Relationships between Cyberbullying Techniques and Psychological Wellbeing of Adolescents in Secondary Schools in Nairobi County, Kenya

Nuna, R. M¹ Ngumi, O²and Macharia, S³ Department of Pychology Mount Kenya University P.O Box 342(01000) Thika, Kenya

Abstract

Cyberbullying has become a global social health issue in the past ten years. An estimated 20 to 40 percent of all teenagers will be victims of cyberbullying at some point. Although the phenomenon has no currently accepted definition and is still in its early stage, adolescents exhibit emotional instability. The purpose of this study was to investigate the relationship between cyberbullying techniques and the psychological well-being of adolescents in secondary schools. The study applied the Ex-Post-Facto and Survey designs. Ex-Post -Facto design was used to model the study since cyberbullying had already occurred and it was not possible to control its effects on the dependent variable (psychological wellbeing). Survey was used to describe the relationship between cyberbullying techniques and the psychological wellbeing of the adolescents in details. The target population consisted of all adolescents between 13-18 years from five selected schools in Nairobi County from whom a sample of 318 participants were drawn. Out of the five selected secondary schools, the researcher used 5 school principals, and 5 teacher counselors. The research instruments consisted of a modified Cyberbullying Questionnaire by Batool, Yousaf and Batool (2017), an interview schedules for school Principals and Teacher-Counselors and a Focus Discussion Guide for key informants. Data were analyzed using SPSS version 25 and presented using frequency tables and percentages. The study found that, there was statistically significant relationship between cyberbullying by social networking sites and by text messaging (r $(316) = .469^{**}$. p > ..087). The results showed that, cyberbullying or witnessing someone being cyber bullied through social networking sites and text messaging decreased the adolescents' psychological wellness. The study recommended that, the school principals should employ intensive monitoring and control of the sites the adolescents is visiting in order to safeguard them from psychological problems and maintain their mental health.

Key words cyberbullying, cyberbullying strategies, psychological wellbeing, bullies, and victims

1. Introduction

As more people gain access to the internet, social media, mobile phones, and other forms of electronic communication systems, the problem of cyberbullying continue to spread and has become an issue of concern particularly with secondary schools. The influence of email and online social networks on adolescents' activities and behaviors is expanding. Despite the fact that countries around the world pay attention to what happens on websites like Facebook, YouTube, Twitter, and other social media platforms, these platforms have been linked to online bullying. According to Jun (2020), Internet and social media are becoming platforms for both positive and negative experiences relating to the mental health and wellbeing of the adolescents. Consistently, Hindujah and Patchin (2014) found that adolescents could use their phones and tablets to make websites, films, and publish them on social media platforms, which they could then use to harass, threaten, embarrass, or bother their peers. Mostly, the internet and other social platforms provide the bully with a shied which prevents them from seeing the emotional feeling experienced by the victims thus, they may perpetrate bullying at will without considering its psychological impact on the victims. In Kenya, Langat (2015) found that, students in Kenyan universities spent increasingly large amount of their quality time on WhatsApp and twitter even during lecture hours. Furthermore, InterMedia (2013) established that adolescents frequently used Face book, SMS (Texting) and phone calling. This indicated that from such platforms the adolescents could be cyberbullied. Therefore, this study provides the relationships between the techniques of cyber bullying and psychological wellbeing of the adolescents in secondary schools.

2. Literature Review

2.1 Cyber Bullying Techniques and Psychological Wellbeing of The Adolescents in Secondary Schools

In this study cyberbullying techniques referred to the manner and ability in which the adolescents in secondary schools accomplished their desire to perpetrate cyber bullying. Bullies can accomplish cyberbullying in the 42

presence of great number of onlookers (audience), at the same time allowing the perpetrators to remain unidentified whether it is being performed through Facebook, Twitter, Instagram or any other platform, observed Foody, et al (2015). Consequently, the strain caused may result to multiple psychological, emotional and behavioral disorders, such low self-esteem, feeling depressed, sad, angry and frustrated (Hinduja & Patchin, 2021).

Specifically, Kraft and Wang (2010) investigated cyberbullying and cyber stalking experiences of college students in USA. The results indicated that, 43% were cyberbullied through text messaging, 39% phone calls, 37% instant messaging, 35% Emails, 15% unwanted pornography while 9% through embarrassing pictures. However, the victims of such cyberbullying reported feeling suicidal thoughts as well as anger, irritation, upset, hurt, and humiliation. This study shed new light on the current study on the relation between teenage psychological health and techniques of cyberbullying. Consistently, Peled (2018) conducted a study in Israel on cyberbullying and its influence on academic, social and emotional development of undergraduate students.

The study found that, cyberbullying had influence on academic, social and emotional development of the students. Besides, the study revealed that, there were statistically significant relationships between the cyberbullying perpetrated through social networking sites and instant messaging and students' interpersonal problems. This suggested that the students were unable to adjust to new social freedoms, support networks, or environments. The study revealed that the usage of drugs by students has increased as a result of chat rooms and instant messaging cyber bullying. Surprisingly, the study demonstrated that, family problems increased when the students were cyber bullied through all kinds of media while problems with regular activities such as school and academics, increased when they are cyber bullied through Emails.

This implies that cyberbullying techniques have great implication on the psychological wellbeing of the adolescents particularly, family problem thus the need to address it because the family is a basic unit in the large society. However, Azam and Jasmin (2018) observed that, out thee adolescents who had been cyberbullied through, texting, chatting or Facebook, 26% believed they were depressed, 26% experienced fear while 34.8% felt embarrassed. In addition,, Lai, et al (2017) found that, out of the students who had been cyberbullied through chartrooms, Facebook, Twitter, Mobile phones and Instagram, 49.4% became very sensitive to their surroundings, 44.7% experienced emotional changes, 38.1% had insecure feelings when surfing on internet, 29.6% became nervous when receiving messages and emails while 26.8% avoided mixing with family friends.

Others changed their appetite and attempted to commit suicide. In addition, Abaido (2020) in United Arab Emirates studied cyberbullying on social media platforms among university students. The results indicated that, 55.5% used Instagram, 38% used Facebook while 35.5% used twitter. However, out of 75% of those who used Facebook, 54% reported experiencing cyberbullying. This implies that the intensive use of various techniques in social media would yield to cyberbullying thus the detrimental effects may be enormous. According to Malik and Radwan (2020), victims of cyberbullying show more negative emotions and more stress than the non-victims consequently where the victims are more likely to display psychiatric disorders, both emotional and behavioural.

In Africa and South Africa in Particular, platforms such as text messaging, social network sites, chat rooms, short message services are techniques frequently used to perpetrate cyberbullying. Cilliers and Chinyamurindi (2020) did a study on perceptions of cyber bullying at primary and secondary school amongst the student teachers in Cape Province, South Africa. The study reported that, 32(21.3%) of the students used instant message services, 74(49.5) used Facebook while 24(16%) used twitter. Consistently, a survey done in Cape Town on internet visibility and cyberbullying among high school students found that social network sites (SNS) and short message services (SMS) were online spaces used for cyberbullying.

Specifically, the study revealed that 29% of the students used SNS, 22% SMS, 6% chat rooms, 2% used gaming while only one percent used emails (Scholtz, et al, 2015). In addition, Hills (2017) using social scientific and comparative approaches investigated the framework used to regulate cyberbullying in South Africa. The study found that 70% of the participants used text messaging as popular platform of socialization, 80% used pictures and video clips, 90% phone calls, 80% WhatsApp while 60% used Facebook. These findings were confirmed by Odora and Matoti (2015), who discovered that emails, chat rooms, social networking websites, and text messaging were common methods used by students to engage in cyberbullying.

In Nigeria, Okoiye et al (2015) investigated the moderating effects of cyberbullying on psychological wellbeing of adolescents in Benin State. The findings showed that, the most popular methods of cyberbullying among adolescents were internet, Facebook, and social networking sites. In Tanzania, Onditi (2017) did investigate cyberbullying among the adolescents particularly the experience and the psychosocial factors influencing coping strategies. The results indicated that, 76% of the adolescents used phones to perpetrate cyberbullying; 86% used internet devices while 45% used social networking sites implying that they risked being cyber bullied which may result to distress.

In Kenya, Muli (2022) added that bullying could be perpetrated through texts, Emails, Phone calling and letters. Consistently, Okoth (2014) displayed that 2.1% used written SMS, 3.8% Audio messages 5.8% Visual messages while 3.8% used Audio visual. Comparably, Makori and Agufana (2020) examined the challenges and possible mitigations of cyber bullying in higher educational institutions. The study displayed that 24% of the students used WhatsApp, 16% used Facebook, 12% used Twitter and 14% used Messager. This indicates that as they explored some sites, they could as well use them to perpetrate cyberbullying which could interfere with their psychological wellbeing. According to Makori and Agufana (2020), 63% of the students who had been cyber bullied through such techniques, felt embarrassed when they realized they had been cyber bullied. Moreover, 61% felt bad because they were attacked individually, 37% felt no one could help, 32% felt they were alone with no support while 22% felt there was no way they could escape from cyberbullying. These and many others would consequently throw the victims into frustration, loneliness, depression and feeling of rejection.

2.2 Purpose of the Study

The purpose of this study was to investigate the relationships between cyber bullying techniques and psychological wellbeing of the adolescents in secondary schools in Nairobi County, Kenya.

3. Research Methodology

3.1 Research Design

Ex- Post -Facto and Survey were the two designs used in the investigation. *Ex –Post- Facto* design was used to model the study because cyberbullying manifestation had already occurred and could not be controlled, while the survey design allowed the researcher to describe the relationship between cyber bullying techniques and the psychological wellbeing of the adolescents in detail. Hence, a retrospective investigation into cyberbullying was conducted to determine the counter measures.

3.2 Study Population

All the 5200 secondary school students from five chosen schools, ranging in age from 13 to 18, made up the study's population. Adopting this category was motivated by the fact that adolescents are in developmental stage where they are more aggressive and socialize mostly with peers rather than their parents and significant others. They may also utilize internet media to further their social agenda, which could lead to cyberbullying. From the five selected secondary schools the study purposely selected the 5 principals and the 5 teacher counselors. The researchers also selected a professional counselor, a police officer, an IT Expert, former high school student who had left school one year prior to the study, a pastor and a parent based on the relevance to the study and they formed the focus group.

3.3 Sampling Procedures

Simple random sampling was used to select 318 adolescent students for the study. Further the researchers used purposive sampling to select 5 school principals and 5 teacher counselors. Purposive sampling was also used to select 5 key informants for focus groups (a professional counselor, a police officer, an IT Expert, former high school former student and parent).

3.4 Research Instruments

The study modified cyberbullying questionnaire by Batool, Yousaf and Batool (2017) to collect information about the relationship between cyberbullying techniques and psychological wellbeing of the adolescents in secondary schools. The questionnaire consisted of five-point Likert scale items. The interview schedules contained items used to collect data regarding the techniques used by adolescents and their effects on their psychological wellbeing.

4. Study Findings

Table 1 displays the findings on the relationships between the cyberbullying techniques and the psychological wellbeing of the adolescents in secondary schools. The study used descriptive statistics (frequencies and percentages) to explain the outcome.

Ta	ble	1:

Descriptive Analysis for Cyberbullying Techniques and Psychological Wellbeing of the Adolescents in Secondary Schools

Item/Scale		1		2		3		4		5	
	Gender	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
How often have disliked	М	97	50.8	51	26.7	30	15.7	8	4.2	5	2.6
school work after being											
cyberbullied through text	F	71	56.8	32	25.6	17	13.6	3	2.4	2	1.6
messaging?	м	40	25.7	4.4	22	47	24.6	20	20.4	10	6.2
How often have you been	М	49	25.7	44	23	47	24.6	39	20.4	12	6.3
embarrassed after witnessing your peers being cyber											
bullied through social	F	31	24.8	33	26.4	23	18.4	33	26.4	5	4
networking sites?											
How often have you missed	М	119	62	37	19.3	22	11.5	8	4.2	6	3.1
your class or test when											
someone harrassed you	F	90	72.6	21	16.9	8	6.5	5	4	00	00
through phone calling?											
How often have you felt	М	129	66.8	31	16.1	18	9.3	9	4.7	6	3.1
like committing suicide after											
receiving hurtful video clips	F	95	76	17	13.6	8	6.4	2	1.6	3	2.4
or pictures?											
How often have you felt	М	114	60	36	18.9	25	13.2	10	5.3	5	2.6
frustrated and depressed											
after being cyberbullied	F	89	72.4	16	13.0	14	11.4	3	2.4	1	0.8
through chat rooms?											
How often have you been	М	133	73.5	24	13.3	13	7.2	5	2.8	6	3.3
angry or annoyed because of											
nasty messages you recieved through emails?	F	101	83.5	12	9.9	5	4.1	3	2.5	00	00
recieved through emails?	-	101	0010			C		C		00	00
How often have you felt	М	87	45.8	31	16.3	25	13.2	20	10.5	27	14.2
worried or scared after	111	07	15.0	51	10.5	23	13.2	20	10.5	27	11.2
sending online threats to	-				2 0.0				11.0	-	1.0
someone through gamming?	F	68	54.4	26	20.8	11	8.8	14	11.2	6	4.8
How often have you felt	М	147	76.6	26	13.5	7	3.6	7	3.6	5	2.6
like giving up or committing											
suicide after being cyber	F	97	77.6	11	8.8	10	8.0	4	3.2	3	2.4
bullied through blogging?					l <u>.</u>		<u> </u>	Ļ			

Key %- Percentage, Frequency, 1-Never, 2-Rarely, 3-Sometimes, 4- Often, 5- Always

The study investigated gender differences in cyberbullying techniques and the psychological wellbeing of the adolescents in Nairobi County. As indicated in Table 1, the study showed that, out of the adolescents who had been cyber bullied through text messaging, 51(26.7%) and 30(15.7%) of the males and 32(25.6%) and 17(13.6%) of the females rarely and sometimes disliked school work respectively. However, the study demonstrated that 119(62%) of the males and 90(72.6%) of the females did not miss class or test when someone harrassed you through phone calling. This implied different cyberbullying techniques would have different effects on the psychological wellbeing of the adolescents.

Additionally, the study found that more male 47(24.6%) than female 23(18.4%) were sometimes embarrassed after they witnessed their peers being cyber bullied through social networking sites. Inversely higher percentage of females (33(26.4%)) than males 39(20.4%) would often feel embarrassed. This implied that more females than male would be uncomfortable with the online information. Besides, the study found that majority of the adolescents (129(66.8%)) males and 95(76%) girls) did not feel like committing suicide after receiving hurtful clips and pictures. Only less than one fifth (31(16.1%)) males and 17(13.6%%) girls) rarely experienced such feelings. Nevertheless, the study displayed that, 36(18.9%) and 25(13.2%) of male gender and 16(13%) and 14(11.4%) of the female gender were frustrated and depressed as victims of chat room cyberbullying. However, of those who reported being cyber bullied by Emails, within a range of rarely to always, more males (48(26.6%)) than females (20(16.5%)) were annoyed and angry. It seems cyberbullying does not only impact on the victims but also the cyber bullies and those who witness it. The findings of this study revealed that, 103(54.2%) of the males and 57(45%) of the females were worried and scared after sending online threats to someone through gamming.

This implies that the adolescents value socialization particularly of the peers and thus, they thought they could be apprehended by being excluded from the group. Lastly, as indicated in Table 1, the results showed that, of the adolescents who had been cyber bullied through blogging, 27(14.2%) of the male agreed they would always feel like giving up or committing suicide, 10(8%) of the female would sometimes experience such feelings while more than 70% of the adolescents across gender did not feel anything. The study conducted a Pearson correlation coefficient to establish the relationship between the two variables as indicated in table 2.

Table 1:

Correlation Matrix	For	Cyberbullying	and	Psychological	Wellbeing	of the	Adolescents in	Secondary
Schools								

	Forms of Cyber bullying	1	2	3	4	5	6
1	How often do you dislike school work after being	1					
	cyberbullied through text messaging?						
2	How often have you been embarrassed after witnessing	.469**.	1				
	your peers being cyber bullied through social						
	networking sites?						
3	How often have you missed your class or test when	.368**.	.368**.	1			
	someone harrassed you through phone calling?						
4	How often have you felt like committing suicide after	.466**.	.363**.	.283**.	1		
	receiving hurtful video clips and pictures?						
5	How often have you been angryor annoyed because of	.393**.	.362**.	.284**.	.323**.	1	
	the nasty messages you recieved through emails?						
6	How often have you felt worried or scared after sending	.155**.	.347**.	.256**.	.296**.	.370**.	
	online threats to someone through gamming?						1

**.Correlation is significant at the 0.05 level (2-tailed). Critical region .087, n = 318, df = 316

As indicated in Table 2, the study established statistically significant relationship between cyberbullying and psychological wellbeing of the adolescents in secondary schools in Nairobi County. Consistently, the study found that, there was statistically significant relationship between cyberbullying by social networking sites and by text messaging (r $(316) = .469^{**}$. p > -.087). The results indicated that, cyberbullying or witnessing someone being cyber bullied through social networking sites and text messaging increased the adolescents' embarrassment and dislike in school work. Besides the correlation between the gaming techniques and sending hurtful video clips and pictures (r $(316) = .296^{**}p > .087$) indicated that as those cyber bullied by gaming reported increased worry and feeling of being scared, those who had been cyber bullied through video clips and pictures reported increased suicidal ideation.

This implied that there was statistically significant relationship between being bullied though gaming and by hurtful video clips and pictures. The study displayed that, there was a significant relationship between being bullied through emails and phone calling. Besides, the study demonstrated that, there was a statistically significant relationship between feeling angry and annoyed after receiving nasty messages through Emails and feeling like committing suicide after receiving hurtful video clips and pictures(r $(316) = .323^{**}$. p > .087). The adolescents who experienced anger would also experience suicidal ideation after the cyberbullying experience. The study found that, there was statistically significant relationship between feeling worried or scared after sending online threats through gaming and being angry or annoyed because of receiving nasty messages through Emails r $(316) = .370^{**}$. P > .087). This implied that cyber bullying by gaming and Emails increased the victims feeling of being worried, scared, angry and annoyed.

Table 3:

Chi Square Test for Cyberbullying Techniques and Psychological Wellbeing of the Adolescents in Secondary Schools

Test	Value	df	Critical Value
Pearson Chi-Square	6.703	4	3.841
Laval of significance 0	5 Critical Value 2 941 df 4		

Level of significance .05, Critical Value 3.841, df = 4

The finding In Table 3 indicates that, the Chi- Square results $\chi^2(4) = 6.703$, P>3.841) revealed that, there was statistically significant relationship between cyberbullying techniques and psychological wellbeing of the adolescents. The study, therefore, rejected the null hypothesis that there was no statistically significant relationship

between techniques of cyberbullying and psychological wellbeing of the adolescents in secondary schools in Nairobi County.

5. Discussions of the Findings

From the findings the study found that there was a statistically significant relationship between cyberbullying and the psychological wellbeing of the adolescents in secondary schools. This implies that cyberbullying had effects on the psychological wellbeing of the adolescents. These results were consistent with Lim and Lee (2021) who observed that, almost all the victims of cyber bullying experienced certain degree of social and psychological distress. Batool et al (2017) specified that of those who had been cyber bullied, 25.1% would always get depressed while 27.5% would always feel anxious and 40.8% would always feel tensed up particularly if someone harassed them through social networking sites.

Corroborating, the current study found that cyberbullying by social networking sites and text messaging increased the adolescents' embarrassment and dislike of school work. Additionally, the study found that cyberbullying by gaming and video clips and pictures increased the adolescents' worry, feeling of being scared and suicidal ideation while cyberbullying through Emails increased the adolescents' feeling of missing school or test, anger and being annoyed. These findings were supported by Peled (2018) that the usage of drugs by students had increased as a result of chatrooms and instant messaging cyber bullying.

Surprisingly, the study demonstrated that, family problems increased when the students were cyber bullied through all kinds of media while problems with regular activities such as school and academics, increased when they were cyber bullied through Emails. This implies that, cyberbullying techniques have great implication on the psychological wellbeing of the adolescents. Besides, the current study found that there was statistically significant relationship between gaming and the psychological wellbeing of the adolescents.

For instant, the study revealed that the feeling of being worried, scared and committing suicide increased when cyberbullying was perpetrated through video clips, pictures and gaming. These results were contradicted by Boyle, et al. (2016) that, gaming would help the youth to relax, forget their problems and manage their anger thus contributing to positive outcomes as well as wellbeing in both educational and therapeutic contexts. However, Yang (2012) found that, there was a significant relationship among preference for video games, hostility, aggressive behaviours and cyber bullying among the online gamers.

Cyberbullying was consistent with psychological distress and inspiration to achieving life goals. This meant that, when the adolescents are cyber bullied, it might affect their choices and hinder them from having control of their lives. In line with this Mwiti (2015) observed that cyberbullying might give adolescents negative thinking and false self-perceptions about themselves and may take away their energy and their ability to be spontaneous because their energy focuses on the comments made by bullies instead of focusing on their goals. These results were agreeable with Lai, et al. (2017) that, the students who had been cyber bullied through chartrooms, Facebook, Twitter, Mobile phones and Instagram, became very sensitive to their surroundings, experienced emotional changes, had insecure feelings when surfing on internet, had become nervous when receiving messages and emails and avoided mixing with family friends.

Cyberbullying not only affects the emotions but also the physical wellbeing of the adolescents because the study reported that others changed their appetite and only minority attempted to commit suicide. From the focus group discussion, the report demonstrated that, cyberbullying might lead to mental problems among the adolescents. The group reported that cyberbullying makes the adolescents in secondary schools leave school and adopt unnecessary behaviors including drug and substance abuse. Their self-esteem gets affected leading to self-hatred and self-blame. Specifically one of the respondents reported that, *"the adolescents might withdraw from their peers, retreat to isolation, depression and lastly end up committing suicide"*. This was an indication that cyberbullying is severe and thus it requires immediate attention in order to alleviate its effects particularly among the adolescent who might be at risk of such behaviors. The study, therefore, suggests for education regarding the techniques of cyberbullying among the adolescents.

6. Conclusion

The study found that, different cyberbullying techniques had negatively influenced the psychological wellbeing of the adolescents in secondary schools. The use of these techniques negatively affected their psychological wellbeing causing them embarrassment, anxiety, stress, depressive tendencies and lack of focus on their education.

6.1 Recommendations for the Study

The school principals should employ intensive monitoring and control of the sites the adolescents is visiting in order to safeguard them from psychological problems and maintain their mental health. They could also create awareness on cyberbullying techniques used by adolescents and its harm on their psychological wellbeing.

References

- Abido G. M. (2020). Cyberbullying in Social Media Platforms among University Students in Arab Emirates. *International Journal of Adolescence and Youth*, 25 (1) 407-420. http://doi.org.10.1080/0267384.2019.1669059
- Azam, Z., & Jasmin, K. S. S. (2018). A Study on Cyberbullying Among School Students in Chennai. International *Journal of Pure and Applied Mathematics*, 120(5)263-273 https://www.acadpubl.eu/hub/specialissue
- Batool, S., Yousaf, R., & Batool, F. (2017). Bullying in social media: An effect study of cyberbullying on the youth. *Pakistan Journal of Criminology* 9(4)119-139.
- Boyle, E. A., Hainey, T., Connolly, T. M., Gray, G., Earp, J., Ott, M., Lim, T., Ninaus M. J., Ribeiro, C., Pereira, J. (2016). An Update to the systematic literature review of empirical evidence of the impacts and outcomes if computer games and serious games. *Journal of computer education*, 94(1), 178-192 https://doi.org/10.1016/j.compedu.2015.11.003
- Cilliers, L., & Chinyamurindi, W. (2020). Perceptions of Cyberbullying in Primary And Secondary Schools among Students Teachers in the Eastern Cape Province of South Africa. *The Electronic Journal of Information Management Systems*. e 12131 http://doi.org.1002/isd2.12131
- Foody, M., Samara, M., & Calbring (2015). A Review of Cyberbullying and Suggestions for Online Psychological Therapy 9 Internet Interventions, 2(3)235-242 http://doi.org/10.1016/j.invent 1015.05002
- Hills, C. A. (2017). Developing, a Law and Policy Framework to Regulate Cyberbullying in South African Schools, (PHD) University of South Africa.
- Hinduja, S., & Patchin, J. W. (2021). Cyberbullying: Identification, Prevention, and Response. Cyberbullying *Research Center (cyberbullying.org).*
- Hinduja, S., & Patchin, J. W. (2014). Cyberbullying, Identification, Prevention and Response. Cyberbullying Research Center, www.cyberbullying.US
- InterMedia A (Private) Public Space. (2013). Examining the Use and Impact of Digital and Social Media among Adolescents in Kenya.
- Jun, W. (2020). A Study on the Cause, Analysis of Cyberbullying in Korean Adolescents .International *Journal of Environmental Research and Public Health*, 17(2020)4648 https://doi.org/10.3390/ijerph17134648
- Kraft, E. M., & Wang, J. (2010). An Exploratory Study of Cyberbullying and Cyber Stalking Experiences and Factors Related to Victimization of Students at the Public Liberal Art College. *International Journal of Techno ethics*, 1(4)74-91
- Langat, A.C. (2015). The influence of Social Media on Study Habits of Undergraduate Students in Kenyan Universities. *International Journal of Novel Research in Humanity and Social Sciences* 21(4)42-55.
- Lim, H., & Lee, H. (2021). Cyberbullying: Its Social and Psychological Harms Among Preschoolers. *Journals and Campus Publications IJCIC*, 4(2021)1
- Mallik C.I, & Radwan R. B. (2020). Adolescent Victims of Cyberbullying in Bangladesh- Prevalence and Relationship with Psychiatric Disorders. *Asian Journal of Psychiatry*, 2020, 10189. https://www.doi:org/10.1016/j.ajp.2019.101893.
- Mwiti, G. (2015). *Dangerous Sides of Cyberbullying*. Businessdailyafrica.com/bd/lifestyle/thedanderous-side-of-cyber-bully-2091450
- Okoiye, O. E., Nwoga, A.N., & Onah, A. (2015). Moderating Effect of Cyberbullying on the Psychological Wellbeing of in School Adolescents in Benin Edo State of Nigeria. European Journal of Sustainable Development 4(1)109-118.
- Okoth, O. (2014). Teachers' and Students' Perceptions on Building Behaviour in Public Secondary Schools in Kisumu County, Kenya. *Journal of Educational and Social Research MCSER Publishing Rome –Italy 4*, 6
- Onditi, H.Z.(2017).Cyberullying in Tanzania: Adolescents experiences and psychosocial factors, PHD University of British Columbia https://hdi.handle.net/2429/61264
- Peled, Y. (2018). Cyberbullying and its Influence on Academic, Social and Emotional Development of Undergraduate Students. In Y. EShet-Alkalai, I. Blau, A. Capsi, S. Etgar, N. Geri, Y. Kalman& V. Silber-Varod(Eds) *Proceedings of 13th Chais Conference for the Study of Innovation and Learning Technologies:* Learning in Technological Era(E26-E31). The Open Raawana University.
- Scholtz, B., Turha, T. V., & Johnston, K. (2015). Internet Visibility and Cyberbullying: A Survey of Cape town High School Student. *African Journal of Information and Communication 15* (2015) 93-104.
- Yang, S., C. (2012). Paths to Bullying in Online Gaming: The Effects of Gender Preference for Playing Violent Games, Hostility and Aggressive Behaviour on Bullying. *Journal of Educational Computing Research* 47(3)235-249 https://www.doi.org/10.2190/EC.47.9