

Cyberbullying Awareness: Study of Students Knowledge and Prevention

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Received: 14 December 2024 | Accepted: 13 March 2025 | Published: 1 April 2025

DOI: <https://doi.org/10.55057/ajress.2025.7.3.10>

Abstract: *In Malaysia, 92.7% of people use the Internet and 23.8% are teenagers between 15 and 24 years old. All generations, including kids and teens, now depend on the Internet as a daily necessity and useful tool. Its benefits for online learning and information gathering. Learning how to use the Internet is important for everyone in today's online environment, especially for children and teenagers. Internet abuse can lead to the possibility for users to become victims or perpetrators of cyberbullying is one of the impacts. 52% of Malaysian teenagers have experienced cyberbullying in a global survey conducted by UNICEF in 2020 among 28 countries for youth cyberbullying, Malaysia ranks second in Asia. The objective of this research is to identify the level of knowledge and prevention against cyberbullying and identify the correlation between knowledge and prevention of cyberbullying. This study is based on primary sources and uses a purposive sampling technique focusing on the student Commerce Department at Politeknik Nilai. The study results are analyzed using Statistical Packages for The Social Sciences 25.0 software to meet the study's objectives. Findings show the level of respondents' knowledge and prevention practice in cyberbullying is high and the relationship significance of the two variables is a positive correlation value between each. It found that respondents are knowledgeable and apply that information. Other than that, educational institutions create awareness campaigns to raise understanding of the negative effects of cyberbullying on students.*

Keywords: cyberbullying, awareness, knowledge, prevention

1. Introduction

In Malaysia, 92.7% of people use the Internet and 23.8% are teenagers between 15 and 24 years old (MCMC, 2023). All generations, including kids and teens, now depend on the Internet as a daily necessity and useful tool. Its benefits for online learning and information gathering. Learning how to use the Internet is important for everyone in today's online environment, especially for children and teenagers. Internet abuse can lead to the possibility for users to become victims or perpetrators of cyberbullying is one of the impacts. According to (Samsudin et al., 2023), 52% of Malaysian teenagers have experienced cyberbullying in a global survey conducted by United Nations International Children's Emergency Fund (UNICEF) in 2020 among 28 countries for youth cyberbullying, Malaysia ranks second in Asia. (Ayub & Yusoff, 2018). Other than that, the report from the Malaysian Communications and Multimedia Commission (MCMC) for the period from January to 1 November 2024 complaints related to cyberbullying were 8,339 cases or a day of 27 cases of complaints (Bernama, 2024). These numbers indicate an urgent need to boost awareness and develop better prevention strategies.

Therefore, this study was conducted to review the level of knowledge and prevention of cyberbullying students from the Commerce Department of Politeknik Nilai. This study begins with an introduction to cyberbullying, cyberbullying in Malaysia focusing on teenagers, the impact of cyberbullying, and cyberbullying awareness program.

Digital Landscape in Malaysian

Daily activities are greatly influenced by the rapid development of information and communication technology (ICT) and the widespread use of the Internet. Now every class of society in Malaysia can surf the Internet, whether it's adults, youth, or children. This is reported through the MCMC report 2022 regarding Internet use in Malaysia, finding there was an increase in Internet users from 64.1% in 2012 to 92.7% in 2022. The report also shows that most Malaysian Internet users use the Internet for socializing purposes. The percentage of Internet users who communicate via text to socialize increased by 0.3% in 2022, from 98.0% in 2020 (MCMC, 2023) .

Cyberbullying

Cyberbullying is defined as an aggressive act that is repeated over time and involves the use of the victim's information (Shaikh et al., 2020). It is like the definition from Peled (2019), cyberbullying is the use of online information and communication technologies that serve to defame, support, and repeat behavior intended to harm others. This crime of cyberbullying is different from traditional bullying, this is because it involves the perpetrator's ability to harass the victim at any time and able to spy on and invade the privacy of the victim being bullied using online media (Mohammad et al., 2023).

Peled (2019), describes there are 7 types of cyberbullying: 1. flaming involves cyberbullies who will send angry, rude, or abusive messages via text or email to someone personally or to a group, 2. Online harassment is sending offensive messages repeatedly using digital media, 3. Cyberstalking is online harassment, as well as bullies sending threatening messages to their victims. 4. Denigration is when cyberbullies send fake messages or sending hurtful messages about others to victims of cyberbullying. 5. Disguise when a bully is disturbing and sends threats to victims of bullying where the cyberbully will pretend to be someone else. 6. Trickery and outings occur when a cyberbully posts and sends the bullied victim's sensitive information to others for viewing to embarrass the victim. 7. Exclusion is where the bully excludes the bullied by removing the individual from the online group and assigning a negative stigma to the bullied.

Cyberbullying in Malaysia

Recent cyberbullying statistics create an alarming picture of Malaysia's digital world. Data from the MCMC shows 27 cyberbullying cases daily, with 8,339 complaints recorded in 2024 increase compared to 3,199 complaints in 2023 (Bernama, 2023). In a study conducted by UNICEF and the United Nations Secretary-General's Special Representative on online bullying in 2019. It was found that more than a third of respondents were from 30 countries including Malaysia, and teenagers aged between 13 and 24 years have been victims of cyberbullying. Through the report, almost three-quarters of respondents also said that social networks, including Facebook, Instagram, Snapchat, and Twitter are places for easy threats of bullying happen (UNICEF, 2019). MCMC also shows that social media is the main platform for cyberbullying in Malaysia for 2023 like Facebook with 1,401 complaints, followed by WhatsApp with 667, Instagram with 388, TikTok with 258, and X with 159 complaints. This shows that the main factor contributing to the problem of cyberbullying in Malaysia is the widespread use of social media, especially among teenagers. It also agrees by Abaido (2020)

according to research studies cyberbullying and online harassment are one of the problems in social media. The study conducted by Afroze et al., (2024) also found that cyberbullying easily occurs when the amount of time spent on social media is more.

Impact of Cyberbullying

This cyberbullying can happen at any time 24/7 and online content leaves a lasting digital footprint that is hard to erase. This will hurt teenagers, affecting their mental, emotional, and social well-being. Victims of cyberbullying will have the following effects anxiety, depression, low self-esteem, and some even want to commit suicide (Esquivel et al., 2023). Alotaibi (2019), also stated victims would face fear and tension, insecurity, high anxiety, depression, and psychological and social effects. It will result in emotional, behavioral, and academic problems and harm students' academic success. Most frightening Fadhli et al., (2022), the study found that students involved in cyberbullying had a significant relationship with suicidal behavior. In Malaysia, one case was reported on 5 July 2024 a social media influencer was found dead from the suicide impact of cyberbullying (NST, 2024).

Cyberbullying Awareness Program

Various parties play an important role in implementing effective prevention and intervention strategies for dealing with the emotional impact of cyberbullying. The institution has an important role to play in dealing with cyberbullying. Through education, universities can organize prevention programs, awareness, and subjects related to cyberbullying that can help ensure safety and an environment conducive to cyberbullying (Esquivel et al., 2023). Family and friends' support also plays an important role in preventing victims from the psychological effects of cyberbullying (Ngo et al., 2021). It was also discussed by Kee et al., (2024) that to reduce the risk of cyberbullying, education and psychology subjects should add elements of cybercrime technology to the curriculum. Exposure to these students will develop critical thinking skills, self-awareness, and online autonomy, allowing them to respond to cyberbullying incidents with the self-control they have learned.

As can be seen in the literature review, this issue is very serious among teenagers, where cyberbullying behavior often occurs. Students need to be aware of cyberbullying behavior, which occurs in the school environment and social life, especially by using social media. In the Commerce Department, Politeknik Nilai, cybersecurity, and cyberbullying awareness will be embedded in the syllabus directly and or indirectly. In addition, a program of awareness from subject-matter specialists is invited to ensure students understand the cybersecurity environment. But how do students understand and apply what they learn about cyberbullying? Therefore, the research objectives have been formulated to identify the level of knowledge and prevention against cyberbullying of students. Other than that, to determine the correlation between knowledge and awareness of cyberbullying.

2. Methodology

This study method is based on primary sources conducted on Commerce Department students from Politeknik Nilai. It is a survey study that uses a purposive random sampling technique. The total number of Commerce Department Politeknik Nilai students is 1140. From the total population, the minimum sample size determination is 285 people based on Krejcie & Morgan's (1971).

This study uses a questionnaire as a research instrument and items were adapted from previous studies (Kalender, 2018), and (Thumronglaohapun et al., 2022). Modifications were made to

match the title and to facilitate student understanding. This research instrument consists of two parts. Part A relates to the demographics of the respondents and Part B includes items that measure the two variables, which are knowledge and prevention of Commerce Department students of Politeknik Nilai towards cyberbullying. The item of measurement question scale for the variable level of students' knowledge and students' prevention of cyberbullying is answered using a 5-point Likert scale as follows; 1= strongly disagree, 2= disagree, 3= partially agree, 4= agree, and 5 = strongly agree.

A pilot study was conducted to determine the validity and reliability of the constructed questionnaire using Cronbach's Alpha reliability. The variable level of knowledge and prevention practice values are 0.769 and 0.873. This shows that the constructed questionnaire has good reliability because Cronbach's Alpha value exceeds 0.7 and it can be used in real studies (Butts, & Michels, 2006). The data obtained was analyzed using the Statistical Package for Social Sciences (SPSS) software application version 25. This analysis only involved descriptive statistics, with simple statistical methods such as frequency and percentage used to analyze the data obtained. For the interpretation of the data of this study, it is based on Moidunny's (2009) mean score classification as shown in Table 1 below, which is an indicator for each average mean score value. To determine the relationship between student knowledge and cyberbullying prevention, correlation analysis was used. Correlation tests were performed using SPSS. The hypotheses tested in this study are H1: There is a significant relationship between knowledge and prevention of cyberbullying.

Table 1: Interpretation Mean Score

Item	Level of Interpretation
1.00 – 1.80	Very Low
1.81 – 2.60	Low
2.61 – 3.20	Simple
3.21 – 4.20	High
4.21 – 5.00	Very High

Sources: (Moidunny, 2009) in (Intan Marfarrina Omar et al., 2020)

3. Results

The sample for this study was taken from Commerce Department, Politeknik Nilai students. Table 2 shows the demographic distribution information for the 289 respondents involved in this study. Of the 289 respondents, 172 (59.5%) of the respondents were female and the remaining 117 (40.5%) were male. The respondents are from four programs in the Commerce Department, 126 (43.6%) Diploma in Business Information Systems (DBS), 82 (28.4%) Diploma in Logistics and Supply Chain Management (DLS), Diploma in Islamic Finance & Banking (DIB)/ Diploma in Islamic Finance (DIF) 51 (17.6%) and 30 (10.4%) Diploma in Retail Management (DRM). It consisted of semester 1, 118 people (40.8%), semester 2, 39 people (13.5%), semester 3, 64 people (22.1%), semester 4, and 30 people (10.4%) semester 5. Most respondents allocated 3 to 4 hours to browsing social media in a day and 98 (33.9%) respondents have experienced being a victim of cyberbullying on social media social media.

Table 2: Respondent Demographic

Item	Mean Score	Frequency	Percentage (%)
Gender	Male	117	40.5
	Female	172	59.5
Program	Diploma in Logistics and Supply Chain Management (DLS)	82	28.4

	Diploma in Retail Management (DRM)	30	10.4
	Diploma in Business Information Systems (DBS)	126	43.6
	Diploma in Islamic Finance & Banking (DIB)/ Diploma in Islamic Finance (DIF)	51	17.6
Semester	Semester 1	118	40.8
	Semester 2	39	13.5
	Semester 3	64	22.1
	Semester 4	38	13.1
	Semester 5	30	10.4
Estimated time browsing social media in a day	1- 2 hours	33	11.4
	3- 4 hours	101	34.9
	5- 6 hours	81	28
	7- 8 hours	48	16.6
	9-10 hours	12	4.2
	> 10 hours	14	4.8
Experienced being a victim of cyberbullying on social media	Yes	98	33.9
	No	191	66.1

Figure 1 shows a summary of the types of social media respondents use. Most respondents use WhatsApp, TikTok, and Instagram to connect to the internet, and they also use more than one social media.

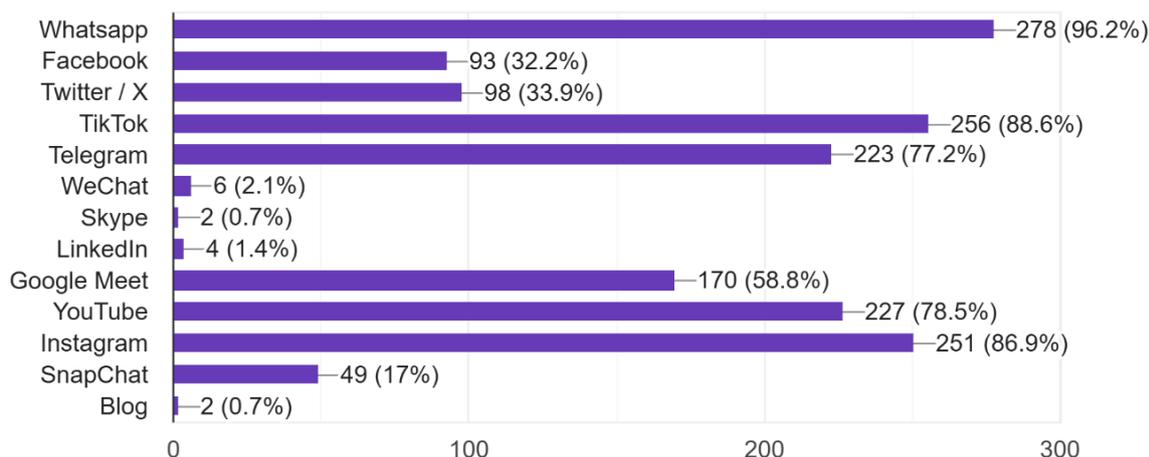


Figure 1: Types of Social Media Used by Respondents

Table 3 shows the analysis distribution of the level of respondents' knowledge of cyberbullying. The results found that the average mean for all ten items reached a high level which is a mean value is 3.99. Item 1: I understand the danger of cyberbullying on social media reaching the highest mean score which is a mean value of 4.19. Item 2: I am aware that social media is the source of the crime of cyberbullying, obtaining a mean score of 4.18. With the lowest mean score value, which is a mean score of 3.77, it shows I know who to refer to if feel threatened by cyberbullying in item 8. Findings for the knowledge of cyberbullying variable at a high level.

Table 3: Level of Knowledge Towards Cyberbullying

No	Item	Mean Score	Mean Average Score	Level Interpretation
1	I understand the danger of cyberbullying on social media.	4.19	3.99	High

2	I know that social media is the source of the crime of cyberbullying.	4.18
3	I know the impact cyberbullying has on the victims of bullying.	4.12
4	I know cyberbullying is a violation of privacy, regardless of the intent of the perpetrator.	4.16
5	I know about cyber surveillance on social media.	3.83
6	I know about identity theft on social media.	4.01
7	I understand how important it is to keep monitoring social media activity to prevent the risk of cyberbullying.	3.97
8	I know who to refer to if feel threatened by cyberbullying.	3.77
9	I know about cyberbullying laws in Malaysia.	3.79
10	I know about the cyber security awareness program.	3.96

Table 4 shows the distribution of item analysis of student level of prevention practices towards cyberbullying. The results found that the average mean for all ten items reached a high level, which is a mean value of 3.77. Item 8: I take precautions to prevent my personal information from being shared on social media to achieve the highest mean score which is a mean value of 4.18. Item 9: I am aware of who I share information with on social media., obtaining a mean score of 4.03. Follow with Item 6: I am aware of and careful about who I connect with on social media. The lowest mean score value, which is a mean score of 3.40, shows item I am adjusting privacy settings and reporting harmful content on social media on item 3.

Table 4: Level of Prevention Towards Cyberbullying

No	Item	Mean Score	Mean Average Score	Level Interpretation
1	I keep information on who should be consulted in the event of cyberbullying.	3.71	3.77	High
2	I am always careful when using social media to avoid cyberbullying.	3.83		
3	I am adjusting privacy settings and reporting harmful content on social media.	3.40		
4	I attend a cyber security awareness program implemented at my institution.	3.58		
5	I know how to deal with cyberbullying.	3.72		
6	I am aware of and careful about who I connect with on social media.	4.00		
7	My institution has specific rules regarding cyberbullying.	3.63		
8	I have content monitoring software installed on my device.	3.60		
9	I am aware of who I share information with on social media.	4.03		
10	I take precautions to prevent my personal information from being shared on social media.	4.18		

The hypothesis tested in this study is H1: There is a significant relationship between knowledge and prevention of cyberbullying. Table 5 shows the positive correlation value between each.

Table 5: Relationship Correlation between Knowledge and Prevention of Cyberbullying

Level of Knowledge	Correlation	Level of Prevention
		0.403
	Significance	0.00

4. Discussion

The best way to deal with cyberbullying is to be knowledgeable and take preventative measures. This study examines polytechnic students' awareness of the value of cyberbullying. These findings are discussed in line with the results of the study's data collection instrument, and the results of this survey are compared with observations in the literature on cyberbullying.

Cyberbullying is an important issue for society that hurts the younger generation. It can lead to serious consequences for users of information technology applications, including resulting in emotional, and behavioural challenges and it can contribute to low self-esteem, emotional and psychological issues, academic difficulties, clinical depression, (Alotaibi, 2019), and even suicide (Fadhli et al., 2022). As a result of the study's findings, the level of respondents' knowledge and prevention practice in cyberbullying is high. The significance of the relationship between the two variables is a positive correlation value between each. According to the findings, respondents are knowledgeable and apply that information, and educational institutions create awareness campaigns to raise understanding of the negative effects of cyberbullying on students. This finding is the same as Imro'atur Rosyidah et al., (2023) educating students about cyberbullying is beneficial. Boosting cyberbullying awareness can be achieved by providing information on types, causes, effects, and strategies to overcome cyberbullying, which can increase knowledge and understanding. Ngo et al., (2021) agreed that educational initiatives method to improve the knowledge and attitudes of teenagers about cyberbullying have a positive impact on students not to get involved and become victims of cyberbullying. (Lan et al., 2022) study as well as intervention programs that include knowledge about cyberbullying are effective in reducing cyberbullying perpetration and victimization.

5. Conclusion

The study results from the respondents gave useful answers to this study. The respondents consisted of students from the Commerce Department Politeknik Nilai, level of knowledge and prevention about cyberbullying is high. Measuring this level of knowledge and prevention is important to see the improvements that need to be made from various sides. The study also shows that there is a relationship between student knowledge and the awareness and actions taken by students to deal with cyberbullying. Therefore, cybercrime awareness training is needed for students to gain knowledge, especially in using social media more safely and responsibly. Other than that, all parties must be involved to address and prevent this issue. Programs related to cyberbullying and cybercrime are given in courses that are learned directly and indirectly at Politeknik Nilai, this increases students' knowledge and understanding of this issue. It also provides exposure and awareness to students to always be careful when using social media to avoid becoming a victim of bullying or bullying others.

Limitation

This study has several limitations that should be considered in interpreting the findings. The data only includes students of the Commerce Department, Politeknik Nilai; the results do not indicate the teenage population. This study is based on self-reported information and tends to be biased. Future studies can be improved by strengthening the validity by adding a variety of sources, focusing more on the possible impact, and looking more closely at the extent to which students act in dealing with cyberbullying.

References

- Abaido, G. M. (2020). Cyberbullying on social media platforms among university students in the United Arab Emirates. *International Journal of Adolescence and Youth*, 25(1), 407–420. <https://doi.org/10.1080/02673843.2019.1669059>
- Afroze, T., Kittur, R. M., Quadri, S. S. M., Fathima, S., Jacob, D. M., & Mohammad, B. H. S. (2024). Knowledge, attitude and psychological impact of cyberbullying among adolescents. A cross-sectional study. *Journal of Family Medicine and Primary Care*, 13(9), 3843–3849. https://doi.org/10.4103/jfmmpc.jfmmpc_164_24
- Alotaibi, N. B. (2019). Cyber Bullying and the Expected Consequences on the Students' Academic Achievement. *IEEE Access*, 7, 153417–153431. <https://doi.org/10.1109/ACCESS.2019.2947163>
- Ayub, Z. A., & Yusoff, Z. M. (2018). Right of online informational privacy of children in Malaysia: A statutory perspective. *UUM Journal of Legal Studies*, 9, 221–241. <https://doi.org/10.32890/uumjls.9.2018.9116>
- Butts, M. M., & Michels, L. C. (2006). The sources of four commonly reported cutoff criteria: What did they really say? *Organizational Research Methods*, 9(2), 202–220. <https://doi.org/10.1177/1094428105284919>
- Esquivel, F. A., López, I. L. de L. G., & Benavides, A. D. (2023). Emotional impact of bullying and cyber bullying: perceptions and effects on students. *Revista Caribeña de Ciencias Sociales*, 12(1), 367–383. <https://doi.org/10.55905/rcssv12n1-022>
- Fadhli, S. A. M., Yan, J. L. S., Halim, A. S. A., Razak, A. A., & Rahman, A. A. (2022). Finding the Link between Cyberbullying and Suicidal Behaviour among Adolescents in Peninsular Malaysia. *Healthcare (Switzerland)*, 10(5). <https://doi.org/10.3390/healthcare10050856>
- Imro'atur Rosyidah, F., Purwati, S., & Muzayyanah, N. (n.d.). Improving Adolescent knowledge to Prevent Cyber Bullying through Psychoeducation. <https://doi.org/10.47772/IJRISS>
- Intan Marfarrina Omar, Nur Iylia Liyana Zulazmi, & Muhammad Firdauz Mohd Zainal. (2020). Extrinsic Motivational Factors and Teachers' Job Performance in Kepala Batas's Secondary Schools, Pulau Pinang. *Malaysian Online Journal of Psychology and Counselling*, 7(1), 27–47.
- Internet Users Survey 2022 SURUHANJAYA KOMUNIKASI DAN MULTIMEDIA MALAYSIA MALAYSIAN COMMUNICATIONS AND MULTIMEDIA COMMISSION. (n.d.). <http://www.mcmc.gov.my>
- Kalender, K., & Kalender, M. (2018). Cyberbullying awareness in secondary and high-schools. In *World Journal on Educational Technology: Current Issues* (Vol. 10, Issue 4). www.wj-et.eu
- Kee, D. M. H., Anwar, A., & Vranjes, I. (2024). Cyberbullying victimization and suicide ideation: The mediating role of psychological distress among Malaysian youth. *Computers in Human Behavior*, 150. <https://doi.org/10.1016/j.chb.2023.108000>
- Krejcie, R. V., & Morgan, D. W. (1970). *Determining Sample Size for Research Activities, Education and Psychological Measurement*. Sage Publications. Inc.
- Lan, M., Law, N., & Pan, Q. (2022). Effectiveness of anti-cyberbullying educational programs: A socio-ecologically grounded systematic review and meta-analysis. In *Computers in Human Behavior* (Vol. 130). Elsevier Ltd. <https://doi.org/10.1016/j.chb.2022.107200>
- Mohammad, N., Abdul Karim Zamri, N., Roni, M., Ab Hadi, S. N. I., & Alias, A. (2023). Relationship of Cyberbullying and Mental Health in Malaysian Society. *International Journal of Academic Research in Business and Social Sciences*, 13(6). <https://doi.org/10.6007/ijarbss/v13-i6/17089>

- Ngo, A. T., Tran, A. Q., Tran, B. X., Nguyen, L. H., Hoang, M. T., Nguyen, T. H. T., Doan, L. P., Vu, G. T., Nguyen, T. H., Do, H. T., Latkin, C. A., Ho, R. C. M., & Ho, C. S. H. (2021). Cyberbullying Among School Adolescents in an Urban Setting of a Developing Country: Experience, Coping Strategies, and Mediating Effects of Different Support on Psychological Well-Being. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.661919>
- Peled, Y. (2019). Cyberbullying and its influence on academic, social, and emotional development of undergraduate students. *Heliyon*, 5, e01393. <https://doi.org/10.1016/j.heliyon.2019>
- Remand extended for suspected cyber bully probed over TikTok influencer's death. (n.d.). Retrieved December 21, 2024, from <https://www.nst.com.my/news/crime-courts/2024/07/1074684/remand-extended-suspected-cyber-bully-probed-over-tiktok>
- Samsudin, E. Z., Yaacob, S. S., Xin Wee, C., Mat Ruzlin, A. N., Azzani, M., Jamil, A. T., Muzaini, K., Ibrahim, K., Suddin, L. S., Selamat, M. I., Ahmad Saman, M. S., Abdullah, N. N., Ismail, N., Yasin, S. M., Azhar, Z. I., Ismail, Z., Rodi Isa, M., & Mohamad, M. (2023). Prevalence of cyberbullying victimisation and its association with family dysfunction, health behaviour and psychological distress among young adults in urban Selangor, Malaysia: A cross-sectional study. *BMJ Open*, 13(11). <https://doi.org/10.1136/bmjopen-2023-072801>
- Shaikh, F. B., Rehman, M., & Amin, A. (2020). Cyberbullying: A Systematic Literature Review to Identify the Factors Impelling University Students towards Cyberbullying. *IEEE Access*, 8, 148031–148051. <https://doi.org/10.1109/ACCESS.2020.3015669>
- Thumronglaohapun, S., Maneeton, B., Maneeton, N., Limpiti, S., Manojai, N., Chaijaruanich, J., Kummaraka, U., Kardkasem, R., Muangmool, T., Kawilapat, S., Juntaping, K., Traisathit, P., & Srikummoon, P. (2022). Awareness, perception and perpetration of cyberbullying by high school students and undergraduates in Thailand. *PLoS ONE*, 17(4 April). <https://doi.org/10.1371/journal.pone.0267702>
- UNICEF. (n.d.). UNICEF poll: More than a third of young people in 30 countries report being a victim of online bullying. Retrieved December 15, 2024, from <https://www.unicef.org/press-releases/unicef-poll-more-third-young-people-30-countries-report-being-victim-online-bullying>.