Is there a significant difference in cyberbullying behaviors of the students according to marital status of their parents?

METHODS

Research Model

This section contains information about the research model, population and sample, data collection and data analysis.

This research is a descriptive study that uses a quantitative research method and examines cyber-bullying behaviors of secondary school students in schools affiliated to the Ministry of National Education of the Turkish Republic of Northern Cyprus in terms of various psycho-social variables. Quantitative method is a method based on numerical data and results (Kıncal, 2015). Descriptive studies aim at revealing the current situation of the problem. This method is used to test hypotheses, to reveal relationships and to describe the problematic situation in detail. (Büyüköztürk, Akgün, Karadeniz, Demirel and Kılıç, 2016).

Population and Sample

The population of this study consists of students in secondary schools (secondary and high schools) affiliated to the Ministry of Education of the Turkish Republic of Northern Cyprus in Nicosia and Kyrenia district in 2017-2018 academic year.

Sample

The sample of this study consists of 145 students in 8th, 9th, 10th and 11th grades studying in schools affiliated to the Ministry of National Education of the Turkish Republic of Northern Cyprus. 63.4% of the participants were female and 36.6% were male. The sample of the study was determined by convenience sampling method.

Data Collection Tools

Personal Information Form: It is a form in which students have questions about school, class, gender, age, number of siblings, the profession of their parents and their income level.

Revised Cyber Bullying Inventory: Developed by Topcu and Erdur-Baker (2018). It consists of two parallel forms, cyber bullying and cyber victimization, 28 items in the first form and 10 items in the last revised form. The form including 10 items was used in the study. In the inventory, participants indicate the level of agreement of each item using a 4-point Likert type 1 (Never) to 4 (more than three) ratings. In the inventory, there are some situations that people may encounter while using the internet. The participant marks how often he has experienced each situation in the last 6 months in the "Done to Me" section and how often he does this

behavior in the "I Have Done" section. Higher scores indicate more frequent cyberbullying. According to the results of the analysis conducted in this study, Cronbach's Alpha coefficient of the "Done to Me" section was calculated as 0,793, whereas Cronbach's Alpha coefficient of the "I Have Done" section was found to be 0,620.

Data Analysis

For the purposes of the study; percentages, one-way analysis of variance (ANOVA), t and LSD tests were applied.

FINDINGS

Table 1. *Descriptive statistics related to participants' exposure to cyber bullying levels*

Cyber Bullying I have been exposed to	N	$\bar{x}$	ss
1. capturing one's account password	145	1,46	0,81
2. sharing posts to humiliate someone by using his or her account without permission	145	1,16	0,50
3. threatening someone	145	1,44	0,88
4. insulting someone	145	1,87	1,16
5. sending offending and embarrassing messages	145	1,65	1,04
6. sharing a photo or video with others, with which the owner will be bothered when it is seen	145	1,23	0,67
7. sharing a secret with others without the owner's permission	145	1,45	0,88
8. gossiping	145	1,90	1,22
9. pretending to be someone else by creating a profile for him or her	145	1,32	0,82
10. creating humiliating website / page	145	1,12	0,53
Cyber Bullying I have been exposed to	145	14,60	5,20

In Table 1, when the were exposed to a low level of cyber bullying in general ($\bar{x}$= 14,60). It was determined that the most cyber bullying item that students were exposed to was gossiping with a mean of 1,90 and the lowest cyber bullying item was creating humiliating website / page with a mean of 1,12.

Table 2. *Descriptive statistics regarding cyber bullying levels of participants*

Cyber Bullying I have done	N	$\bar{x}$	ss
1. capturing one's account password	145	1,30	0,72
2. sharing posts to humiliate someone by using his or her account without permission	145	1,09	0,34
3. threatening someone	145	1,32	0,72
4. insulting someone	145	1,64	1,02
5. sending offending and embarrassing messages	145	1,40	0,83
6. sharing a photo or video with others, with which the owner will be bothered when it is seen	145	1,17	0,53
7. sharing a secret with others without the owner's permission	145	1,30	0,64
8. gossiping	145	1,71	1,10
9. pretending to be someone else by creating a profile for him or her	145	1,21	0,64
10. creating humiliating website / page	145	1,08	0,40
Cyber Bullying I have done	145	13,21	3,48

In Table 2, when descriptive statistics of cyberbullying levels that students did (by themselves) were examined, it was determined that students generally have a low level of cyber bullying ($\bar{x}$= 13,21). It was determined that the most common cyber bullying item was "insulting someone" with a mean of 1,64, and the lowest level of cyber bullying was creating a humiliating website / page" with mean of 1,08.

Table 3. *Independent sample t test results of the participants' cyber bullying levels according to gender variable*

	Gender	N	$\bar{x}$	ss	t	sd	p
I have been exposed to cyber bullying	Female	92	14,67	5,09	0,225	143	0,823
	Male	53	14,47	5,44			
I have done cyber bullying	Female	92	12,86	3,37	0,245	143	0,106
	Male	53	13,83	3,62			

As shown in Table 3, independent sample t-test was used to determine the difference between cyberbullying levels of the students according to their gender. According to the results of the test, cyberbullying levels of the students were not statistically significant according to their gender ($p>0.05$).

Table 4. *Results of ANOVA analysis of the differentiation of participants' cyber bullying levels according to grade variable*

	Grade	N	$\bar{x}$	ss	Source of Variance	Sum of Squares.	sd	Mean of Squares	F	p
I have been exposed to Cyber Bullying	8	55	14,20	5,24	Between Groups	58,4	3	19,5	0,715	0,545
	9	34	14,15	4,01	Within Groups	3838,4	141	27,2		
	10	39	14,90	5,43						
	11	17	16,12	6,64						
I have done Cyber Bullying	8	55	12,51	2,99	Between Groups	59,3	3	19,8	1,655	0,180
	9	34	14,15	4,15	Within Groups	1685,1	141	12,0		
	10	39	13,23	3,42						
	11	17	13,59	3,45						

As shown in Table 4, ANOVA analysis was performed to determine the difference between the cyberbullying levels of the students according to their grade level. According to the results of the analysis, no statistically significant difference was found between the cyber bullying levels of students according to their grade.

Table 5. *Results of ANOVA analysis of the differentiation of participants' cyber bullying levels according to age variable*

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	Age	N	$\bar{x}$	ss	Source of Variance	Sum of Squares.	sd	Mean of Squares	F	p
I have been exposed to Cyber Bullying	13	12	14,33	6,08	Between Groups	63,5	4	15,9	0,580	0,678
	14	46	13,89	4,96	Within Groups	3833,3	140	27,4		
	15	37	15,14	4,10						
	16	33	14,42	5,51						
	17	17	15,88	6,83						
I have done Cyber Bullying	13	12	12,08	3,85	Between Groups	130,7	4	32,7	2,836	**0,027***
	14	46	12,48	2,68	Within Groups	1613,6	140	11,5		
	15	37	14,73	4,04						
	16	33	13,24	3,35						
	17	17	12,65	3,35						

*p<0.05

Table 6. *Results of ANOVA analysis of the differentiation of participants' cyber bullying levels according to the number of siblings*

	The Number of Siblings	N	$\bar{x}$	ss	Source of Variance	Sum of Squares.	sd	Mean of Squares	F	p
I have been exposed to Cyber Bullying	No sibling	15	15,07	5,74	Between Groups	134,0	3	44,7	1,674	0,175
	1	76	13,93	5,35	Within Groups	3762,8	141	26,7		
	2	41	14,80	4,41						
	3 or more	13	17,31	5,62						
I have done Cyber Bullying	No sibling	15	13,53	3,52	Between Groups	57,5	3	19,2	1,602	0,192
	1	76	12,72	3,11	Within Groups	1686,9	141	12,0		
	2	41	13,49	3,99						
	3 or more	13	14,85	3,56						

As shown in Table 5, There is a significant difference between cyberbullying levels of students according to their age ($F_{(4-140)}$= 2,836; p= 0,027 p<0.05). LSD test was performed to examine the difference between the groups. A significant difference was found between the students aged 15 and 13, 14 and 17. 15-year-old students ($\bar{x}$ =14,73) have higher cyberbullying levels than 13-year-olds ($\bar{x}$=12,08), 14 year-olds ($\bar{x}$=12,48), and 17 year-olds ($\bar{x}$=12,65). Comparison of Cyber Bullying and Victimization Levels of Participants According to the Number of Siblings.

As shown in Table 6, ANOVA analysis was performed to determine the difference in cyberbullying levels of students according to the number of their siblings. According to the results of the analysis, cyberbullying levels of students do not show statistically significant differences according to the number of siblings. Comparison of Cyber Bullying and Victimization Levels of Participants According to the Income Level of Their Family

Table 7. *Results of ANOVA analysis of the differentiation of participants' cyber bullying levels according to the income level of their family*

	Income Level	N	$\bar{x}$	ss	Source of Variance	Sum of Squares.	sd	Mean of Squares	F	p
I have been exposed to Cyber Bullying	Low	15	15,80	5,45	Between Groups	30,1	2	15,1	0,553	0,577
	Medium	43	14,77	5,45	Within Groups	3866,7	142	27,2		
	High	87	14,31	5,06						
I have done Cyber Bullying	Low	15	12,27	2,87	Between Groups	15,8	2	7,9	0,651	0,523
	Medium	43	13,21	3,45	Within Groups	1728,5	142	12,2		
	High	87	13,38	3,60						

As shown in Table 7, ANOVA analysis was performed to determine the difference in cyberbullying levels of students according to the income level of their family. According to the results of ANOVA analysis, cyberbullying levels of students do not show statistically significant difference according to income level.

Table 8. *Results of ANOVA analysis of the differentiation of participants' cyber bullying levels according to the the occupational status of their mothers*

	Occupation of Mother	**N**	$\bar{x}$	**ss**	Source of Variance	Sum of Squares.	sd	Mean of Squares	**F**	**p**
I have been exposed to Cyber Bullying	Educator	20	12,35	3,70	Between Groups	236,7	3	78,9	3,039	**0,031***
	Private Sector	34	14,71	5,86	Within Groups	3660,1	141	26,0		
	Public Officer	24	13,17	2,93						
	Self Employed	67	15,73	5,60						
I have done Cyber Bullying	Eğtc.	20	11,65	2,60	Between Groups	91,3	3	30,4	2,596	0,055
	Özel Sekt.	34	12,76	3,32	Within Groups	1653,1	141	11,7		
	Devl. Mem.	24	13,13	3,33						
	Ser. Çal.	67	13,94	3,70						

*p<0.05

As shown in Table 8, cyberbullying levels of students show statistically significant differences according to occupational status of their mothers ($F_{(3-141)}$= 3,039, p= 0,031 p<0.05). LSD test was performed to examine the difference between the groups. According to this, there is a significant difference between self-employed and educators. The level of cyberbullying

among students whose mothers are self-employed ($\bar{x}$ = 15.73) was found to be higher than those whose mothers are educator ($\bar{x}$ = 12.35).

Table 9. *Results of ANOVA analysis of the differentiation of participants' cyber bullying levels according to the the occupational status of their fathers*

	Occupation of Father	N	$\bar{x}$	ss	Source of Variance	Sum of Squares.	sd	Mean of Squares	F	p
I have been exposed to Cyber Bullying	Educator	11	11,55	2,34	Between Groups	203,9	3	68,0	2,596	0,055
	Private Sector	25	16,52	6,49	Within Groups	3692,9	141	26,2		
	Public Officer	37	14,11	5,07						
	Self Employed	72	14,65	4,90						
I have done Cyber Bullying	Educator	11	11,09	1,81	Between Groups	56,3	3	18,8	1,566	0,200
	Private Sector	25	13,68	3,48	Within Groups	1688,1	141	12,0		
	Public Officer	37	13,32	3,18						
	Self Employed	72	13,32	3,75						

In Table 9, ANOVA analysis was performed to determine the differences in cyberbullying levels of students according to their fathers' occupational status. According to the results of ANOVA analysis, cyberbullying levels of students do not show statistically significant difference according to their fathers' occupational status.

Table 10. *Independent sample t test results for cyber bullying levels of the participants according to marital status of their parents*

	Marital Status	n	$\bar{x}$	ss	t	sd	p
I have been exposed to Cyber Bullying	Married	114	14,24	4,95	1,621	143	0,107
	Divorced	31	15,94	5,94			
I have done Cyber Bullying	Married	114	13,12	3,47	0,602	143	0,548
	Divorced	31	13,55	3,54			

In Table 10, Independent sample t-test was used to determine the differences in cyberbullying levels of the students according to their parents' marital status. According to the results of the test, cyberbullying levels of the students do not show statistically significant differences according to their parents' marital status.

DISCUSSION and CONCLUSION

When the results of the study examined in general, it was determined that the students were exposed to a low level of cyber bullying. It was determined that the most common cyber bullying was “gossiping”, and the lowest cyber bullying was “creating a humiliating website/webpage”. It was determined that students generally exposed others to a low level of cyber bullying. It was also determined that the cyber bullying item that students exposed most was “insulting someone” and the lowest was “creating a humiliating website/webpage. In this

study, no statistically significant difference was found in the cyberbullying levels of the participants in terms of gender variable. This result is not parallel to the studies in the literature. For example, as in Çetinkaya's (2010) studies, it was found that males were more likely to expose cyberbullying than females and were more likely to be exposed to it. The opposite result was emphasized in the study of Soydaş (2011). The research, in which the rate of cyber victimization of girls and bullying rates of boys are high, is the majority (Burnukara and Uçanok (2010), Baker and Kavşut (2007). Cyberbullying levels of the students did not show statistically significant difference according to their grade levels. Kapçı (2004), in his study, found no significant differences in terms of exposure to bullying and socio-economic level, grade level and gender variables. This result was found to be parallel with the results of some sources such as Baker and Kavşut (2007), but not with Kowalski and Limber (2007), Manap (2012) and Soydaş (2011). According to Kağan and Ciminli (2016), for example, cyber bullying increases with the increase in grades. The reason why there is no difference in gender variable in this study may show that there is no sharp sexual identity taboos among young people in Northern Cyprus, and this finding may be generalized to adolescents in Northern Cyprus.

In this study, it was found that cyberbullying levels of students aged 15 were higher than those of age 13, 14 and 17. This result is almost incompatible with the literature because generally sources such as Soydaş (2011), Burnukara and Uçanok (2010) found that there is no increasing cyber bullying experience according to age. Erdur Baker (2007), Çivilidağ and Cooper (2013), Burnukara and Uçanok (2010) found that there was no significant relationship between the two variables. According to the results of this study, there is no statistically significant difference in the cyberbullying levels of the students according to the number of siblings. This situation is generally in agreement with the literature. It can be foreseen that crowded families will have low level of childcare and this may create a disadvantage in terms of getting involved in cyber bullying. Most sources, including this study, have shown the opposite. The studies reaching this finding can be listed as Çifçi (2010), Kale and Demir (2017) and Ertaş (2012). In some studies such as Serin (2012), the level of bullying among children with 4 siblings differentiated while it did not in other variables. For example, in some studies such as Özer (2016), it was emphasized that the number of siblings is not a determining factor, and that there are sources mentioning that the experience of bullying increases with the increase in the number of siblings. The study of Mutluoğlu (2007) was another study emphasizing the increase in cyber bullying behavior in crowded families.

According to the results of this study, cyberbullying levels of students do not show statistically significant differences according to income level. This is in line with most literature such as Erdur Baker and Kavşut (2007), Çifçi (2010), Ertaş (2012), Yaman et al. (2013), Kapçı (2004), Dalmaç Polat and Baytaktar (2016). There are also studies such as Manap's (2012) study stating that bullying increases with the increase in socio-economic level. On the other hand, some studies that refer to studies abroad such as Mutluoğlu (2007) put forward that the low-income level is a variable that triggers cyber bullying. TRNC is a place where the middle class is in the majority and the welfare level is relatively high. In this sense, social class cases such as income level may no longer be a determinant for the sample.

In this study, it was found that the level of cyber bullying among the students whose mothers' are self- employed was higher than that of the educators. On the other hand, cyberbullying levels of the students do not show statistically significant difference according to father's occupational status. This is not consistent with the literature in terms of maternal occupational status. Because, generally in the studies such as Ertaş (2012), Çifçi (2010), Kale and Demir (2017), no two-way relationship was found between cyber bullying levels of the participants and occupational status of their parents. However, it is emphasized in many studies conducted by researchers such as Manap (2012), Mutluoğlu (2007), Yaman et al. (2013) that, generally, the low social level triggers cyber bullying. No statistically significant difference was found in the cyberbullying levels of the students according to the marital status of their parents. This result is not in line with the literature. Conversely, as stated in the studies of researchers such as Mutluoğlu (2007), Hiloğlu (2009), Akca and Sayımer (2017), the level of bullying behavior increases among students whose parents are divorced. Mutluoğlu (2007), in his study

with primary school students, stated that adolescents were most frequently verbally bullied in Northern Cyprus, followed by physical, emotional, sexual and other bullying, respectively.

There was no significant difference between male and female students in terms of cyberbullying exposure and cyberbullying behaviors. This result is important in terms of showing that gender difference is not important in cyberbullying exposure and cyberbullying behaviors. This finding is important to show that both genders are at risk in terms of cyber bullying. It was determined that the levels of cyberbullying exposure of students who stated their mothers' occupation as self-employed were higher than those who stated their mothers' occupation as educators. With regard to this, it is necessary to include the mothers in the education programs on preventing cyber bullying that will be held under the control of school guidance services. Cyberbullying behaviors of 15 year old students were higher than 13, 14, and 17 year olds. This age group is the 1st grade in high school. This age group in adolescence should be investigated particularly well. Effective guidance should be given to this age group in adolescence and all students to prevent abuse of technology and correct use of technology by the school guidance service. Psycho-education programs should be applied by school guidance services to this group, which includes 9th and 10th grade students and who have problems in leisure time management. They should be informed about time management, directed to useful activities such as sports, and informed about technology-induced damages.

The general and accepted opinion is that a solution should be brought before the risky behaviors become chronic. Preventive studies are the most rational way. It shows the importance of intervening before these behaviors turn into serious consequences by detecting them particularly during adolescence, and using systematic support methods in preventive treatment processes. Seminars, conferences and in-service trainings are recommended for school administrators, teachers and families regarding cyber bullying. It is important to prepare preventive programs developed by experts such as emotion control, communication skills and social skills etc. For future studies on a similar topic, it is recommended to work with a wider sample and age group. In addition, qualitative studies can be conducted to express their views on cyber bullying.

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