Cybervictimization Experiences, Reactions and Coping Strategies Among Filipino Adolescent Patients Ages 12 to 18 Years Old at the East Avenue Medical Center*

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ABSTRACT

Background: Adolescents are at risk for cybervictimization given their easy access to the internet and their increased engagement in online activities. Screening adolescents for cybervictimization experiences is essential to address possible adverse effects and to implement timely interventions to prevent untoward outcomes.

Objective: To describe the cybervictimization experiences, reactions and coping mechanisms of Filipino adolescent patients ages 12 to 18 years old at the East Avenue Medical Center

Methodology: This is a prospective cross-sectional study that utilized a 4-part questionnaire survey.

Data Analysis: Descriptive and inferential statistics were used to analyze the results of the study.

Results: A total of 72 adolescents were included in the study. Most of the participants were middle adolescents (55.5%), enrolled in junior high school (56%), with a slight female predominance (52.7%). Almost all of the adolescents (98.6%) used the internet and majority (84.72%) had their own mobile phones. Facebook (94.4%), Tiktok (70.8%), Messenger and Instagram (63.8%) were the most commonly used platforms. Cybervictimization experiences within the past 6 months were reported by 31.9%. More males (52.7%) were cyberbullied and cybervictimization was experienced mostly in the seventh grade (30.4%). The most common forms of cybervictimization experienced were online exclusion and impersonation and were related to visual (mean=8.17, SD=1.94) and written (mean=8.56, SD=2.19) cybervictimization. Most adolescent cybervictims either felt scared (39.1%) or angry (34.8%). Thirty percent (30.4%) claimed not to have been affected while 26% felt embarrassed. Many of the participants either ignored the cyberbullying incidents (60.9%) or cried (47.8%). More than half of the participants disclosed their cybervictimization experiences to others, mostly to their classmates or friends (43.5%). Mobile phone use (p value= 0.021) and a lower grade onset of bullying (p value=0.020) were noted to be statistically significant associated risk factors for cybervictimization. Most adolescents either blocked the bully (52.2%) or asked support from friends (43.5%).The more time the adolescents spent on social media using their mobile phones, the higher the risk of experiencing cybervictimization. Those who experienced cybervictimization earlier may have a higher probability of re-experiencing cyber-victimization and further traumatization.

Conclusion: Different forms of cyberbullying exist and victims may have different reactions and coping strategies towards the experience. Promotion of cybersafety among adolescents and timely psychosocial support and management should be provided to prevent unwanted outcomes.

Keywords: *adolescent, cybervictimization, cyberbullying*

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INTRODUCTION

Background of the Study

The advent of technology including mobile devices and the Internet has brought about numerous advantages for today's youth. However, access to these technological advances has also brought about concomitant risks. Among these is the risk of adolescents falling victim to the cyberworld.

Cybervictimization has been described by del Rey et al in 2012 as a "form of aggression via electronic devices, mostly using mobile phones or the Internet."[1]

The four most common types of cybervictimization that adolescents encounter as described by Nocentini et al in 2010 are: (1) visual (2) written-verbal cybervictimization, (3) online exclusion and (4) impersonation.[2]

Visual cybervictimization involves offensive, harmful, or injurious photos or videos while written-verbal cybervictimization is done by sending annoying, threatening, or offensive calls, messages, or written comments. Online exclusion on the other hand is the non-acceptance or expulsion from a social networking group or an instant messaging program while impersonation is making fun of or getting the victim into trouble by impersonating him or her on the mobile phone or internet.[2]

According to the Cybersafe Survey done by the Stairway Foundation, Inc. and the Department of Education in the Philippines in 2016, the most common avenue for cyberbullying was social media in both the 7-12 year old (60%) and 13-16 year old (80%) age groups. Other means of cyberbullying reported were through chatting or texting. Thirty percent (30%) of the 7-12 year old age group experienced cyberbullying in the form of threats, while thirty percent (30%) of the 13-16 year old age group experienced cyberbullying through photo editing. Cyberbullying was also done by exposing one's secret conversation, humiliation, creation of poser accounts, and exclusion. The usual cyberbullies were classmates in both age groups.[3]

Cybervictimization is becoming an alarming problem among adolescents. An estimated twenty (20) to forty (40) percent of adolescents have become victims of electronic aggression. Cybervictimization has been associated with increased anxiety, low self-esteem, social anxiety, depressive symptoms and suicidal ideations. Academic performance may also be affected due to problems with concentration, poor performance, and truancy.[4]

Hence, screening adolescent patients for cybervictimization experiences is essential in order to be able to address its possible adverse effects and to implement timely interventions to prevent further untoward cybervictimization outcomes.

Significance of the Study

The present generation of adolescents are highly dependent on mobile phones, gadgets, the internet and social media, making them vulnerable to bullying via these digital communication technologies.

Cybervictimization has grave consequences on the mental health of adolescents and may cause low self-esteem, depression, anxiety and suicide.

Screening for cybervictimization in adolescent patients may help in the identification of victims and facilitate timely implementation of interventions that may prevent the unwanted outcomes of victimization experiences.

The results of this study may also augment the few existing local data on cyberbullying among Filipino adolescents.

Review of Related Literature

Cyberbullying, a form of cybervictimization, can be more serious than traditional bullying since online attacks are public, the audience may be unlimited, and it is difficult to escape or control. It may result in psychological impairment and in severe cases, depression and suicidal behavior. [5]

Sampaga-Kayinga and Hamilton in 2015, examined the relationship between the use of social networking sites and cybervictimization among adolescents. Nineteen percent (19%) of the adolescents enrolled in the study were cyberbullied in the last twelve months. There was an increased risk for cyberbullying in younger, female adolescents, those with lower socioeconomic status and those who had alcohol or tobacco usage. The study results confirmed the association between the use of social networking sites and cybervictimization among adolescents regardless of the intensity of use. [6]

According to the study of Alvarez-Garcia et al in 2015, an estimated twenty to fifty percent (20-50%) of adolescents have been victims of electronic peer aggression. Two to seven percent (2-7%) experienced severe cybervictimization which may be a significant contributor to the onset of depressive symptoms and suicidal ideations. Age, off-line school victimization, parental control, risky internet behaviors, online social network use, use of instant messaging applications, frequency of weekend internet use were identified as significant risk factors for both occasional and severe victimization. On the other hand, owning a mobile phone, engaging in online gaming and frequency of weekday internet use were implicated in severe cybervictimization.[7]

Reactions of adolescents who experience cyberbullying may include anger, sadness, anxiety, embarrassment, crying, fear and self-blame. Poor concentration, a decline in academic performance and absence from school have also been reported.[7]

Victims of cyberbullying may use multiple strategies in order to cope. Responses to cyberbullying can be categorized as follows: 1) targeted towards cyberbullies (retaliation); 2) ignoring the aggressor; 3) seeking instrumental or emotional support from adults, teachers, friends, or external institutions and 4) cyber- specific technical solutions (reporting abuse, blocking the sender).[5]

The findings of the 2014 study of Remond et al on cyberbullying showed that close to thirty five percent (35%) of the students were cybervictims. The mean age of cyberbullying victims was 17.84 ± 5.9 years. The strategies employed by the student cybervictims included coping, disclosing the bullying experience to someone, analyzing the situation and avoidant coping. The study results also showed that victims of cyberbullying recovered longer from a stressful event compared to victims of traditional bullying.[8]

In a 2012 study conducted by Parris et al in Atlanta, three primary cyberbullying coping themes were identified. *Reactive coping* was done through avoidance of the cyberbullying through deleting or ignoring messages. *Preventive coping* consisted of doing face-to-face talks and having increased awareness and security. However, there were also some students who reported that there was "no way to prevent cyberbullying".[9]

OBJECTIVES OF THE STUDY

General Objective

To describe the cybervictimization experiences, reactions and coping mechanisms of Filipino adolescent patients ages 12 to 18 years old at the East Avenue Medical Center

Specific Objectives

1. To determine the socio-demographic characteristics of the adolescents who experienced cybervictimization as to age, sex, current educational status and internet use
2. To determine the prevalence of adolescents with cybervictimization experiences
3. To determine the different types of cybervictimization experienced by the adolescents
4. To determine the adolescents' reactions to their cybervictimization experiences
5. To enumerate the different coping strategies employed by the adolescents who experienced cybervictimization

OPERATIONAL DEFINITIONS OF TERMS AND VARIABLES

Adolescents - are those who belong to the 10-19 year old age group, further subdivided into Early Adolescents (10-13 years old), Middle Adolescents (14-16 years old) and Late Adolescents (17-19 years old)[10]

Cyberbullying - a form of cybervictimization**;** a "collective label used to define electronic forms of bullying to aggressively and intentionally harm someone"[11]

Cybervictimization - "aggression by means of electronic devices, mainly mobile phones and the Internet[1]

Visual cybervictimization - type of cybervictimization which uses offensive, harmful, or injurious photos or videos taken or disseminated by electronic means[2]

Written-verbal cybervictimization - receiving annoying, threatening or offensive calls, messages, or written comments through mobile phone or internet[2]

Online exclusion - non-acceptance or expulsion from a social networking group or an instant messaging program[2]

Impersonation - making fun of or getting the victim into trouble by impersonating him or her on the mobile phone or Internet[2]

Coping Strategy - "an individual's behavioral, emotional, and cognitive response to stress which serves to eliminate or modify a problem by neutralizing its negative character; helping the individual regulate his or her emotional response"[5]

METHODOLOGY

I. Research Plan and Design

1. Study Type and Design

This is a prospective cross-sectional study.

2. Sample Size, Statistical Methods and Power Calculation

The minimum sample size of **72** adolescent patients was computed based on the total number of adolescent patients admitted by the department for a period of four months (June to September 2021).

The computation was based on a 95% margin of error and 80% power. The sample size was computed using Statistical Package for Social Sciences (SPSS) version 26 using the formula below:

$$X = Z(c/100)^2 r(100-r)$$

$$n = Nz/((N-1)E^2+x)$$

$$E = \mathrm{Sqrt}[N-n)x/n\ (N-1)]$$

Legend:

N= population size

r=fraction of responses

Z(c/100)=critical value

3. Subject Criteria

a. Inclusion Criteria

1. Filipino adolescent patients ages 12 to 18 years old who consulted at the Pediatric OPD clinic or were admitted at the Pediatric wards of the East

Avenue Medical Center from June to September 2021

2. Adolescents who can read, understand and answer the questionnaires

b. Exclusion criteria

1. Adolescents previously diagnosed with a mental health condition (depression, anxiety, post-traumatic stress disorder, mood disorders, etc.)

2. Adolescents with developmental delays or other conditions who cannot read, comprehend or answer the questionnaire on their own

3. Admitted adolescents with unstable or critical conditions

4. Non-Filipino citizens

5. Questionnaires with incomplete answers

c. Withdrawal criteria

Participation in this study was purely voluntary. The parent and/or adolescent was informed that he or she may withdraw his or her consent at any time before, during, or after completion of the survey questionnaire with no negative consequences.

4. Description of the Study Procedure

a. Specific methods and techniques used throughout the study

The protocol was submitted to the Research Committee of the Department of Pediatrics for initial approval. Once approved, it was forwarded to the Technical Review Board, then to the Institutional Ethics Review Board for final review. Once with IERB approval, letters requesting permission to conduct the study at the OPD and at the Pediatric wards were sent to the Center Chief, the Chair of the Department of Pediatrics, the Head of the Outpatient Department and the Pediatric Ward Nursing Supervisor. Once approved, parental/guardian informed consent and adolescent informed consent/assent were obtained. The purposes and benefits of the study were explained thoroughly by the principal investigator to the parent/guardian and to the adolescent. Questionnaires were self-administered in the presence of the principal investigator and/or a pediatric resident research assistant who were ready to answer any questions or clarifications that the study participants might have about individual items in the questionnaire. The adolescents were given 30-45 minutes to answer the questionnaire. The patients' responses to the questionnaires were encoded in Excel format and sent to a statistician for statistical analysis. The names of the respondents were kept confidential. Codes were used to label the individual questionnaire forms.

b. Location where study was performed

The study was conducted at the East Avenue Medical Center Pediatric Outpatient Clinic and Pediatric ward.

c. Personnel Who Conducted the Study

The primary investigator (PI) administered the survey questionnaires to the adolescents. One (1) pediatric resident assisted the PI in administering the questionnaires. The assisting pediatric resident was briefed about the study procedure and the questionnaire that was utilized in the study.

II. SUBJECT PARTICIPATION

a. Recruitment

All adolescent patients ages 12 to 18 years old who consulted at the Pediatric OPD clinic or were admitted at the pediatric ward of the East Avenue Medical Center during the specified time period and met the inclusion criteria were recruited.

Screening Interview/Questionnaire: A 4-part validated survey questionnaire was administered. The first part contained questions on demographics. The second part included questions on mobile phone and internet use. The third part of the questionnaire contained questions from the Cybervictimization *Questionnaire (CYVIC).* The last part of the questionnaire was composed of questions on cybervictimization reactions and coping strategies.

The *Cybervictimization Questionnaire (CYVIC)* is a 19-item, Likert type questionnaire that has been validated for use in adolescents ages 12 to 18 years old. It has been found to be a reliable self-report measure of cybervictimization in adolescents. [1]

Permission to use the questionnaire and translate it to Filipino for the purposes of this study was obtained from the author through email correspondence. The questionnaire was translated to Filipino by a language specialist and content validation was done by four (4) Adolescent Medicine specialists and one (1) psychologist. The validated translated Filipino version of the CYVIC was pre-tested on 10 randomly selected adolescents prior to the actual administration to the study population.

b. Informed Consent and Informed Assent process and timing of obtaining of consent

The primary investigator gave detailed and comprehensive information about the study to the parents, guardians and adolescents. Informed consent and/or informed assent were obtained prior to the conduct of the study.

c. Costs to Participants

There was no cost to the participants of the study.

d. Compensation

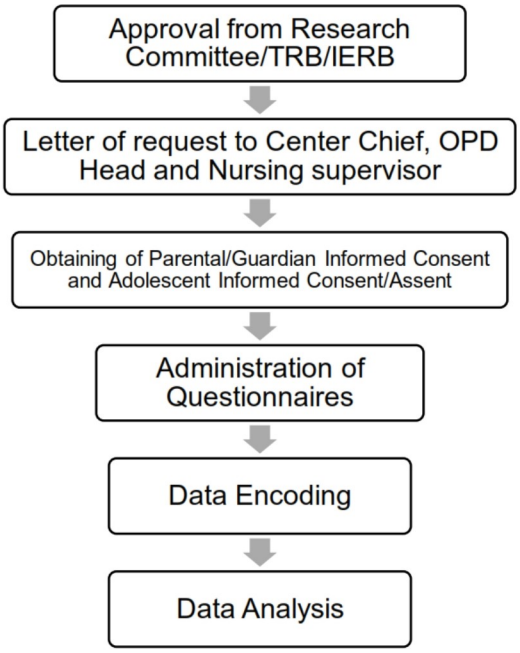
The patients or their parents/guardians did not receive monetary or any other form of compensation for participating in this study.

III. DATA COLLECTION AND PROTECTION

a. Data management and security

All information regarding the study participants was kept strictly confidential. The participants' names were kept in a password-protected database which only the principal investigator had access to. Upon collection, the questionnaires were kept in a sealed envelope that could only be accessed by the principal investigator. The names of the respondents were kept confidential and codes were used to de-identify them. The data will be kept secure by the investigator for a maximum period of 3 years after which it will be discarded.

b. Study Algorithm



IV. DATA ANALYSIS AND REPORTING

Descriptive and inferential statistics were used to analyze the results of the study. Mean, standard deviation, frequency and percentage were used to describe and categorize the cybervictimization experiences, reactions and coping strategies of the adolescents. Chi Square Test of Association was employed to examine the associated risk factors of cybervictimization experiences of adolescents, and their strategies being used as a means to cope with the cyberbullying. Decision to determine relationships and risk factors was set at 95% confidence interval.

V. RESULTS

Table 1. Socio-demographic profile of Adolescents

Variable	No. of Patients (n)	Percentage (%)
Age		
10-13 years	16	22.22%
14-16 years	40	55.55%
17 years and above	16	22.22%
Sex		
Male	34	47.22%
Female	38	52.77%
Educational Status		
Enrolled	63	87.5%
Not enrolled	9	12.5%
Grade		
6	3	4.2%
7	11	15.3%
8	9	12.5%
9	9	12.5%
10	9	12.5%
11	18	25%
12	13	18%
Highest Grade If Not Enrolled		
6	1	1.11%
7	1	1.11%
8	0	0
9	0	0
10	1	1.11%
11	2	22.22%
12	4	44.44%
Has Own Mobile Phone		
Yes	61	84.72%
No	11	15.28%
Uses Internet		
Yes	71	98.61%
No	1	1.39%
Social Media Account		
Facebook	68	94.44%
Twitter	26	36.11%
Instagram	46	63.88%
Tumblr	2	2.77%
Messenger	46	63.88%
Snapchat	25	34.72%
Whatsapp	2	2.77%
Tiktok	51	70.83%
Experienced Cybervictimization		
Yes	23	31.94%
No	49	60.05%

Sex		
Male	12	52.17%
Female	11	47.82%
Grade		
6	1	4.34%
7	7	30.43%
8	3	13.04%
9	3	13.04%
10	2	8.69%
11	3	13.04%
12	4	17.39%
TOTAL	72	100%

A total of **72** adolescents were included in the study. **Table 1** shows the demographic profile of the study participants. There were more female (52.77%) than male (47.22%) respondents. Most were middle adolescents (55%). Majority were currently enrolled in school (87%). Among those enrolled, 56 percent (56%) were in junior high school. For those who were not currently in school, most (44.4%) were able to reach the Grade 12 level.

Of the 72 participants, almost all (98.61%) reported to have used the internet and a majority (84.72%) also had their own mobile phones. The top three platforms used by the participants were Facebook (94.44%), Tiktok (70.83%) and Messenger and Instagram (63.88%).

Among the participants, 31.94% (n=23) reported that they had experienced cybervictimization within the past six months. There were slightly more males (n=12, 52.77%) who were cyberbullied and cybevictimization was experienced mostly in the seventh grade (30.43%).

Table 2. Cybervictimization Experiences of Filipino Adolescents based on CYVIC questionnaire dimensions

Variables	No. of questions	1	2	3	4	Total
Impersonation	1	9	9	4	1	23
	12	19	3	0	1	23
	18	13	8	2	0	23
Visual Cybervictimization	2	21	2	0	0	23
	3	20	3	0	0	23
	6	21	2	0	0	23
	9	22	1	0	0	23
	10	20	3	0	0	23
	14	17	2	1	3	23
	15	20	3	0	0	23
Written-verbal Cybervictimization	5	11	9	3	0	23
	7	14	6	2	1	23
	8	15	7	1	0	23
	11	16	5	1	1	23
	17	21	2	0	0	23
	19	15	7	0	1	23

Table 2 shows the cybervictimization experiences of Filipino adolescents based on the CYVIC questionnaire dimensions. Based on the CYVIC, most of the Filipino Adolescents reported to have experienced **online exclusion** at least two to four times a month, **impersonation** at least one to four times, **written verbal** and **visual cybervictimization** and **general cybervictimization** once a month.

Table 3. Cybervictimization reactions and coping strategies of adolescents

Variables	Total	Percentage
Feelings about cybervictimization experience		
Scared	9	39.1%
Sad	7	30.4%
Angry	8	34.8%
Revengeful	1	4.3%
Embarassed	6	26%
Not affected	7	30.4%

Reaction to cybervictimization Experience		
Cried	11	47.8%
Told somebody	3	13%
Retaliated	1	4.3%
Ignored	14	60.9%
Did you tell anyone about cybervictimization experience		
Yes	13	56.5%
No	10	43.5%
Person to whom cybervictimization experience was disclosed to		
Friend/classmate	10	43.5%
Brother/sister	2	8.7%
Parents	4	17.4%
Teacher	2	8.7%
Coping strategies		
Avoid using internet	8	34.8%
Avoid using mobile phone	5	21.7%
Blocked the cyberbully	12	52.2%
Changed mobile number	3	13%
Reported the bully to the website Administrator	1	4.3%
Sought help from parents	7	30.4%
Deleted account	4	17.4%
Asked support from friends	10	43.5%
Others:		
Not Affected	1	4.3%

Table 3 shows the adolescents' cybervictimization reactions and coping strategies. Most adolescents who experienced cybervictimization either felt scared (n= 9 , 39.1%) or angry (n=8, 34.8%). Thirty percent (30.4 %) claimed not to have been affected while twenty-six percent (n=6, 26%) felt embarrassed about their experience.

Majority of the participants (n=14, 60.9%) either ignored the cyberbullying incidents or cried in response to the cybervictimization (n=11, 47.8%). More than half of participants (n=13) disclosed their cybervictimization experiences to others, mostly to their classmates or friends (43.5%,n=10). Only a few initially told their parents (17.4%,n=4) or teachers (8.7%, n=2). In order to cope with their cybervictimization experiences, most of the adolescents either blocked the bully (52.2%, n=12), asked support from friends (43.5%, n=10), avoided using the internet (34.8%, n=8) or sought help from their parents (30.4%,n=7). Only four respondents deleted their accounts while one (1) reported the incident to the website administrator.

Table 4. Dimensions of Cybervictimization

	Minimum	**Maximum**	**Mean**	**Standard Deviation**
Impersonation Score	3.00	9.00	4.6522	1.69515
Visual Cybervictimation Score	7.00	13.00	8.1739	1.94591
Written Cybervictimization Score	6.00	14.00	8.5652	2.19143
Online Exclusion Score	3.00	12.00	4.8696	2.36075
General Cybervictimization Score	1.00	4.00	1.4348	.72777

The most common cybervictimization experiences that the participants experienced were related to **visual** (mean=8.17, SD=1.94) and **written** (mean=8.56, SD=2.19) **cybervictimization.** Participants had varying responses with regards to **online exclusion (mean=4.86, SD=2.36)** and **impersonation (mean=4.65, SD 1.69)** making these the least common methods of cybervictimization. **General Interpretation of Cybervictimization** garnered the lowest mean scale score among the dimensions (mean=1.43, SD.727).

Table 5. Risk Factors Associated with Cybervictimization

Profile	Impersonation	Visual Cyber-victimization	Written Cyber-victimization	Online Exclusion	General Cyber-victimization
Age	.361	.265	.386	.287	.328
Educational Level	.705	.069	.533	.519	.302
Grade Level	.188	.288	.190	.242	.371
Use of Mobile Phone	.575	.481	.077	.158	.021*
Social Media Accounts	.915	.723	.535	.745	.711
Grade Level Onset of Bullying	.479	.508	.293	.118	.020*

*significant at .05 level

In **Table 5,** the risk factors for cybervictimization are presented. Based on the study results, age and educational or grade levels were not found to be significant risk factors for cybervictimization. On the contrary, mobile phone use was noted to be a statistically significant associated risk factor for cybervictimization (p value=0.021). The more time the adolescent spends in social media using their mobile phone, the higher the risk of experiencing cybervictimization. A lower grade level onset of bullying was also found to be a significant risk factor for cybervictimization (p value=0.020). Those who experienced cybervictimization earlier on may have a higher probability of re-experiencing cybervictimization and concomitantly, further traumatization.

DISCUSSION

The risk for cyberbullying or electronic bullying (voluntary and repeated actions against one or more individuals through the use of computers and electronic devices) is a reality given the easy access of adolescents to current technological advances, particularly the internet and social media.[13]

Majority of the participants in this study were middle adolescents (55.55%) with a slight female predominance (52.77%). Most were currently enrolled in junior high school (56%) while the highest level attained by most of those who were not enrolled was Grade 12 (44%). Of the 72 participants, almost all (98.61%) reported to have used the internet and a majority (84.72%) also had their own mobile phones. The top three platforms used by the participants were Facebook (94.44%), Tiktok (70.83%) and Messenger and Instagram (63.88%). Patton et al in 2014 also documented that 90% of adolescents reported using the internet on a regular basis and about 70% had at least one user profile on a social networking site. Social media and social networking sites were also used by the youth to bully and harass their peers. [14] Among the participants, 31.94% experienced cybervictimization within the past 6 months. Males (52.77%) were reported to be cyberbullied more than females. The study of Gofin and Avitzour in 2012 likewise showed this male predominance among cybervictims.[15] In addition, UNICEF also reported in 2019 that among 13-17 year old adolescents in the Philippines who experienced cyberbullying, there was a slightly higher number of males affected (44%).[16] Furthermore, Li in 2007 also documented that among 133 seventh grade students who were cyberbullied, 31.2% were male while 26.3% were female.[17]

Online exclusion and impersonation were experienced by the study participants one to four times a month. Most adolescents who experienced cybervictimization either felt scared (39.1%) or angry (34.8%). Thirty percent (30.4 %) claimed not to have been affected while twenty-six percent (26%) felt embarrassed about their experience.

Majority of the participants (60.9%) either ignored the cyberbullying incidents or cried (47.8%) in response to the cybervictimization. These reactions to the cybervictimization experiences are similar to those reported by Sahin in 2012, Bauman et al in 2013 and Gimenez in 2015. These authors noted that adolescents who have been victimized by cyberbullying reported feeling sad, feelings of unhappiness, and reported depression more frequently than those who have not been victimized.[18]

More than half of the study participants disclosed their cybervictimization experiences to others, mostly to their classmates or friends (43.5%). Only a few initially told their parents (17.4%) or teachers (8.7%). This can be explained by the nature of adolescents who tend to confide more in their peers. Some adolescents might have also been afraid to tell their parents or teachers about the incident. Schenk in 2011 reported similar findings among college students who experienced cyberbullying and coped by by talking with friends and getting support from them.[19]

On the contrary, Dehue et al in 2008 stated that many adolescents who have been victimized by cyberbullying did not talk to anyone about it or if they did talk to someone it was either with their parents or caregiver.[20]

In order to cope with their cybervictimization experiences, most of the adolescents either blocked the bully (52.2%,), asked support from friends (43.5%) avoided using the internet (34.8%) or sought help from their parents (30.4%,n=7). Only four respondents deleted their accounts while one (1) reported the incident to the website administrator. The findings of a study by Bukowski et al in 2001 showed that friends have a strong influence on students' emotional, behavioral, and affective development and this can explain while many of the cybervictims in this study sought support from their friends.[21] Hodges & Perry in 1999 and Jeffrey et al in 2001 also stated that friends helped reduce the cybervictims' anxiety and provided protection and coping advice to victims either in the real world or in cyberspace.[22]

In this study, the most common cybervictimization experiences that the participants experienced were related to visual (mean=8.17, SD=1.94) and written (mean=8.56, SD=2.19) cybervictimization. According to Menesini et al in 2011, adolescents reported that the experience of visual cybervictimization (e.g unpleaseant photos or videos of oneself distributed online) was more negative than that of written cyberbullying victimization (when one is the recipient of online insults, pranks or flaming).[23]

Based on the study results, age and educational or grade levels were not found to be significant risk factors for cybervictimization. On the contrary, mobile phone use was a statistically significant associated risk factor for cybervictimization (p value=0.021). The more time adolescents spend in social media using their mobile phones, the higher the risk of experiencing cybervictimization. Tokunaga in 2010 also reported that age was not significantly associated with cybervictimization.[24]

CONCLUSION

The risk for cybervictimization is a reality among adolescents today given their easy access to the internet and their increased engagement in online activities. Different forms of cyberbullying exist and efforts should be made in order to promote cybersafety through awareness of these potential risks. Adolescent cyberbullying victims may have different reactions to the experience. Timely psychosocial support and management should be provided to prevent unwanted outcomes.

LIMITATIONS OF STUDY

The study has several limitations. First, only a small sample size was used (72) and the results may not be reflective of the actual prevalence of cybervictimization among Filipino adolescents. Second, the study design is cross-sectional, hence, no direct causative relationships may be derived among the study variables. Also, given the nature of the study and the use of questionnaires, recall bias may have occurred during the time the adolescents were filling out the forms. In addition, the degree of traumatization brought about by the cybervictimization experiences was not measured and the role of the parents in monitoring internet use of the adolescents was not among the variables explored.

RECOMMENDATIONS

A larger sample size is recommended to get a more accurate picture of the prevalence of cybervictimization among Filipino adolescents. A nationwide survey in the school setting involving well adolescents would be ideal to have a point of comparison since this study only included sick adolescents either admitted at the wards or who consulted at the outpatient clinic for acute health concerns. School- based programs addressing the need to educate adolescents on cybersafety are also highly recommended to prevent or decrease the risk for cybervictimization. Follow-up studies that would look into the role of parents and guardians with regards to adolescents' internet use and also those that would quantify the degree of traumatization of the cybervictims are also recommended to help in the prevention and timely management of the negative effects of cybervictimization.

ETHICAL CONSIDERATIONS

IERB approval was sought prior to the conduct of the study. This study was done in compliance with the Data Privacy Act of 2012. Participation was purely voluntary, and the adolescent was allowed to withdraw consent anytime without any negative consequences on his or her healthcare. Adolescents who were identified to have cybervictimization experiences were referred to an Adolescent Medicine specialist for further evaluation and counseling.

The results of the study will be shared with the medical community, may be presented in local and international conferences or may be submitted for publication in medical journals.

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