

# Preventing and Coping Strategies for Cyber Bullying and Cyber Victimization

Erdinc Ozturk, Gizem Akcan

**Abstract**—Although there are several advantages of information and communication technologies, they cause some problems like cyber bullying and cyber victimization. Cyber bullying and cyber victimization have lots of negative effects on people. There are lots of different strategies to prevent cyber bullying and victimization. This study was conducted to provide information about the strategies that are used to prevent cyber bullying and cyber victimization. 120 (60 women, 60 men) university students whose ages are between 18 and 35 participated this study. According to findings of this study, men are more prone to cyber bullying than women. Moreover, men are also more prone to cyber victimization than women.

**Keywords**—Cyber bullying, cyber victimization, coping strategies.

## I. INTRODUCTION

TECHNOLOGICAL developments provide some opportunities like discovering the world, learning and having fun [1]. Also, they catch attention of people via media. However, they cause the easily access to some web sites that are related with sex, violence, substance use [2]. Although information and communication technologies provide new, comfortable and useful places, they cause some problems like cyber bullying and cyber victimization [3]. Some researches supported that cyber victimization causes unjust suffering. People are subjected to harmful behaviors via information and communication technologies and they have both financial and emotional damage [4]. People who are cyber victims reported that their experiences were very stressful [3]. Cyber bullying is defined as using information and communication technologies repeatedly to harm people intentionally [2]. It can be said that cyber bullying harm people via SMS (Short Message Service), taking photos and videos with mobile phone camera, harassing people via mobile phones, chat rooms, e-mail, web sites [5].

Campbell supported that cyber bullying has been common in all over the world especially in England, ABD, Canada, and Japan [6]. Furthermore, according to the results of a study, cyber bullying and cyber victimization have negative effects on psychosocial development and academic achievement of youths [1]. Moreover, Sahin et al. also found that cyber bullying damages personal, social, emotional and psychological development of teenagers [7].

There are some research findings in world magazines. For example, a girl who was 9 years old got messages like ‘I am

coming to kill you’ in her computer in America. Another little girl who was 12 years old got frightening and racist messages via school computer. Both of the little girls who used computer faced with frightening cyber bullying [6]. Besides them, a little girl, Megan, was 13 years old and she was harassed with a social communication site in America and she attempted to suicide. The harasser was a friend of Megan’s mother. The harasser chatted with Megan as someone else and got information about her. Then, he used that information to humiliate her traducingly [8].

According to some studies, boys are more prone to be cyber bullier than girls [9]. However, Kowalski and Limber supported that girls are more prone to be cyber victim than boys [10]. Furthermore, Ceyhan and Gurcan said that the duration of internet use is also related with being cyber bullier and cyber victim that if duration of internet use is too long, the effects of cyber bullying and cyber victimization will increase [11]. Moreover, both cyber bullying and cyber victimization leads to lots of problems in the lives of people. Ybarra supported that people who experienced major depression are more prone to be cyber victim. [12].

Juvonen and Gross supported that adolescents use some different methods to prevent cyber bullying [13]. The most used method is to delete the pin of screen. Besides them, the characteristics of cyber bullying should be learned. Li also supported that people who work in schools, teachers and directors should work together to prevent cyber bullying [14].

According to the results of a study, there are different ways to prevent cyber bullying and protect adolescences in internet [13]. Breaking the code of computers is the most common way to prevent cyber bullying. Participants of this study reported that 33% of them did not give their codes to friends who are in their friend lists, 26% of them changed their codes, 25% of them warned their bulliers. Moreover, it was found that some youths know what they should do to be protected from cyber bullying and they use their technological knowledge and avoid hazardous sites to protect themselves from cyber bullying.

Worthen supported that preventing and coping programs should be developed to protect students from negative effects of cyber bullying [15]. Instead of waiting the progress of problem, trying to prevent the problems at the beginning will be helpful to protect students from cyber bullying. Prevention is better than acting after the events that it will be helpful to protect students from emotional and economical effects of bullying. Furthermore, it can be said that getting information about the features of cyber bullying will be helpful and effective to develop prevention and coping programs. Besides them, Li supported that preventing and coping programs

Erdinc Ozturk, PhD, is with the Istanbul University Institute of Forensic Sciences, Istanbul, Turkey.

Gizem Akcan, MA, Research Assistant is with the Halic University, Istanbul, Turkey (e-mail: akcan.gizem@hotmail.com).

should be organized with participation of school, family and society [14].

The aim of this study is providing information about the strategies that are used to prevent cyber bullying and cyber victimization. 120 (60 women, 60 men) university students that are 18-35 ages are included as participants in this study.

## II. METHOD

### A. Participants

This study is a quantitative study and descriptive method was used. Participants were included from university students who live in Istanbul. This study was applied to 120 (60 males, 60 females) students who study in Haliç University and Istanbul University in Psychology Department, Computer Engineering Department and Department of Business 1, 2, 3, 4 classes in 2015-2016 school year. Students participated to the study voluntarily. The ages of participants are between 18 and 25.

### B. Measures

Demographic information form, cyber bullying and cyber victimization scales were applied to students. Demographic information form was developed by the researcher. Cyber Bullying and Cyber Victimization Scales were developed by [4].

### C. Procedure and Data Analysis

SPSS 17.0 program was used to analyze the data. To test whether cyber bullying and cyber victimization is related with gender or not, Mann Whitney U Test was used. Moreover, ANOVA was applied to test whether cyber bullier scores of people are significantly different in terms of duration of daily internet usage or not. Also, LSD test was applied to determine the resource of the difference.

## III. RESULTS

### A. Results Related with Cyber Victimization and Cyber Bullying and Demographic Information

Totally, 120 (60 boys and 60 girls) were participated to the study. The ages of them are between 18 and 35. The mean age is 19.5. 23 of them are 18-20, 83 of them are 21-25, 12 of them are 26-30 and 2 of them are 31-35 ages.

TABLE I  
AGE OF PARTICIPANTS

Group	Frequency	Percent	Valid Percent	Cumulative Percent
18-20	23	16,7	19,2	19,2
21-25	83	60,1	69,2	88,3
26-30	12	8,7	10,0	98,3
31-35	2	1,4	1,7	100,0
Total	120	87,0	100,0	

TABLE II  
CYBER SETTING THAT CAUSE CYBER BULLYING (F) (%)

Cyber setting that cause cyber bullying	Cyber Victims (f)	Cyber Bulliers (f)
Facebook	35	15
Short message via mobile phone	30	17
Calling with mobile phone	14	9

As shown in Table II, social networking site 'Facebook' is the most common cyber setting that cyber bullying incidences have been most frequently occurred in there. 35 of the participants reported that they experienced cyber bullying in 'Facebook' and 15 of them reported that they are cyber bullies in 'Facebook'. Moreover, 30 of the participants reported that they experienced cyber bullying via short messages with mobile phones, and 14 participants reported that they experienced cyber bullying via phone callings with mobile phones.

TABLE III  
ANOVA RESULTS

Victim or Bullier	Duration (hour)	n	Level of Variable					Meaningful
			X	S	sd	F	p	
Being Cyber Victim	1	32	10.43	2.37	4.331	1.07	.36	-
	2	26	10.33	2.48				
	3	23	11.02	2.95				
	4	11	10.83	3.40				
	5 and more	28	11.2	33.28				
Being Cyber Bullier	1	32	9.64	2.76	4.331	2.95	.02	1-5
	2	26	9.85	4.02				
	3	23	10.42	5.46				
	4	11	9.51	1.38				
	5 and more	28	11.72	5.94				

Table III shows that being cyber bullier scores of people are significantly different in terms of duration of daily internet usage [ $F(4-331)=2.95$ ;  $p<.05$ ]. LSD test was applied to determine the resource of difference and according to the results of the test, the scores of people whose daily internet usage duration is five or more than five hours have higher scores ( $X=11.72$ ) than people whose daily internet usage duration is one ( $X=9.64$ ), two ( $X=9.85$ ) and four ( $X=9.51$ ) hours. According to the this finding, it can be said that students who use internet during five and more than five hours in a day they are more prone to being cyber bullies.

### B. Differentiation of Cyber Bullying According to Gender

TABLE IV  
DIFFERENTIATION OF CYBER BULLYING ACCORDING TO GENDER  
U TEST RESULTS

Group	n	Mean of Row	Sum of Row	U	P
Female	60	52.63	3158.00	1328.00	.002
Male	60	68.37	4102.00		

There is significant difference according to gender,  $U=1328$ ,  $p<.05$ . The cyber bullying scores of boys are higher than girls.

### C. Differentiation of Cyber Victimization According to Gender

TABLE V  
DIFFERENTIATION OF CYBER BULLYING ACCORDING TO GENDER  
U TEST RESULTS

Group	n	Mean of Row	Sum of Row	U	P
Female	60	43.50	2610.00	780.000	.000
Male	60	77.50	4650.00		

There is significant difference between boys and girls,  $U=780$ ,  $p<.05$ . Cyber victimization scores of boys are higher than girls

#### IV. DISCUSSION

It can be said that students are very familiar with technology and the majority of them own cellular phones and have internet access at home. According to a study that was organized with students, cyber bullying was a problem at schools for female students but male students were somewhat less likely to agree that this was a problem [11]. It was also found that the majority of the incidents occurred outside of the school day, with the exception of cyber bullying via text messaging. Moreover, students were unlikely to report cyber bullying to the adults at school, as it frequently occurs via cellular phone use, and it is against the school policy to have cellular phones on during school hours [16]. Furthermore, students also indicated that they did not trust the adults at school to help themselves if they experience cyber bullying [17]. According to another study, students were more likely to report cyber bullying to parents than adults at school, particularly if the bullying was threatening in nature [18]. It can be said that students were reluctant to report cyber bullying to parents because they feared the loss of online privileges. Besides them, in a study, students were asked whether they could circumvent the school filters to access Myspace or other social networking sites, e-mail, or instant messaging programs and it was found that students were able to describe ways to effectively circumvent the school district filters [16]. Moreover, it can be said that this information can be true for high school level students, but some middle school students cannot know how to circumvent filters [12]. It was found in another study that was designed by Wang et al. that the student's thought that no one else was on MySpace or instant messaging at the same time and there was not much incentive to go to these sites during the school day [19]. Moreover, it was found that students were able to know strategies like blocking the sender or ignoring the message rather than responding in a manner that would encourage retaliation to deal with cyber bullying [20].

According to the results of this study, cyber bullying scores of boys are higher than girls. It can be said that boys are more prone to be cyber bullier than girls. Peker et al. also supported this finding that boys experience more cyber bullying than girls [21]. However, there are some studies in the literature that support that there is not significant difference between boys and girls according to cyber bullying [22]. Moreover, according to the results of this study, there is significant difference between boys and girls according to cyber victimization. Boys are experienced more cyber victimization than girls. Wolak et al. also supported this finding that boys are more prone to be cyber victim than girls [20]. However, there are some different findings that girls experience more cyber victimization than boys [23]. Besides them, according to some studies, there are not significant difference between boys and girls in terms of cyber victimization [23], [24]. Besides them, Tokunaga supported that the trend with age across studies is

for a curvilinear relationship for victimization, with the greatest incidence at seventh and eighth grades (around 13-15 years) [8]. Involvement in cyberbullying continues through adult life, but does decrease after older adolescence [24]. The students reported that older students were more often the perpetrators. Younger ones do not tend to have these mobiles. They do not know much about it.

Juvonen and Gross supported that cyber bullying is not restricted with age [13]. It can be experienced from primary school to adolescence. It can be experienced in all age groups; however, according to the results of the studies, children were seen as riskier [10]. Some researchers supported that students who are 12-14 years old and have primary education have more risks [14]. Students who are 12-14 years generally play games in the internet and join to the chat sites. It can be said that that is why they have more risks to meet with strangers. However, in older ages, they interest in education. Tokunaga also supported that the area of gender differences as more complex and "fraught with inconsistent findings" [8]. Researchers found that boys more involved than girls; few or no significant differences [5] and girls being more involved than boys [25]. Nonetheless, there may be relatively greater involvement of girls in cyberbullying, just as there is in relational bullying, when compared to traditional physical (mainly boys) or verbal bullying. As a summary, researchers suggest that adolescence is a peak period for involvement in cyberbullying [26]. Compared to traditional bullying, girls may be relatively more involved, but gender differences remain inconsistent across studies, probably due to different samples, methodologies (definitions, and types of cyberbullying assessed) and historical changes such as increased use of social networking in girls especially [22].

Psychologists and consultants in schools should develop awareness, prevention and intervention programs to deal with cyber bullying. They should behave as leaders to prevent cyber bullying and work together with families. Besides, students should be learned how to use internet, computers and other communication tools confidentially and responsibly. Students also should know related sources and their addresses to apply if they need. Furthermore, parents do not have enough information about modern communication tools and they do not know technological developments [27]. That is why, there are differences between parents and children and parents do not communicate with their children. So, parents cannot notice cyber bullying experiences of their children. Parents should improve themselves and they should communicate with their children clearly [22]. Parents should inform their children about how to use internet and other communication tools properly to their development levels, restrict and control them.

Beran and Li also supported that parents should improve themselves to have enough information about technological tools to control and train their children about internet and other technological tools [5]. Most of the students reported that their parents do not have enough information about technology and computer. According to Kowalski and Limber, 89% of the students use technologic tools better than

their families, 18% of families also reported that they use technology very well [10]. Worthen designed a study with students and it was found that 38% of the children reported that their families have enough information about technology [15]. Besides, 12% of adolescents said that their families educate and give information them about negative effects of technology. Furthermore, some teachers do not aware of the problems and risks related with technology [1]. Awareness related with cyber victimization should be created among teachers. Awareness has been increasing day by day but there are also some teachers that they do not have information about cyber bullying. Some teachers are aware of the risks of cyber bullying but little of them think that students can harass each other via technology [28].

Cyber bullies use technological devices that they can harass victims more rapidly than traditional bullies [29]. Moreover, both traditional and cyber bullies want to frighten and distress the victims [6]. Teachers should be aware of the problems related with cyber bullying and attempt to prevent it.

There are lots of programs to prevent cyber bullying. The program which was developed by Olweus is the most common one [9]. The aim of this program is creating awareness towards cyber bullying and giving information to students [30]. It can be said that cooperation is very necessary to prevent cyber bullying in schools. Moreover, students should be educated about effective problem solving, communication skills and students should learn to be kind towards others [31].

#### REFERENCES

- [1] Beran, T., & Li, Q. (2005). Cyber-harassment: A study of a new method for an old behavior. *Journal of educational Computing Research*, 32(3), 265-277.
- [2] DeHue, F., Bolman, C., & Völlink, T. (2008). Cyberbullying: Youngsters' experiences and parental perception. *CyberPsychology & Behavior*, 11(2), 217-223.
- [3] Neary, A. & Joseph, S. (1994). Peer victimization and its relationship to self-concept and depression among schoolgirls. *Personality and Individual Differences*, 16, 183-186.
- [4] Arıca, O. T., Kınay, H., & Tanrıku, T. (2012). Siber zorbalık ölçeğinin ilk psikometrik bulguları. *Hasan Ali Yücel Eğitim Fakültesi Dergisi*, 9(1), 101-114
- [5] Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of child psychology and psychiatry*, 49(4), 376-385.
- [6] Campbell, M.A. (2005). Cyberbullying: An old problem in a new guise? *Australian Journal of Guidance and Counseling*, 15(1), 68-76.
- [7] Şahin, M., Aydın & B. Sarı, S. V. (2012) Cyberbullying, cyber victimization and psychological symptoms: A study in adolescent. *C.U. Faculty of Education Journal*, 41/1, 53-59.
- [8] Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in human behavior*, 26(3), 277-287.
- [9] Olweus, D. (1999). In PK Smith, Y. Morita, J. Junger-Tas, D. Olweus, R. Catalano, and P. Slee (Eds.). *The nature of school bullying*, 28-48.
- [10] Kowalski, R. M., & Limber, S. P. (2007). Electronic bullying among middle school students. *Journal of adolescent health*, 41(6), S30.
- [11] Ceyhan, E.; Ceyhan, A.A. & Gürçan A. (2007) The validity and reliability of the problematic internet usage scale. *Educational Sciences: Theory And Practice*, Vol.7, No:1, 411-416
- [12] Ybarra, M. L. (2004). Linkages between depressive symptomatology and Internet harassment among young regular Internet users. *Cyber Psychology & Behavior*, 7(2), 247-257.
- [13] Juvonen, J. and E.F. Gross (2008) Extending the school grounds bullying experiences in cyberspace, *Journal of School Health* 78(9): 496-505.
- [14] Li, Q. (2006) Cyberbullying in schools: A research of gender differences, *School Psychology International* 27, 157-170
- [15] Worthen, M. (2007). Education policy implications from the expert panel on electronic media and youth violence. *Journal of Adolescent Health*, 41, 61-62.
- [16] Agatston, P. W., Kowalski, R., & Limber, S. (2007). Students' perspectives on cyber bullying. *Journal of Adolescent Health*, 41(6), 59-S60.
- [17] Cook, C. R., Williams, K. R., Guerra, N. G., & Kim, T. E. (2010). Variability in the prevalence of bullying and victimization. *The handbook of bullying in schools: An international perspective*, 347-362
- [18] Çelen, F. K., Çelik, A., & Seferoğlu, S. S. (2011). Çocukların internet kullanımları ve onları bekleyen çevrim içi riskler. *Akademik Bilişim*, 2-4.
- [19] Wang, J., Iannotti, R. J. & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent health*, 45(4), 368-375.
- [20] Wolak, J., Mitchell, K., & Finkelhor, D. (2007). Does online harassment constitute bullying? An exploration of online harassment by known peers and online-only contacts. *Journal of Adolescent Health*, 41, 51-58
- [21] Peker A., Eroğlu Y., & Çitemel, N. (2012). Boyun eğici davranışlar ile siber zorbalık ve siber mağduriyet arasındaki ilişkide cinsiyetin aracılığının incelenmesi. *Uluslararası İnsan Bilimleri Dergisi*, 9(1), 205-221.
- [22] Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of suicide research*, 14(3), 206-221.
- [23] Mesch, G.S. (2009). Parental mediation, online activities, and cyberbullying. *Cyberpsychology, Behavior, and Social Networking*, 12(4), 387-393.
- [24] Topçu, Ç. Baker, Ö.E., Çapa & Aydın, Y. (2008). Examination of cyber bullying experiences among Turkish students from different school types. *Cyber Psychology & Behavior*, 11, 643-648
- [25] Ybarra, M.L. & Mitchell, K. J. (2004). Online aggressor/ targets, aggressors, and targetst: A comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry*, 45, 1308-1316.
- [26] Rivers, I., & Noret, N. (2010). Findings from a five-year study of text and email bullying. *British Educational Research Journal*, 36(4), 643-671.
- [27] Dursun, Ö. Ö. & Akbulut, Y. (2010). Investigation of cyberbullying victimization and communication styles in a hybrid learning environment. Paper presented at IODL & ICEM International Joint Conference and Media Days, Eskisehir, Turkey. 206-221.
- [28] Yıldırım, İ. (2004). Lise öğrencilerinde boyun eğici davranışların yaygınlığı. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 26, 220-228.
- [29] Yılmaz, H. (2010). An examination of preservice teachers' perceptions about cyberbullying. *Eurasia Journal of Mathematics, Science & Technology Education*, 6 (4), 263-270
- [30] Yıldırım, İ. and Ergene, T. (2003). Lise son sınıf öğrencilerinin akademik başarılarının yordayıcısı olarak sınav kaygısı, boyun eğici davranışlar ve sosyal destek. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 25, 224-234
- [31] Erdur-Baker, Ö., & Kavşut, F. (2007). A new face of peer bullying: Cyber bullying. *Journal of Euroasian Educational Research*, 27, 31-42.