CYBERBULLYING VICTIMIZATION: A STUDY OF MIDDLE AND HIGH SCHOOL STUDENTS
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SİBER ZORBALIK MAĞDURİYETİ: ORTAOKUL VE LİSE ÖĞRENCİLERİYLE BİR ÇALIŞMA

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ABSTRACT: Cyberbullying, a new growing phenomenon due to society's heavy reliance on advanced technologies is an intricate and ever-evolving form of bullying. Little is known about how cyberbullying is perpetrated at the middle and high school levels. The current study aims to investigate the prevalence, impact, and differential experience of cyberbullying victimization comprehensively. The participants of the study consist of 1752 middle and high school students in İstanbul. The cyber victimization inventory and personal information questionnaire were used to gather research data. These surveys examined the relationship between cyber victimization and technology use and students' sociodemographic information. As a result of the research, it was observed that male students experienced significantly higher cyber victimization than females. Also, the results demonstrated that 10th and 11th grade students have experienced more cyber victimization compared to 6th, 7th, 8th, and 9th grade students. When internet access was not supervised by the parents and students' time of internet usage increased, it was found that they have experienced cyber victimization significantly higher. This research contributes to the literature in terms of revealing cyber victimization and related factors. Understanding the level of cyber victimization that children are exposed to and the factors related to victimization are important for reinforcing studies to prevent bullying behaviors in the online environment.

Keywords: Cyberbullying, cyber victimization, internet, technology, victimization.

ÖZ: Siber zorbalık, toplumun ileri teknolojilere olan yoğun bağımlılığı nedeniyle büyüyen yeni bir fenomen, zorlayıcı ve sürekli gelişen bir zorbalık şeklidir. Orta ve lise düzeyindeki ergenlerde siber zorbalığın nasıl sürdürüldüğü hakkında çok az şey bilinmektedir. Bu çalışmanın amacı, siber zorbalık mağduriyetinin yaygınlığını, etkisini ve farklı deneyimlerini kapsamlı bir şekilde araştırmaktır. Araştırmanın katılımcı grubu İstanbul'da ortaokul ve lise dzüeyinde okullarda okuyan 1752 öğrenciden oluşmaktadır. Araştırma verilerini toplamak için "Siber mağduriyet envanteri" ve "Kişisel bilgi formu" kullanılmıştır. Çalışma siber mağduriyet ile teknoloji kullanımı ve öğrencilerin sosyodemografik değişkenleri arasındaki ilişkiyi incelemiştir. Araştırma sonucunda, erkek öğrencilerin kadınlardan anlamlı derecede daha yüksek siber mağduriyet yaşadıkları görülmüştür. Ayrıca, sonuçlar 10. ve 11. sınıf öğrencilerinin 6., 7., 8. ve 9. sınıf öğrencilerine göre anlamlı düzeyde daha fazla siber mağduriyet yaşadıklarını göstermiştir. İnternet erişimi ebeveynler tarafından denetlenmediğinde ve öğrencilerin internet kullanım süresi arttıkça, siber mağduriyet yaşamalarının anlamlı derecede daha yüksek olduğu

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görülmüştür. Bu araştırma, siber mağduriyet ve bununla ilgili faktörlerin ortaya çıkması açısından literature katkıda bulunmaktadır. Çocukların maruz kaldıkları siber mağduriyet seviyesinin ve mağduriyetle ilgili faktörlerin anlaşılması, çevrimiçi ortamda zorbalık davranışlarını önleme çalışmalarının güçlendirilmesi için önemlidir.

Anahtar Kelimeler: *Siber zorbalık, siber mağduriyet, internet, teknoloji, mağduriyet.*

Introduction

In recent years, studies on cyberbullying have received considerable attention. Cyberbullying, in other names electronic bullying or digital bullying, is described as a type of bullying in an online environment which includes cell phones, computers, and/or tablet computers, which occurs in places where people can join by email, text, websites, social media, and online games ("What is cyberbullying", 2019). Cyberbullying appears as sending negative, harmful, wrong content to someone or sharing someone's private information to humiliate and/or degrade them ("What is cyberbullying", 2019). Cyberbullying has common characteristics with traditional bullying. It is also based on an imbalance of power, it happens more than once, it involves psychological violence, and it is intentional (as cited in Dehue, Bolman, & Völlink, 2008). Compared to other types of bullying, the most distinguished and extremely critical feature of cyberbullying is its potential to appear in seven days 24 hours (Williard, 2007).

The recent technological developments and a variety of electronic devices have generated a potential place for abuse and victimization (Mitchell, Finkelhor, & Wolak, 2003). As a consequence of the dramatic increase in usage of the internet, technology put many at risk for cyberbullying especially children and adolescents. However, there is a lack of study in the current literature related to being targeted by cyberbullying in other words being a cybervictim. Understanding cyber victimization is also crucial to reinforce the studies on learning how to battle cyberbullying, how to protect youngsters from being victims and how to help victims. For this reason, this study focused on exploring cyber victimization among adolescents.

Literature

Cyber victimization is defined as the situation of experiencing harassment, embarrassment, humiliation, threatened, and/or intimidation via communication and information technologies ("What is cybervictimization", 2019). The current literature demonstrates that boys had been targeted by cyberbullying behaviors which involves direct and overt aggression, while girls more encountered cyber victimization involving indirect aggression, such as spreading rumors or pretending to be someone else (Mishna, Cook, Gadalla, Daciuk, & Solomon, 2010). In Turkey, Erdur-Baker and Kavşut (2007) surveyed 228 high school students aged 14 -19 years and the study presented that being kicked out of chat rooms, being

cursed at in chat rooms, having passwords hacked, creating harm by using webcam and messages are the most common cyberbullying acts. The same research also demonstrated that male students faced more cyber victimization than female students (Erdur-Baker & Kavşut, 2007). Arıcak et al. (2008) researched Turkey on 269 middle and high school students aged between 12 and 19 and revealed that the frequency of being targeted by cyberbullying is 13.4% for boys and 10.4% for girls. The same research also identified the most common forms of cyberbullying behaviors are spreading rumors, humiliating, degrading, and threatening (Arıcak et al., 2008).

Slonje and Smith (2008) suggested that cyberbullying which involves pictures and videos have more negative effects on victims. In their study, victims reported that being bullied by pictures and videos caused more feelings of shame and hurt for them since visual materials can be observable by others and the audience cannot be predictable (Slonje & Smith, 2008). Another study also emphasized that victims rated public cyberbullying as the most severe type because of the large audience, view of others and the role of bystanders (Nocentini et al., 2010). With today's technology, pictures or videos (visual material) can be distributed via social media in a short period, and the publicity easily involves.

On the other hand, students reported that cyberbullying that involves email or text messages affected them less negatively. Not knowing the aggressor's identity might lead feelings of frustration and powerlessness (as cited in Nocentini et al., 2010); however, when the aggressors are anonymous, victims might perceive they were just randomly targeted (Smith et al., 2008). Considering the fact that they are not intentionally selected, this is an ordinary experience, and also messages are superficial might lead victims to assess email and text messages are less personal (Slonje & Smith, 2008).

Dooley, Gradinger, Strohmeier, Cross, and Spiel (2010) reported a detailed study of 7.489 students; 5.959 children from Australia and 1.530 children from Austria. They conducted research on teenagers (medium ages are 12) who reported that they were cyberbullied. Students were asked if they ask for help after they were victimized in an online environment and if they have experienced any emotional difficulties after the abuse. Findings indicated that children who were bullied in an electronic environment are less likely to seek help compared to children who were bullied in other forms. In the situation of seeking help, they reported that they first reach friends, families, teachers, and relatives other than parents. Most of the students who reported that they sought help were female and they also stated seeking counseling for the emotional challenges that they experienced (Dooley, Gradinger, Strohmeier, Cross, & Spiel, 2010).

Being a cybervictim has detrimental effects on adolescents' psychosocial adjustment (as cited in Extremera, Quintana-Orts, Mérida-López, & Rey, 2018). Students who had been targeted by cyberbullying

reported feeling sad, anxious, fearful and having difficulty to focus which leads to lower academic success (Beran & Li, 2005). Cyberbullying is also linked to social, physical and psychological problems such as sleep problems, bed-wetting, depression, anxiety, self-esteem, substance abuse for adolescent victims (Extremera et al., 2018). Recent research also underlined that depression, drug use, and crime are more common in cyber victims (Mitchell, Ybarra & Finkelhor, 2007). Another study indicated that lower self-esteem associated with cyberbullying experiences and emphasized that victims of cyberbullying demonstrated lower self-esteem compared to non-victims (Patchin & Hinduja, 2010). Finally, there is some evidence to address depressive symptomatology and cyber victimization (Dehue, Bolman&Völlink, 2008)

Mishna et al. (2010) reported that cyberbullying is a serious problem in middle school and high school students. Therefore, this study focused on 5th through 11th grade class students as a chosen target group. Previous research on cybervictimization demonstrated that even though cyberbullying studies have received extensive attention in recent years, there is not enough published detailed research focusing on cyber victimization in Turkey (to our knowledge). This research has been conducted to comprehensively examine cyber victimization with a large and diverse sample. This study aims to contribute to the literature in terms of exploring and understanding cyber victimization.

Objectives

This study aims to investigate the level of cyber victimization in terms of technology usage and some socio-demographic variables. The current study explored the answers to the following questions:

1. Is there any significant difference on cyber victimization scores according to socio-demographical variables (gender, parents' level of education, grade level, socioeconomic status, and parents' marital status)?

2. Is there any significant difference on cyber victimization regarding parental control over time spent on the internet?

3. Is there any significant difference on cyber victimization regarding the purpose of internet usage?

4. Is there any significant difference on cyber victimization regarding the time length of internet usage?

5. Is there any significant difference on cyber victimization regarding students own their own cell phone?

6. What are the most frequent cyber victimization types in which students encounter?

Method

Participants

Participants included 1,752 students (983 female and 769 male) aged 11 - 16 years from various middle and high schools located in Istanbul, the most populated urban city in Turkey. The research was conducted in 2018 on 20 different schools including private schools and public schools. Students were chosen from grade 5th through 12th.

Measures

Two forms were used in this research. Demographic Information Form (DIF) includes basic demographic questions such as age, gender, grade level, parents' level of education, socioeconomic status, and internet usage characteristics. In order to determine the cyber victimization levels, Cyber Victimization Questionnaire (CVQ) was used. CVQ, developed by Arıcak, Tanrıkulu, and Kınay (2012) is a twenty-four item, self-report measure that assesses overt and relational victimization within the previous 30 days. As with the original scale, participants provided answers using a 5-point Likert type scale from strongly disagree to strongly agree (with items 2, 4, 5, and 8 reverse coded). 24-48 points can be obtained from the scale. Higher scores reflected higher victimization. This scale shows a single factor structure and this single factor explains 30.17% of the total variance. The Cronbach's alpha coefficient for the whole scale was .89 and the test-retest reliability coefficient was .75.

Procedure

Approval was obtained from the Istanbul Provincial Directorate of National Education before administering any questionnaires. After that, the study was conducted in classes with the permission of the class instructor. Data were collected by administering surveys in the classroom environment. Clear instructions for the aim of the study, conditions of participation (volunteering, confidentiality, anonymity), were provided both verbally and on the informed consent. No incentives were offered. It took approximately 10 to 15 minutes for the participants to complete all the measures. The scales were given to students in groups. Student responses were anonymous, as they did not put their names on the response sheets. Participation was voluntary, and students were assured that their responses would remain confidential. No identifying information was contained on packets, and no compensation was provided. Missing items or variable data were handled separately.

Statistical Analyses

SPSS-22 for Windows was used to analyze the data gathered from scales. Data set was checked in terms of normality distribution and homogeneity of variances and parametric tests were applied. Frequency analysis, descriptive analysis, T-test and one way ANOVA analysis was used in comparison of groups and frequency of results. Tukey HSD analysis of post

hoc tests was preferred to determine the differentiation between the groups and to determine the direction of differentiation. Multivariate regression analysis was performed to examine the predictive levels of the variables. In interpretation, .05 and .001 significance levels were preferred.

Study group

The research was carried out in the 2017-2018 academic year spring semester in 20 public and private schools in İstanbul. Participants were 1,752 students attending 5th through 12th grades. The class distribution of the students is shown in the Table 1.

Table 1.Frequency Analysis Findings of Class Distribution of Students

	n	%
5th grade	192	11,0
6th grade	233	13,3
7th grade	236	13,5
8th grade	216	12,3
9th grade	262	15,0
10th grade	261	14,9
11th grade	195	11,1
12th grade	157	9,0
Total	1752	100,0

The gender distribution of students demonstrated that 983 (56.1%) of the students were female and 769 (43.9%) were male. The students in the study group were between 10 and 17 years old. The parents of 1,541 students (88%) were together; parents of 179 (10.2%) were divorced; mother of 5 (3%) died; father of 27 (1.5%) died. The income levels of the students are categorized in four levels and the income level is presented in Table 2.

Table 2.Students' Income Status Frequency Analysis Findings

	n	%
No income	125	7,1
Low income	316	18,0
Middle income	377	21,5
High income	934	53,3
Total	1752	100,0

The educational status of the parents is presented in Table 3.

Table 3. Parents' education level

Education level	Mother		Father	
	n	%	n	%
Not literate	59	3.4	11	0.6
Only literate	38	2.2	35	2
Primary school	385	22	250	14.3

Elementary school	316	18	374	21.3
High school	455	26	494	28.2
Bachelor's degree	410	23.4	467	26.7
Master-PhD	89	5.1	121	6.9
Total	*1,752*	*100.00*	*1,752*	*100.00*

Results

Results of cyber victimization by gender

In order to determine whether the level of cyber victimization differs according to gender, T-test analysis was performed from parametric tests. The results are shown in Table 4.

Table 4. T-test results of cyber victimization scores by gender

	Girls			Boys			t	p
	n	X̄	SS	n	X̄	SS		
Cyber victimization	983	29.21	7.72	769	30.17	9.69	-2,241	.025*

*p=.025; p<.05 There is significant differentiation.

According to the results of the T-test analysis, a significant difference was found between the total cyber victimization scores by gender $[t_{(1750)}=-2.241, p=.025, p<.05]$. When the direction of differentiation was examined, it was seen that the cyber victimization scores of the girls (X̄= 29.21) were significantly lower than that the boys (X̄= 30.17).

Results of cyber victimization according to grades

One-way ANOVA analysis of variance was used to determine whether the level of cyber victimization differs according to the grades of the students. According to ANOVA results, highly significant differentiation was detected between classes. $[F(7.1744)=6,27, p=.000; p<.001]$. Tukey HSD post hoc analysis was performed in order to find out the groups that differentiation exists and to find the direction of this differentiation. According to Tukey analysis (Table 5), respectively; there is significant differentiation (p=.002; p<.05) between 5th and 10th grades and victimization was higher in 10th grade; there is highly significant differentiation (p=.000; p <.001) between 5th and 11th grade and victimization was higher in 11th grade; there is significant differentiation (p=.004; p <.05) between 6th and 10th grades and victimization was higher in 10th grade; there is significant differentiation (p=.001; p<.001) between 6th and 11th grades and victimization was high in 11th grade; there is significant difference (p=.001, p<.001) between the 7th and 10th grades and victimization was high in 10th grade; there is highly significant difference

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(p=.000; p <.001) between 7th and 11th grades and victimization was higher in 11th grades. There is no significant differentiation between the other groups.

I) Grade	(J) Grade	Mean Difference (I-J)	Std. Error	p
5th grade	10th grade	-3.27784	.81427	.002*
	11th grade	-3.80056	.87071	.000**
6th grade	10th grade	-2.91091	.77189	.004*
	11th grade	-3.43363	.83122	.001*
7th grade	10th grade	-3.25409	.76929	.001*
	11th grade	-3.77681	.82881	.000**

Table 5. Tukey HSD post hoc results according to grades

*p<.05 There is significant differentiation.

**p<.001 There is highly significant differentiation.

Results of cyber victimization level according to parental education level

One-way ANOVA analysis was performed to compare the cyber victimization scores and parent's educational level. According to ANOVA results, no significant difference was found between the cyber victimization scores and education level of the mother [$F(6.1745)=1.88$, $p=.081$; $p>.05$]. Also, there is no significant difference between the cyber victimization scores and education level of the father [$F(6,1745)=0.76$, $p=.600$; $p>.05$].

Results of cyber victimization level according to parental marital status

One-way ANOVA analysis was performed to compare the cyber victimization scores of children and their parental marital status. No significant difference was found between the cyber victimization scores of the children according to the marital status of the parents [$F(3.1748)=1.27$, $p=.280$; $p>.05$].

Results of cyber victimization level according to income status

One-way ANOVA analysis was used to compare the cyber victimization scores of children according to income status. No significant difference was found between the cyber victimization scores of children according to income status [$F(3,1748)=1,38$, $p=.247$; $p>.05$].

The results of cyber victimization level according to the control of internet duration

T-test analyzes were conducted to determine the differentiation of cyber victimization according to whether or not the duration of internet access of children was controlled. The results are shown in Table 6.

Table 6. T-test results of cyber victimization level according to internet control

	Control exists			Absence of control			t	p
	n	X̄	SS	n	X̄	SS		
Cyber victimization	844	29.16	8,56	908	30.08	8.72	-2.221	.026*

*p=.026, p<.05 There is significant differentiation.

Regarding the T-test analysis results; there is a significant difference between the cyber victimization levels of the students and the supervision and non-supervision of internet access time [$t_{(1750)}$=-2.221, p=.026; p<.05]. When the direction of differentiation is examined, the fact that the time to enter the internet is controlled (X̄=29.16) indicates a lower level of cyber victimization than the absence of control (X̄=30.08).

The results of cyber victimization according to the purpose of entering the internet

One-way ANOVA analysis was used to determine whether cyber victimization scores differ according to the purposes of internet use. Regarding to ANOVA results, there is a highly significant difference in cyber victimization scores according to the purpose of internet access [$F_{(9.1742)}$=6.68, p=.000; p<.001]. In order to find out the differentiation between the groups and the direction of this differentiation, Tukey HSD post hoc analysis was performed. According to Tukey HSD analysis (Table 7), respectively; there is highly significant differentiation between the internet users for the purpose of course-homework and the internet users for the purpose of playing games (p=.000, p<.001) and victimization was lower in those whose purpose is course-homework; there is highly significant differentiation between the internet users for the purpose of course-homework and the internet users for the purpose of watch movies (p=.000, p<.001) and victimization was lower in those whose purpose is course-homework; there is highly significant differentiation between the internet users for the purpose of course-homework and the internet users for the purpose of enter the social networks (p=.000, p<.001) and victimization was lower in those whose purpose is course-homework; there is highly significant differentiation between the internet users for course-homework and the internet users for listening to music (p=.000, p<.001) and

victimization was lower in those whose purpose is course-homework. There is no significant differentiation between the other groups

Table 7. Tukey HSD post hoc results according to the purpose

I) Purpose	(J) Purpose	Mean Difference (I-J)	Std. Error	p
Course-homework	Watch movies	-3.69151	.76566	.000*
	Social networks	-3.61288	.59873	.000*
	Playing games	-4.41180	.66223	.000*
	Listening to music	-4.52104	.96318	.000*

*p<.001 There is highly significant differentiation.

The results of cyber victimization level according to the time of entering the internet

One-way ANOVA analysis was used to determine whether cyber victimization scores differ according to internet usage periods. According to ANOVA results, there is a highly significant difference between cyber victimization scores according to internet access time [$F(3.1748)=33.01$, p=.000; p<.001]. In order to find out the differentiation between the groups and the direction of this differentiation, Tukey analysis was performed from post hoc tests. According to Tukey HSD analysis (Table 8), respectively; there is significant differentiation between the internet users who spent 1-3 hours per day and the ones who spent less than one hour per day (p=.050, p<.05) and the victimization is higher in the users who spent 1-3 hours per day; there is highly significant differentiation between the internet users who spent 4-6 hours per day and the ones who spent less than one hour per day (p=.000, p<.001) and the victimization is higher in the users who spent 4-6 hours per day; there is highly significant differentiation between the internet users who spent more than 6 hours per day and the ones who spent less than one hour per day (p=.000, p<.001) and the victimization is higher in the users who spent more than 6 hours per day; there is significant differentiation between the internet users who spent 1-3 hours per day and the ones who spent 4-6 hours per day (p=.013, p<.05) and the victimization is higher in the users who spent 4-6 hours per day; there is highly significant differentiation between the internet users who spent more than 6 hours per day and the ones who spent 1-3 hours per day (p=.000, p<.001) and the victimization is higher in the users who spent more than 6 hours per day. There is no significant differentiation between the other groups

Table 8. Tukey HSD post hoc results according to internet time spent

I) Time spent	(J) Time spent	Mean Difference (I-J)	Std. Error	p
Less than 1 hour	1-3 hours	-1.52428	.59327	.050*
	4-6 hours	-3.04515	.65594	.000**
	6+ hours	-6.93209	.75980	.000**
1-3 hours	4-6 hours	-1.52088	.50040	.013*
	6+ hours	-5.40781	.63044	.000**

*p<.05 There is significant differentiation.

**p<.001 There is highly significant differentiation.

Results of cyber victimization level according to personal cell phone

T-test analysis was carried out to determine the differentiation of cyber victimization according to the having a personal mobile phone. The results are shown in Table 9.

Table 9. T-test results of cyber victimization level according to personal cell phone

	Cell phone exists			No cell phone			t	p
	n	X̄	SS	n	X̄	SS		
Cyber victimization	1,481	29.98	8.59	271	27.73	8.72	3,919	.000*

*p=.000; p<.001 There is highly significant differentiation.

According to T-test analysis results, there was a highly significant difference between the cyber victimization levels of the students according to the fact that they had a personal mobile phone [$t_{(1750)}$=3.919, p = .000; p <.001]. When the direction of differentiation is examined cyber victimization is significantly higher in the students with a personal mobile phone (X̄ = 29.98) rather than those without a personal cellphone (X̄ = 27.73).

Results on the effect of device and internet use on cyber victimization

Multiple regression analysis was conducted to investigate the predictive effect of some variables related to device and internet use on cyber victimization scores. The results are shown in Table 10.

Table 10. The predictive effect of some variables related to device and internet usage on cyber victimization results of multiple regression analysis

Variables	B	Std. Error	ß	t	p
Highly used device	-.030	.340	-.002	-.089	.929
Personal computer	-.706	.805	-.041	-.877	.381
Personal computer time spent	-.111	.205	-.024	-.542	.588
Personal cell phone	-.,844	1.060	-.077	-1.740	.082
Personal cell phone time spent	.189	.204	.036	.926	.355
Personal laptop	1.086	.929	.063	1.170	.242
Personal laptop time spent	-.237	.244	-.052	-.971	.332
Home internet	-.038	.658	-.001	-.057	.954
Personal internet	.399	.536	.020	.745	.456
Outside wi-fi	.301	.702	.016	.429	.668
Source of internet	-.424	.182	-.087	-2.328	.020
Parental control	.033	.420	.002	.079	.937
Purpose of use	.421	.112	.089	3.777	.000
Daily use time	1.896	.243	.195	7.792	.000
Connection place	.978	.332	.071	2.950	.003
Offline time	-.028	.123	-.005	-.226	.821
Texting	-.206	.167	-.030	-1.237	.216

R^2=.076; R=.276; adjusted R^2=.067

According to the results of multiple regression analysis;

The variables which are shown in Table 5 have a significant effect on cyber victimization (p=.000; p<.001); however, these variables were able to explain 7% of cyber victimization [adjusted R^2 = .067]. Among these variables, internet source (p=.020; p<.05) and internet connection place (p=.003; p<.05) showed significant predictive effect on cyber victimization; whereas purpose of use (p =.000; p<.001) and daily use period (p=.000; p<.001) were found to have highly significant effect on predicting cyber victimization.

Discussion

This study aimed to evaluate cyber victimization and its relations to technology usage and some other factors. With this purpose, 1,752 middle and high school students were randomly chosen and given to cyber victimization scale and results were assessed in detail. The results of the study provided a wide range of quantitative information on cyber victimization and demonstrated that cyber victimization is a critical issue among middle and high school students.

Results of the study showed that 31% of students (n=543) declared that they have been encountered cyberbullying behaviors, however, general scores did only demonstrate the low level of cyber victimization for victims. Ybarra and Mitchell (2004), %4 of students only were target of cyberbullying and %19 of students were both target and aggressor of cyberbullying. Compared to previous studies on the literature our results are found significantly high. Examining the most frequent cyber victimization types in our data showed that 26.7% of students reported that receiving unpleasant messages 18.1% of them reported that they received unpleasant texts on the phone, 25.6% declared that they were harassed on the phone, 24% of students reported that they have been told things on the internet which never heard face to face. Data emphasized that one of the most frequent types of victimization appeared as receiving unpleasant messages (online or by text) and being bothered by cellphone. Previous studies demonstrated that receiving an upsetting e-mail (18.3%) and receiving an upsetting instant message (16%) are the most common types of victimization (Patchin& Hinduja, 2010). While in terms of receiving unpleasant texts the proportion of both studies appeared similar, in terms of receiving other types unpleasant online messages, our study demonstrated high results. This finding might be concerning developed technology and more options to connect to social media.

Examining results in terms of gender demonstrated that there have been gender differences among victims and boys encountered more cyber victimization compared to girls. Previous studies on cyberbullying illustrated gender differences on cyberbullying and emphasized that boys were more cyberbullied compared to girls (Mishna et. al, 2010; Arıcak et. al, 2008; Erdur-Baker& Kavşut, 2007), which supports the result of this research. According to data, 10th and 11th grade students demonstrated higher cyber victimization scores compared to other grades. This finding is consistent with the previous studies illustrating 6th grades students experienced less cyber victimization than 9th and 10th grade students (Wang, Iannotti, & Nansel, 2009; Slonje & Smith, 2008).

Previous research found socioeconomic level as a high risk factor for being cyberbullied since having a computer and cellphones is more likely in high-income families (Wang et al., 2009). Nevertheless, our study did not demonstrate any significant results between socioeconomic status and

cyber victimization level and could not support the previous findings. The results of our study also demonstrated that owning a cellphone is significantly related to cyber victimization since the students who have cellphones expressed higher level of cyber victimization. According to this finding, while owning a cellphone has a significant effect on cyber victimization, it is also not correlated with socioeconomic status which can be explained as availability of cheaper technological devices. This finding also implies children with a cellphone have more opportunities to reach technological environment and they are more accessible thus they become more vulnerable to cyber victimization.

Examining the relationship between parental education level and cyber victimization level did not indicate any significant relations. Similarly, no significant relationship was found between the parent's statue of marriage and cyber victimization scores.

One of the most striking results of the study was the existence of parental supervision for children using technology was associated with lower cyber victimization. Similarly, findings also emphasized that parents' restriction on children's spending time on the internet is efficient. Ybarra and Mitchell (2004) reported that %29 victims reported infrequent parental monitoring or lack of supervision. An increase in the average time spent on the internet showed a correlation with higher cyber victimization scores. Cyber victimization scores seem also lower in students who used the internet for their homework or classes, however, it appeared higher in students who use the internet to watch a movie, connect social media, play a game or listen to music. This finding underlined the importance of parental monitoring.

While the most important implication of findings addressed the importance of parental control of the internet usage, other studies also underlined that preventing children to use their phone or computer leads feelings of isolation, losing their connections, and perceiving this as a punishment (Mishna, Saini & Solomon, 2009). Moreover, some findings addressed that children and teens are hesitant to inform their parents about being victim of cyberbullying (O'Connell, Price, & Barrow, 2004; Smith et al., 2008; Rigby, 1997; as cited in Duman & Bridge, 2019) One of the explanations for this suggested that children feel worried about parents' restriction to use phone or computer in order to protect them from bullying (Mishna, Saini & Solomon, 2009). Other studies addressed children's lack of trust to adults solving a problem, their belief of adult's will exacerbate the problem, their feeling of humiliation or embarrassment, and feeling worried about no one will believe in them or they will be blamed for being responsible (Peterson & Rigby, 1999; Campbell, 2005).

Recommendations

Gathered data emphasized that children must be informed about the threat of cyberbullying in digital platforms. Studies on cyberbullying/cybervictimization are crucial to understand this phenomenon, decrease the risk factors in the online environment. Decreasing risk factors for children and youngsters and creating a safe and secure environment for their online activities imperative. It is essential to inform people on the use of the internet and online life specifically how to save information, how to protect the information, characteristics to protect, how to act during threats and attacks against information safety, password security, legal regulations, individual's responsibilities (Şahinaslan, Kandemir, & Şahinaslan, 2009).

Studies focused on increasing awareness on cyberbullying and increasing the sensitivity to cyberbullying are important. In order to develop effective interventions, it is necessary to define cyberbullying from the youngsters' perspective, understand how they are affected and explore the attitude of youngsters towards cyberbullying. Furthermore, it is important to assess parents' knowledge about cyberbullying, and encourage them to monitor their children's use of the internet, set some limits and develop effective communication with their children. Interventions should therefore not only be aimed at youngsters but also at their parents and their social environment, including teachers. Many studies emphasized that it is important to prepare effective action plans against cyberbullying and it is important to work on increasing parents' and teachers' awareness of cyber victimization (Slonje & Smith, 2008). The subject of adult consciousness is very crucial to prevent cyber victimization. In addition to creating awareness, it is also beneficial for parents to discuss cyber victimization with their children and to encourage them to recognize and report incidents of cyber aggression (Keith & Martin, 2005).

Limitations

This study is based on the self-report technique which illustrates students assessing themselves. During application, some students may avoid responding genuinely, minimize, or maximize what they have experienced. Other limitations should be considered.

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