

Cyberbullying via Social Media: Case Studies in Malaysia

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ABSTRACT

Cyberbullying is generally defined as employing electronic communication to bully or harass a person on the Internet, particularly on the social media sites. Advances in technology and better Internet access have enabled cyberbullies to find their way into the IT world. This paper presents two cyberbullying cases through the social media platforms in Malaysia involving suicide attempts. It highlights and presents a detailed discussion on the investigation and analysis process that reveals frightful and alarming facts on how social media are manipulated negatively which can lead to death. This paper also shares a learning module entitled the National Cybersecurity Awareness Module, an initiative by CyberSecurity Malaysia in ensuring safer Internet usage in Malaysia. The module consists of six topics including cyberbullying and is aimed at providing awareness and exposure to the need for safe conduct while using the social media. The suggestions and recommendations offered are towards ensuring a secure, resilient, and sustainable social media.

I. INTRODUCTION

The usage of the social media as a communication channel has grown tremendously and has become a necessity instead of a luxury. Anyone around the world who has access to the Internet has the potential to communicate with and attract a massive global audience. While there are many benefits to social media, such ubiquitous communication can also be used for negative purposes. For

instance, cyberbullying has emerged as a potential harm with negative influence on the mental health.

Cyberbullying may have many serious and negative impacts on a person's life and even lead to suicide. Harmful cyberbullying behaviour can include posting rumours, threats, sexual remarks, cyberstalking, trolling, flaming, sharing negative and false content, and denigration. As a result, cyberbullying victims may

experience low self-esteem, increased suicidal ideation and a variety of negative emotional responses, including being scared, frustrated, angry, and depressed.

II. RELATED WORKS

Cyberbullying has reached an alarming rate in Malaysia. The Star, one of the major newspaper in the country, based on a nationwide survey conducted, found that 8 out of 10 school children have experienced bullying in their schools [1]. Malaysia has seen some brutal physical bullying cases, such as the death of 19-year-old teenager, T. Nhaveen, who was beaten up and sodomized by his former school bullies. Not to forget the death of navy cadet officer Zulfarhan Osman Zulkarnain, who was tortured and murdered by university mates over an allegedly stolen laptop [2]. Even though cyberbullying is done in the virtual world, the victims face consequences as real as those who suffer physically.

According to a survey conducted by the Malaysia Communications and Multimedia Commissions (MCMC) involving 14,000 school students, 70% of the respondents admitted to having been harassed online through improper pictures or messages posted and being called mean names [3]. Meanwhile, statistics provided by **MyCERT** (Malaysia Computer Emergency Response Team) CyberSecurity Malaysia show that they received 260 reports on cyber harassment cases in 2019 [4].

III. METHODOLOGY

The analysis was conducted by reviewing existing literature cyberbullying. Our goal was to examine whether the researchers had developed useful insight into this subject and to learn whether consensus agreement had already been reached on this subject. Based on observations, we have found that there are several literatures focusing on cyberbullying. Most of the literatures reviewed are valuable in term of framing the contexts rather than directly providing a solution to the issues of this study. The materials reviewed include articles found on the published websites. conference materials, and referred publications.

The analysis was also done with reference to the Malaysia Strategy Cybersecurity 2020-2024 (MCSS). This strategy's objectives have been outlined in five (5) strategic pillars. This paper referred to pillar four (4) which aims to enhance capacity and capability building, awareness and education through three (3) strategic initiatives. Diagram 1 illustrate the pillars of MCSS which is one of the basis of this analysis.



Diagram 1: The pillars of MCSS

IV. FORMS OF CYBERBULLYING

There many forms are cyberbullying discussed and referred to. Flaming, trolling, cyberstalking, denigration, harassment, masquerading, flooding, exclusion and outing are several types of cyberbullying that exist [5]. Based on a survey conducted by Statista, posting mean or hurtful comments online, spreading rumours about someone online, threatening to hurt someone via phone calls or texting, posting mean or hurtful pictures of someone online, creating mean or hurtful webpages about someone, and sharing racial or sexist remarks about someone online are among the most common types of cyberbullying identified [6].

The following table shows a list of cyberbullying and the definitions

TABLE 1: Types of Cyberbullying [7]

Type/form	Definition
Exclusion	the act of leaving someone out of a situation deliberately. For example, a teenager being left out of message threads or group conversations that involve mutual friends.
Harassment	a general category into which many types of cyberbullying fall, but it mainly refers to a persistent pattern of mean and dangerous online messages sent with the intention of harming someone.
Outing/doxing	refers to openly revealing personal and

	T
	sensitive details about someone without their consent. This is done solely to embarrass the victim on social media platforms by spreading personal photos or documents or sharing an individual's personal messages.
Trickery	is similar to outing but involves deception. The bully will befriend the victim and try to gain their trust before abusing that trust by sharing the victim's secrets and private information to third parties.
Cyberstalking	a severe form of cyberbullying that can go to the extent of physical harm threats, false accusations, and monitoring.
Fraping	when a bully uses a victim's social networking accounts to post inappropriate content using their name. For example, someone may post racial/homophobic slurs through someone else's online profile to ruin their reputation.
Masquerading	happens when a bully creates a made-up profile using a victim's personal information and pictures.
Dissing	when the bully spreads bad information about the victim through public posts or private messages to ruin their reputation and relationships with other people.
Trolling	the act of bullying by intentionally posting

	hurtful comments online to upset others. These bullies do not have a personal relationship with the victims.
Flaming	is similar to trolling but involves more direct attacks on victims, provoking them into online fights.

V. CASE STUDIES

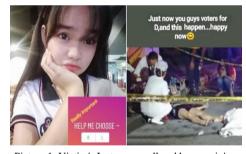
A. Case 1

A recent case that has shocked Malaysians was that of a 16-year-old teenager who committed suicide after her Instagram followers voted in a poll that she should die. On 13th May 2019, Davia Emilia jumped to her death from a third-floor apartment in Batu Kawa New Township, Kuching, Sarawak. She posted an Instagram story earlier that day, around 3pm, asking her followers to choose whether she should live or die. The result showed 69% voted "D" that stands for "die" and the remaining voted "L" that means "live". After returning from dinner at 8pm, her stepbrother found Davia lying lifeless below their rented unit. According to her neighbour, Davia was studious and always had a book with her whenever she was in a coffee shop nearby. She died 10 days before the mid-year school holiday started. Davia came from a broken family. A local news station reported that her depression originated when her father separated and remarried a Vietnamese woman in Singapore. It was also stated her father seldom visited her. On the other hand, her mother, an Indonesian woman,

remarried a man with a 15-year-old son.

Earlier that evening when Davia died, her stepbrother invited her for dinner, but she refused. The city police chief added that Davia updated her Facebook status with "WANNA QUIT F****** LIFE I'M TIRED," before adding it to her Instagram story. She also sent out a heartfelt WeChat status to her friends in Chinese later that day. After her death, Davia's cousin posted a story on her Instagram account with "Just now you guys voted for "D" and this happened... Happy now?" (see **Picture 1**) [8].

According to MCMC, those who incited the 16-year-old girl in Sarawak to commit suicide based on the poll on her Instagram, may be liable under Section 305 of the Penal Code, which states that it is wrong to incite individuals aged below 18 to commit suicide.



Picture 1: Victim's Instagram poll and her cousin's post about her death

B. Case 2

Another tragedy occurred in Penang when a young man jumped to his death from a flat after leaving a suicide note on Facebook (see **Picture 2**). On 2 May 2017, 20-year-old Teh Wen Chun, an engineering student,

jumped from the 17th floor flat in Tanjung Bungah, Georgetown, Penang. It was learnt that Teh had posted an apparent intention to commit suicide on his Facebook page prior to the incident. Wen Chun's friends revealed that he was struggling with his studies and was under a lot of stress. He could not cope with the course he chose [9].

After his controversial death, a post on the TARUC Confessions-Penang Facebook page explained happened to Wen Chun. The post made by an anonymous student said the victim was hurt by anonymous posts online. Wen Chun became depressed by an article that tarnished his image online. His friends did not notice his suffering until he revealed his intention to kill himself. Despite his friends' effort to make him give up the idea of committing suicide, Wen Chun did it anyway. Wen Chun's father. Ben Hock, told The Star Online he was aware of his son being bullied in the cyberspace. Wen Chun display change in behaviour when some of his college mates criticized and called him names on Facebook. The father added that Wen Chun said everything was fine and did not complain about the bullying. Ben Hock said his son probably could not handle the cyberbullying, which led to his suicide [10].



Burn me to ashes release me by the sea No tombstones, no funeral Goodbye

Picture 2: Victim's Facebook profile suggesting his intention to commit suicide

VI. INTERVENTION MEASURES

A. General measures

Victims can fight cyberbullying by taking certain measures like not responding to it. Striking back makes the victim become a bully as well. It is natural to want to fight back but stooping to the bully's level to justify oneself is not a clever act. Children must seek an adult's help, be it a parent, sibling, teacher or professional [11]. Another step that can be taken is to gather evidence of the bullving. such as online messages or posts sent by the bully. There are several nongovernmental organizations willing to children affected help cyberbullying like the Befrienders Malaysia and Penang Protect and Save the Children and the Women's Centre for Change that offer helpline services. Cyberbullying can also be reported online by emailing to CyberSecurity Malaysia's Cyber999 or using the mobile app available on Google Play and App Store [12].

Instagram too has taken certain corrective steps to curb cyberbullying. This application uses artificial intelligence (AI) technology to

minimize mean behaviours. The AI algorithms can detect potentially problematic content before it is posted and advises users of consequences that might arise. Instagram has included a new feature called "Restrict" that allows users to block those who might post rude comments. A restricted user will not know that their comments will not be visible to other users. If the restricted user sends messages, these will automatically go into the spam folder of the message request inbox. The user can choose to either read or ignore the messages sent by the restricted user. The restrict feature allows the online relationship to continue but offers some controls of who and what can be seen. Users are also given the option to block someone to completely separate the individual. themselves from However, victims often prefer not to use this option because they are afraid of the bully's reaction. Twitter has a similar feature for when individuals tweet or reply with hurtful comments [13].

Facebook gives the option to report inappropriate posts, comments, or pictures. The app has also set a few community standards it complies to, and it does not tolerate pages that identify and degrade individuals. Bullying photos and videos used to shame a victim, unwanted friend requests or messages targeted at other sharing people. and personal information to blackmail or harass other users are not acceptable. Snapchat does not tolerate bullying either. If an unwanted message or picture sent to a user indicates bullying or harassment, a report can be

made by filling out an online form [14].

B. Signs of being cyberbullied

Everyone should always look out for certain symptoms in their children and people around if cyberbullying is suspected. The victim appears nervous whenever receiving texts, emails, or instant messages. Loss of appetite and being secretive or uneasy when asked about their social media life are also indications of cyberbullying [15]. Other classic signs are indulging in self-destructive behaviours, avoiding social activities, and loss of interest in education and sports [16]. Children might also have trouble sleeping at night or become frustrated after going online [17]. In some cases, parents are unfortunately the last ones to know that their child is a victim of cyberbullying.

C. National cybersecurity awareness module

(Cyber CyberSAFE Security Awareness for Everyone www.cybersecurity.my) with the motto "Be Smart, Be Safe!" is CyberSecurity Malaysia's initiative to educate and enhance the general public's awareness of the technological and social issues facing Internet users, and particularly the dangers of being online.

Through the CyberSAFE Program, CyberSecurity Malaysia developed a National Cyber Security Awareness Module (NCSAM), which is a collaboration between CyberSecurity Malavsia and the Ministry Education of Malavsia through the Resource and Education Technology Division. In 2017, the idea emerged to develop an e-learning module based on a report for the National Baseline Study on Cyber Security Awareness among School Students in 2016 & 2017. The objectives of this module are:

- i. To create awareness among school children.
- To be an alternative medium for teachers to teach ICT subjects with cybersecurity elements.
- iii. To train "Briget Bestari" or Ambassadors to spread awareness messages among peers.
- iv. To become content for Computer Club activities.

The target audience of this module includes school students aged seven (7) to 17. It also caters to special education and disability students. NCSAM consists of 6 topics:

- i. Social Media
- ii. Cyber Bullying
- iii. Internet Safety
- iv. Digital Citizenship
- v. Balancing Time Online
- vi. Online Ethics

The module has four (4) submodules based on the age or class as follows:

- i. Sub Module 1: Cyber Bullying - Standard 1 to Standard 3 (Age 7 to 9)
- ii. Sub Module 2: Cyber Bullying - Standard 4 to Standard 6 (Age 10 to 12)

- iii. Sub Module 3: Cyber Bullying - Form 1 to Form 3 (Age 13 to 15)
- iv. Sub Module 4: Cyber Bullying - Form 4 to Form 5 (Age 16 to 17)

Basically, on these topics, the participants discuss the definition of cyberbullying, differentiating between cyberbullying and bullying in real life, best practices to avoid being a victim, where to report, identifying the characteristics of victims, and the right things to do when children are facing bullying situations. The development of the modules started in 2018. Since then, the contents are being reviewed by the ministry and subject matter experts to make sure that they are up to date. In 2020, the modules undergo a pilot project at 300 schools in Malaysia to gather feedbacks from the officers. ministry teachers. students. The inputs are used to improve the module and bring it up to standard in supporting the philosophy of the national education.

The module will be fully implemented in 2021. CyberSecurity Malaysia will collaborate with the Ministry of Education to ensure the successful implementation of the achieving module towards the objectives. It is hoped the module will help create awareness and develop soft skills among students, especially for public speaking, and that it will become an influencer in terms of promoting information security and Internet safety.

Besides the development of NCSAM, a few activities are also in place to create awareness among

school children, especially on cyberbullying issues. The activities are:

- i. CyberSAFE Awareness Talk. Talk on best practices, do's and don'ts, current threats, issues and creating awareness within 30 to 45 minutes.
- ii. CyberSAFE Quest. Exploration/race game involving five (5) to six (6) checkpoints. Participants need to answer questions related to cyber safety before they can proceed to the next checkpoint.
- National ICT iii. Security Discourse (NICTSeD). Students can sell their ideas and proposals on specific topics. This year is going to be the 8th year of NICTSeD and the participants are from secondary schools in Malaysia. Sixteen teams representing each state in Malaysia will be chosen to compete in the preliminary, quarter, semi and grand finals.
- iv. Digital Content. Posters and videos on Internet safety and best practices for the various topics can be downloaded from the CyberSAFE Portal (www.cybersafe.my).

VII. CONCLUSION

The case studies shared in this article serve as real-life evidence of how impactful cyberbullying can be on someone's life and even lead to death. With social media nowadays becoming the norm and most people

having access to the Internet and smartphones, the risk is growing as anyone could become a victim of cyberbullying. Efforts from all parties as families. friends authorities are essential to educate and approach the intended audiences from macro and micro-level perspectives. Control measures like those imposed by Instagram and Facebook show how serious cyberbullying is and that it needs to be contained. Prevention is better than the cure. hence. NCSAM developed to help spread awareness among school children on various cvbersecurity including topics cyberbullying. For a safer Internet via digital fluency fostering, mindfulness of how to be safe online and globally recognized etiquette ought to become second nature to Internet users.

VIII. REFERENCES

- [1] Jamie. "Study: 8 out of 10 Malaysian children encountered bullying in school every day". World Of Buzz. https://www.worldofbuzz.com/stu dy-8-out-of-10-malaysian-children-encountered-bullying-in-school-everyday/ (accessed Dec. 31, 2019).
- [2] "The pandemic that's putting Malaysian students in danger". EduAdvisor. https://eduadvisor.my/articles/bull ying-pandemic-malaysian-students-danger (accessed Dec. 31, 2019).
- [3] "Online harassment of school kids as high as 70%". https://www.mcmc.gov.my/en/me dia/press-clippings/online-harassment-of-schoolkids-as-high-as-70-surv (accssed Dec. 30,

- 2019).
- [4] "Reported incidents based on general classification statistics 2019".

 https://www.mycert.org.my/portal/statistics-content?menu=b75e037d-6ee3-4d11-8169-66677d694932&id=0d39dd96-835b-44c7-b710-139e560f6ae0 (accessed Dec. 31, 2019).
- [5] NM Zainudin, KH Zainal, NA Hasbullah, NA Wahab, S Ramli. "A review on cyberbullying in Malaysia from digital forensic perspective," In: Proc. 1st Int. Conf. Inf. Commun. Technol. Institute of Electrical and Electronics Engineers Inc, 2017, pp. 246–250.
- [6] "Cyber bullying: common types of bullying 2019". Statista. https://www.statista.com/statistics/291025/cyber-bullying-share-of-us-students-by-type-of-cyber-bullying/ (accessed Dec. 31, 2019).
- [7] "The 10 types of cyberbullying". Securly Blog. https://blog.securly.com/2018/10/04/the-10-types-of-cyberbullying/(accessed Dec. 30, 2019).
- [8] "Cops: Teen who committed suicide after instagram poll suffered from depression". https://www.thestar.com.my/news/nation/2019/05/17/cops-teen-who-committed-suicide-after-instagram-poll-suffered-from-depression/ (accessed Dec. 31, 2019).
- [9] "Engineering student commits suicide by jumping off Penang flat". https://www.nst.com.my/news/crime-courts/2017/05/236188/engineering-student-commits-suicide-jumping-penang-flat (accessed Dec. 31, 2019).
- [10] "Student in Penang left a suicide

- note on Facebook before jumping to his death". https://says.com/my/news/taruc-student-left-a-suicide-note-on-facebook-before-jumping-off-penang-flat (accessed Dec. 31, 2019).
- [11] "8 Things Malaysians need to know to combat cyberbullying". World Of Buzz. https://www.worldofbuzz.com/8-things-malaysians-need-know-combat-cyberbullying/ (accessed Dec. 31, 2019).
- [12] "Help Hotlines R.AGE". R.AGE. https://www.rage.com.my/helpline s-and-counselling/ (accessed Dec. 31, 2019).
- [13] "RESTRICTing Bullying on instagram Cyberbullying research center https://cyberbullying.org/restrictin g-bullying-on-instagram (accessed Sec. 31, 2019).
- [14] "Bullying on social networks Family Lives" https://www.bullying.co.uk/cyber bullying/what-to-do-if-you-re-being-bullied-on-a-social-network/ (accessed Dec. 30, 2019).
- [15] "10 signs your child is a cyberbullying victim". https://resources.uknowkids.com/b log/bid/173713/10-signs-your-child-is-a-cyberbullying-victim (accessed Dec. 31, 2019).
- [16] "How to know if your child is a cyberbully victim". Free Malaysia Today.

 https://www.freemalaysiatoday.co
 m/category/nation/2019/06/17/ho
 w-to-know-if-your-childis-a-cyberbully-victim/ (accessed Dec. 31, 2019).
- [17] "The 10 warning signs of cyberbullying". Net Nanny. https://www.netnanny.com/blog/the-10-warning-signs-of-

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cyberbullying/ (accesed Dec. 31,