Exploring the Prevalence of Cyberbullying across Gender and Age Groups among Adults

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ABSTRACT

Cyberbullying is a growing concern worldwide, with significant impacts on the mental and emotional health of its victims. The increasing use of digital media and technology has led to the emergence of new forms of communication, such as social media platforms. While social media has revolutionized the way people connect and share information, it has also facilitated cyberbullying. Despite growing awareness, there is a lack of research on cyberbullying among adults in Malaysia. Most existing studies have focused on adolescents, leaving a significant knowledge gap concerning its prevalence and impact on adult populations. This study collected data from Malaysian adults and found that cyberbullying is widespread among this population, with significant differences in prevalence across gender and age groups. The implications of these findings are discussed, with suggestions for future research and interventions to address cyberbullying among Malaysian adults.

1. Intorduction

The United Nation's 2030 Sustainable Development Goal (SDG) related to healthy and free from violence and exploitation aims to significantly reduce all forms of violence and related death rates everywhere [9]. The current information age has contributed to the increasing use of digital media and technology, which is transforming the way people interact with each other and the world around them. This has led to the emergence of new forms of communication, such as social media platforms.

Social media platforms have revolutionized the way people connect and share information online. While they have provided numerous benefits in terms of communication and networking, they have also facilitated cyberbullying. Indeed, a study [3] mentioned that children who have at least one social media account are prone to cyberbullying.

In Malaysia, the widespread use of digital platforms is evident, with a significant number of internet users, 32.03 million in 2022 [8]. This allows for seamless communication between individuals

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through various devices connected to the Internet. However, the ease of creating anonymous or pseudonymous accounts on platforms like Twitter, Facebook, Instagram, and Snapchat allows cyberbullies to hide their identities and target victims without immediate repercussions. Moreover, the viral nature of social media enables hurtful content to spread rapidly, amplifying the impact on the victims.

The widespread use of social media and online platforms has facilitated a dramatic increase in cyberbullying incidents among adult populations. According to a study [10], researchers found that young adults (18-25 years) experienced the highest levels of cyberbullying during both lifetime and past month time frames. However, the prevalence of cyberbullying was lower among older age cohorts, with the lowest rate among the 66+ age group. Indeed, some categories of adults may have different awareness and involvement in cyberbullying due to various factors, such as age, gender, and cultural background.

Understanding the differences in awareness and involvement in cyberbullying among different categories of adults is crucial for developing effective interventions and prevention strategies that are tailored to the specific needs of each group. It is important to raise awareness about cyberbullying among adults and to develop targeted prevention and treatment programs [5]. By understanding the causes and effects of cyberbullying among adults, we can work towards creating a safer online environment for everyone, in line with the United Nation's 2030 SDG related to healthy and free from violence and exploitation.

Studies have explored the prevalence and characteristics of cyberbullying among different groups of adults, including young adults and college students. These studies have identified the underlying psychological motives of cyberbullying, such as revenge, entertainment, and empowerment, and the factors that contribute to its occurrence, such as contact with cyberbullying perpetrators and harmful media.

According to a study in [11], there are significant gender differences in both cyberbullying victimization and perpetration. Females reported higher levels of victimization, while males reported higher levels of perpetration. The study also found that different factors contribute to the cyberbullying experiences of males and females. For males, anger rumination was found to be a contributing factor, while for females, traditional bullying experiences played a role.

Another study [4] discovered the prevalence of bullying changes with age. The study found that the incidence of bullying and victimization at school followed a curvilinear pattern, peaking at ages 14-15, while cyberbullying victimization increased with age. The study also examined the overlap between school bullying and cyberbullying. While males were found to be more involved in both forms of bullying than females, the overlap between the two was not statistically significant.

Also, a study [7] focused on the coping strategies used by students in response to cyberbullying. The study divided the participants into two age groups: younger students (12-15 years old) and older students (16-18 years old). The results showed two significant differences between the age groups. Older students were more likely to report incidents of cyberbullying to the police or other authorities, and they were also more likely to block messages or identities from cyberbullies, compared to younger students.

Shohoudi Mojdehi *et al.*, [6] conducted a study to investigate the influence of culture, age, gender, and participant roles (such as perpetrator and bystander) on the moral evaluations and emotional responses of students and adolescents when encountering cyberbullying events. The study found that gender had a substantial impact on the moral evaluations and emotions of students and adolescents in relation to cyberbullying. Overall, females viewed perpetrator behaviors more negatively than males and were more likely to perceive cyberbullying events as negative.

Studies have also highlighted the critical role that parents and teachers play in preventing cyberbullying among students. By understanding the factors that contribute to cyberbullying and its impact on individuals and society, policymakers, industry stakeholders, and researchers can develop effective interventions and prevention strategies to promote a safer and more just world, in line with the SDG 16.

Therefore, this study seeks to shed light on the prevalent types of cyberbullying encountered within the adult population, addressing the need to understand and address this pressing issue.

2. Methodology

A. Participants and Data Collection

A survey was conducted among Malaysian adults aged 15 to 30, with a total of 216 respondents completing the questionnaire. This age range was specifically chosen to capture the perspectives and experiences of young adults, middle-aged adults, and older adults within the Malaysian population.

To conduct this investigation, the researchers employed a survey methodology. A survey is a structured method of collecting data from a sample of individuals to make inferences about a larger population. In this case, the researchers reached out to 216 respondents who successfully completed the survey. A random distribution strategy was used to ensure that the sample was representative and diverse, reducing bias in the results.

To ensure ethical practices and adherence to research standards, all participants were required to give their informed consent before participating in the survey. This means that they were provided with a clear explanation of the study's purpose and the data that would be collected from them, and they voluntarily agreed to take part. This step is crucial in safeguarding participants' rights and privacy.

The survey was designed to be easily accessible and convenient for respondents. It was administered through an online platform, Microsoft Forms, which provides a user-friendly interface for both researchers and participants. The use of an online platform allowed for a broader reach, as respondents could complete the survey at their convenience, without being limited by geographical constraints.

The survey was conducted in English through social media platforms such as Facebook, WhatsApp, and Twitter. By leveraging these channels, the researchers were able to tap into the online networks of young Malaysians and increase the likelihood of attracting participants within the desired age range.

In the context of cyberbullying, ensuring the anonymity of participants is particularly important. Cyberbullying can be a sensitive and personal topic, and individuals may be hesitant to share their experiences if they fear judgment or consequences. Hence, to ensure the anonymity of the participants and encourage honest responses, the researchers provided an anonymous link to the survey. By providing an anonymous link to the survey, the researchers created a safe environment where respondents could feel comfortable sharing their true thoughts and opinions about their experiences with cyberbullying. This can help to provide more accurate and comprehensive data on the prevalence and impact of cyberbullying among the population being studied.

As shown in Table 1, the study's respondents were composed of individuals from different age cohorts and gender groups, allowing for a comprehensive examination of cyberbullying experiences among young adults (15-18 years), middle-aged adults (19-22 years), and older adults (23 years old and above), while also considering differences between male and female participants.

Table 1

Respondents Demographic Profile

Demographic	Frequency	Percent
Gender:		
Male	61	28.2
Female	155	71.8
Age Category:		
Young Adult (15 – 18 years old)	57	26.4
Middle Adulthood (19 – 22 years old)	70	32.4
Later Adulthood (23 years old and above)	89	41.2

B. Measures

The questionnaires was divided into two sections: Part A and Part B, adapted from previous research (Hinduja & Patchin, 2014). Part A focused on demographic details, such as gender, age, frequency of using digital technology (mobile phone or computer), and frequency of using social media. Part B focused on cyberbullying behaviour, where respondents were asked to express their actions or reactions as a cybervictim. A total of 16 items related to the cybervictim were measured using a four-point Likert scale, ranging from 1 (Strongly disagree) to 4 (Strongly agree).

The demographic information of the participants indicates that there were twice as many female adult as male adults, with females making up 71.8% (n = 155) of the sample. The majority of respondents were in the Later Adulthood group, representing 41.2% of the sample, indicating a significant representation of individuals aged 23 years and above.

3. Results and Discussion

Previous research has suggested a potential link between excessive screen time and cyberbullying behavior [1], making these findings particularly relevant in understanding potential risk factors. Findings revealed significant variations in the number of hours spent using mobile phones or computers among different age cohorts as shown in Table 2.

Among young adults and middle-aged adults, the majority of both males and females reported spending 6 to 8 hours per day on digital devices. This phenomenon could be attributed to the intertwined nature of modern life with digital platforms, where work, social interactions, and entertainment converge in the online space.

In contrast, the majority of older adults reported using digital devices for 10 or more hours per day. This trend might arise from a convergence of factors: the growing adoption of digital technologies among seniors for various aspects of their lives, potential isolation driving increased digital engagement, and a learning curve that leads to extended usage as they explore and integrate digital tools.

Table 2
Percentage of Respondents Who Spent Hours on Mobile Phone or Computer Based on Gender and Age Category (%)

Hours Spent on Mobile Phone or Computer	Young Adults		Middle Adulthood		Later Adulthood	
	Male	Female	Male	Female	Male	Female
0 - 2 hours per day	3.5	7	0	1.4	1.1	0
2 - 4 hours per day	3.5	1.8	0	2.9	2.2	5.6
4 - 6 hours per day	3.5	24.6	4.3	4.3	4.5	6.7
6 - 8 hours per day	7	26.3	7.1	27.1	9	13.5
8 - 10 hours per day	1.8	5.3	2.9	21.4	9	10.1
10 or more hours per day	0	15.8	4.3	24.3	15.7	22.5

The analysis presented in Table 3 examines the differences in cyberbullying experiences among various age groups and reveals intriguing trends. The results indicate that middle-aged adults are the most likely to experience cyberbullying, with 51.9 percent reporting personal encounters with this phenomenon.

Table 3
Respondents Who Reported Having Experienced Cyberbullying (%)

Cyberbully Experience	Young Adults		Middle Adulthood		Later Adulthood	
	Male	Female	Male	Female	Male	Female
I have been cyberbullied	3.5	22.8	19	32.9	23.6	20.2

This higher prevalence among middle-aged individuals may stem from their extensive online presence as they navigate personal, professional, and social interactions in the digital world. Additionally, this finding may reflect a potential lack of digital literacy and coping mechanisms among this age group, making them more susceptible to the negative aspects of online communication. Further research into the specific dynamics within middle adulthood could provide valuable insights into the underlying causes of this trend.

When comparing gender, the highest percentage of cyberbullying experiences was reported by middle-aged females, with 32.9 percent. This heightened prevalence among middle-aged women could be attributed to the complex interplay of societal expectations, online interactions, and personal vulnerabilities that can make them targets for negative online behaviors.

On the other hand, when considering males, the highest percentage of cyberbullying encounters is observed among older adults, accounting for 23.6 percent. This finding could be influenced by evolving online behaviors, as older males might be adapting to new technologies and digital platforms, potentially encountering situations where they are more susceptible to cyberbullying due to their relatively limited experience in navigating online social dynamics.

Table 4 presents an analysis of the various types of cyberbullying experiences encountered by different age groups. According to the responses to the statement "Someone excluded me from online groups to hurt me" in the Social Exclusion category, a common trend emerges. Females across all age groups reported the highest frequency of this form of cyberbullying, suggesting a potential vulnerability among females to exclusion-based online aggression.

In relation to another cyberbully category, Online Harassment, characterized by acts such as the direct transmission of threatening messages, photos, or videos, the study observed that middle-aged and older women reported experiencing this type of cyberbullying. This highlights the need to investigate why these women are targeted. Similarly, women across all age groups reported higher rates of receiving mean messages, photos, or videos, indicating potential gender-specific issues.

In terms of Impersonation, the trend continues, with females in middle adulthood and later adulthood reporting a higher prevalence of someone pretending to be them online to interfere with their friendships. Additionally, females across all age groups reported more encounters of impersonation aimed at damaging their reputation or causing trouble.

The statement "Someone posted my personal information/photos/videos online without my consent" is an example of Privacy Violation. Interestingly, middle-aged and older women reported a higher prevalence of this type of cyberbullying. This suggests that these age groups may be more susceptible to privacy breaches and unauthorized sharing of personal content.

The findings also reveal that females across all age groups reported higher prevalence rates in categories related to race, religion, and sexual innuendos. In other words, females in all age groups are more susceptible to facing hurtful or offensive comments online that are specifically related to their background, beliefs, or gender. These particular types of cyberbullying are related to things like someone making fun of their race, religion, or saying inappropriate things of a sexual nature. This could be because some bullies choose to target these aspects of identity when they are trying to be mean online.

4. Conclusions

Despite its small sample size of Malaysian adults, was able to compare the experiences of cyberbullying among different age groups. The results showed that cyberbullying is a common issue among all age groups, with young, middle-aged, and older adults, reporting receiving mean messages, photos, or videos sent directly to them online.

This study reveals that women of all ages reported higher rates of cyberbullying related to their race, religion, and sexual innuendos. This means that women are more likely to be bullied online because of who they are, such as their race or religion. The study also found that middle-aged and older women reported higher rates of online harassment, where they received threatening or mean messages, photos, or videos. This highlights the need to investigate why these women are targeted and to address and prevent identity-based cyberbullying against women.

Moreover, the study found that middle adulthood is a significant stage where experiences of cyberbullying are particularly prominent. This age group, which encompasses various aspects of life including personal, professional, and social, may be especially vulnerable to online aggression. It is essential to understand the unique challenges faced by individuals in middle adulthood in order to develop tailored prevention and support strategies.

Although limited by its sample size, the study provides valuable insights into the presence of cyberbullying among Malaysian adults and underscores the need to consider age-specific factors in addressing and preventing such harmful online behaviors. Future research on cyberbullying could benefit from increasing the sample size and ensuring its representativeness. Longitudinal studies and the use of qualitative research methods could provide a more in-depth understanding of cyberbullying trends and their emotional impact on different age groups. These findings could inform the development of targeted intervention strategies, as well as education and awareness programs that promote responsible online behavior and empathy. Policymakers could also use this data to shape legislation and guidelines to create safer digital spaces, ultimately fostering a more inclusive and supportive online environment for Malaysian adults.

Acknowledgement

References

[1] Giordano, A. L., Prosek, E. A., & Watson, J. C. (2021). Understanding adolescent cyberbullies: exploring social media addiction and psychological factors. *Journal of Child and Adolescent Counseling*, *7*(1), 42–55.

[2] Hinduja, S., & Patchin, J. W. (2014). *Bullying Beyond the Schoolyard: Preventing and Responding to Cyberbullying*. SAGE Publications. https://books.google.com.my/books?id=TQ2gBAAAQBAJ

[3] Hussein, M. T., & Hussein, R. M. (2020). Involving american schools in enhancing children's digital literacy and raising awareness of risks associated with internet usage. *International Journal of Advanced Computer Science and Applications*, *11*(11).

[4] Pichel, R., Foody, M., O'Higgins Norman, J., Feijóo, S., Varela, J., & Rial, A. (2021). Bullying, cyberbullying and the overlap: What does age have to do with it? *Sustainability*, *13*(15), 8527.

[5] Scheff, S. (2019). *Adult Cyberbullying Is More Common Than You Think*. https://www.psychologytoday.com/us/blog/shame-nation/201911/adult-cyberbullying-is-more-common-you-think

[6] Shohoudi Mojdehi, A., Leduc, K., Shohoudi Mojdehi, A., & Talwar, V. (2019). Examining cross-cultural differences in youth's moral perceptions of cyberbullying. *Cyberpsychology, Behavior, and Social Networking*, *22*(4), 243–248.

[7] Sittichai, R., & Smith, P. K. (2018). *Bullying and cyberbullying in Thailand: Coping strategies and relation to age, gender, religion and victim status*.

[8] Sue, H. (2023). *Social Media Statistics for Malaysia [Updated 2023]*. https://www.meltwater.com/en/blog/social-media-statistics-malaysia.

[9] *Transforming our world: the 2030 Agenda for Sustainable Development*. (n.d.).

[10] Wang, M.-J., Yogeeswaran, K., Andrews, N. P., Hawi, D. R., & Sibley, C. G. (2019). How common is cyberbullying among adults? Exploring gender, ethnic, and age differences in the prevalence of cyberbullying. *Cyberpsychology, Behavior, and Social Networking*, *22*(11), 736–741.

[11] Zsila, Á., Urbán, R., Griffiths, M. D., & Demetrovics, Z. (2019). Gender differences in the association between cyberbullying victimization and perpetration: The role of anger rumination and traditional bullying experiences. *International Journal of Mental Health and Addiction*, *17*, 1252–1267.

Table 4
Respondents Who Reported Having Experienced Cyberbullying (%)

Different Types of Cyberbully	Young Adults					Middle Adulthood					Later Adulthood				
	Male	%	Female	%	Total	Male	%	Female	%	Total	Male	%	Female	%	Total
Someone excluded me from online groups to hurt me.	1	6.3	15	93.8	16	6	25.0	18	75.0	24	17	47.2	19	52.8	36
Someone sent threatening messages/photos/videos directly to me online.	0	0.0	4	100	4	3	21.4	11	78.6	14	10	45.5	12	54.5	22
Someone sent mean messages/photos/videos directly to me online	1	5.9	16	94.1	17	6	18.8	26	81.3	32	11	37.9	18	62.1	29
Someone pretended to be me online to interfere with my friendships.	0	0.0	8	100	8	2	11.8	15	88.2	19	13	50.0	13	50.0	26
Someone pretended to be me online to make me look bad.	0	0.0	5	100	5	3	17.6	14	82.4	17	11	64.7	6	35.3	17
Someone pretended to be me online to get me into trouble.	0	0.0	7	100	7	3	27.3	8	72.7	11	12	52.2	11	47.8	23
Someone hid their identity to threaten me online.	1	9.1	10	90.9	11	5	21.7	18	78.3	23	16	64.0	9	36.0	25
Someone spread rumors about me online.	1	6.7	14	93.3	15	5	17.2	24	82.8	29	21	61.8	13	38.2	34
Someone posted mean or hurtful comments about me online publicly.	1	11.1	8	88.9	9	4	17.4	19	82.6	23	14	50.0	14	50.0	28
Someone posted my private messages online that I did not want others to see.	1	6.3	15	93.8	16	2	12.5	14	87.5	16	8	57.1	6	42.9	14
Someone posted my photos or videos online to embarrass me.	0	0.0	10	100	10	4	22.2	14	77.8	18	11	61.1	7	38.9	18
Someone posted my personal information/photos/videos online without my consent.	0	0.0	8	100	8	4	22.2	14	77.8	18	12	57.1	9	42.9	21
Someone posted mean names or comments online about my race.	2	14.3	12	85.7	14	5	19.2	21	80.8	26	20	51.3	19	48.7	39
Someone posted mean names, comments, or gestures about me with a sexual meaning.	0	0.0	7	100	7	3	17.6	14	82.4	17	6	40.0	9	60.0	15

Someone posted mean names or comments about my religion.	3	13.0	20	87.0	23	5	17.9	23	82.1	28	25	53.2	22	46.8	47
Someone filming me being slapped, punched or assaulted using a camera phone ('Happy slapping').	0	0.0	1	100.0	1	1	33.3	2	66.7	3	7	63.6	4	36.4	11