

Assessing the Risk Factors of Cyberbullying Among Malaysian Undergraduate Students

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ABSTRACT

Cyberbullying, the use of digital platforms to harass, intimidate, or harm individuals, has become a significant concern among young people. The widespread adoption of smartphones, social media, and other digital communication tools has increased the vulnerability of university students to online harassment. Cyberbullying can take various forms, including the dissemination of harmful messages, the spreading of false information, exclusion from online communities, and the sharing of personal or sensitive information without consent. This study examines cyberbullying through the lens of Social Cognitive Theory (SCT) and the Theory of Planned Behavior (TPB), emphasizing the influence of key risk factors such as personal, sociocultural, psychological, and environmental. Personal factors, such as self-esteem and digital literacy, shape an individual's susceptibility to online harassment. Sociocultural influences, including peer norms and cultural attitudes toward online interactions, contribute to the perpetuation of cyberbullying. Psychological factors, such as stress, anxiety, and impulsivity, may increase both victimization and perpetration risks. Additionally, environmental factors, such as internet accessibility and institutional policies, play a crucial role in regulating online behaviors. Despite that, cyberbullying is shown to be a global phenomenon, with the prevalence of cyberbullying victimization and cyberbullying perpetration year by year. This study seeks to assess the prevalence of cyberbullying among Malaysian undergraduates and analyze the interplay of these risk factors. A quantitative research approach will be employed, utilizing a self-administered survey to collect data from a representative sample of students. The analysis will use Structural Equation Modeling (SEM) with AMOS 27.0 software. This research aligns with the United Nations Sustainable Development Goals, particularly SDG 4 (Quality Education) and SDG 16 (Peace, Justice, and Strong Institutions), by contributing to safer educational environments and promoting responsible online behavior. The findings are expected to inform strategies to mitigate digital harassment and support students' mental and emotional well-being in Malaysia's higher education institutions.

Keywords: Cyberbullying, Risk Factors, Digital Harassment, Undergraduate Students, Malaysia

INTRODUCTION

Cyberbullying is generally defined as employing electronic communication to bully or harass a person on the internet, particularly on social media sites. It can be characterized by sending aggressive messages or embarrassing and harassing images via social media, making intimidating phone calls, impersonating the victim, recording and then sharing videos where the victim is ridiculed or being attacked, posting disparaging comments and embarrassing pictures on social networking sites, or intimidating or threatening someone electronically which is done repeatedly and continuously resulting in an imbalance of power between the perpetrator and the

victim [1];[2]. Harmful cyberbullying behavior can also include posting rumors, threats, sexual remarks, cyberstalking, trolling, flaming, sharing negative and false content, and denigration [3]. However, in cyberbullying, the perpetrators can stay anonymous allowing greater potential to do or say more harmful things to the victims than they would in personal relations. Moreover, the perpetrators can reach out to the victim 24 hours a day via internet accessibility and can send annoying emails, and messages or spread rumors online which can draw a larger audience than traditional bullying [4].

Reference [5] shows Malaysia was ranked second in Asia in 2020 for cyberbullying among youths in a global survey involving 28 countries. This is in line with the incident statistics of Cybersecurity Malaysia 2020, whereby cyberbullying is among the top five cyber-related threats to Malaysian people [6]. It is currently at number three behind online fraud and intrusion. There are 59.7% of internet users in Malaysia; among these, university students comprise the majority of the group [7]. Due to this increased and negative usage of the internet by youngsters, cyberbullying in Malaysia has also increased. With the rapid expansion of internet access and social media platforms, university students are increasingly vulnerable to online harassment. This is supported by previous research which indicates that cyberbullying is not only prevalent among adolescents but also extends to young adults, with studies reporting victimization rates ranging from 7% to 62% among university populations [8];[9].

Furthermore, cyberbullying may have many serious and negative impacts on both the physical health and psychological adjustment of victims. For example, continuous cyberbullying can have disturbing effects on an individual's life. Many of the victims of cyberbullying often face issues such as depression, sleep disorders, stress, anxiety, helplessness, somatization, anger, and other emotional and mental challenges [10];[11]. Besides, individuals who are continuously targeted by cyberbullies are at an increased risk of developing suicidal thoughts and engaging in self-harm [12]. Such harassment not only affects emotional well-being but can also lead to long-term psychological issues, including post-traumatic stress disorder (PTSD) in severe cases [4];[13]. In a meta-analysis of studies examining the link between cyberbullying and mental health outcomes, a consistent association was found between online harassment and increased depressive symptoms, self-injurious behavior, and suicide attempts [4].

Despite the widespread recognition of cyberbullying's adverse effects, there is limited research focusing on the specific risk factors associated with cyberbullying among university students. Understanding these factors is crucial, as early intervention could prevent the long-term psychological consequences faced by victims. Many studies across the world have revealed that there are many risk factors associated with cyberbullying and their impact on adolescents' health and well-being. Factors such as gender, social media usage patterns, and mental health conditions are believed to contribute to the likelihood of being involved in cyberbullying, either as a victim or perpetrator [11];[14]. Given the increasing digital exposure of university students, it is essential to investigate the underlying risk factors that make undergraduate students in Malaysia more susceptible to cyberbullying. This research aims to bridge the gap in the current literature by identifying these factors and offering insights that can guide university policies and support services to mitigate the effects of cyberbullying in the region. Hence, the aim of the present study is two-fold. Firstly, it attempts to assess the extent of cyberbullying among undergraduate students in Malaysia. Secondly, it purports to investigate the key risk factors contributing to cyberbullying behavior among these students.

LITERATURE REVIEW

A review of the risk factors associated with cyberbullying among university students highlights various contributing elements

students highlight various contributing elements that are frequently examined. As university students increasingly engage with digital platforms, this makes them particularly vulnerable to both experiencing and perpetrating cyberbullying. Several studies have indicated that gender plays a significant role in both cyberbullying perpetration and victimization. In addition, females are more likely to be victims of cyberbullying, particularly in the form of relational aggression, while males are more likely to engage in direct forms of bullying [15];[16]. This is supported by [17] which cyberbullying in higher education suggests that female students tend

to experience higher rates of victimization, often linked to social dynamics and vulnerabilities in online spaces.

On the other hand, numerous studies emphasize the role of psychological factors in both victims and perpetrators of cyberbullying. Traits such as low self-esteem, depression, anxiety, and anger have been associated with a higher likelihood of becoming a victim or perpetrator of cyberbullying [18]. Victims often suffer from pre-existing emotional vulnerabilities, while bullies may exhibit aggressive tendencies or suffer from social insecurity, leading them to project their frustrations online [19]. These psychological traits are reinforced by recent studies, which emphasize the connection between aggressive behavior and online harassment. Reference [20] found that individuals with heightened aggression and poor emotional regulation are significantly more likely to engage in cyberbullying. This research highlights that impulsivity, often tied to instant gratification and lack of foresight, increases the likelihood of individuals becoming cyberbullies in online environments where accountability is lower [21].

Other studies suggest that peer dynamics play a crucial role in shaping cyberbullying behaviours, particularly among university students. Peer pressure not only pushes individuals to become perpetrators but can also make them passive bystanders who tolerate or encourage such behavior through inaction. Reference [4] shows that students who spend more time on social media are at a greater risk of encountering cyberbullying due to the frequent, unregulated interactions in these spaces. Social pressures and the desire for acceptance in digital communities can push students to participate in or tolerate cyberbullying activities. Additionally, peer pressure to conform to online behavior norms, including the targeting of marginalized or isolated students, further contributes to the prevalence of cyberbullying [22]. A longitudinal study by [23] revealed that students involved in cyberbullying often report doing so to gain acceptance within their peer group, indicating that social cohesion in online communities can exacerbate the problem.

Despite that, the rise of cyberbullying among university students can be attributed to various environmental factors that create conducive conditions for such behaviours. These factors encompass not only the online environment but also the physical and social contexts in which students interact. One of the most significant environmental factors influencing cyberbullying is the architecture of digital platforms. Online environments, particularly social media and instant messaging services, often provide users with varying degrees of anonymity, which can lower the barrier to engaging in harmful behaviours. This is supported by [24] that university students who engage in anonymous online interactions are significantly more likely to participate in cyberbullying behaviours compared to those using real-name platforms. Besides, the COVID-19 pandemic has transformed learning environments, with many universities shifting to remote or hybrid education models [21]. This shift has created a unique set of environmental factors that contribute to cyberbullying. The physical isolation caused by remote learning, coupled with the increased reliance on digital platforms for communication, has led to a surge in online bullying.

Given the complex interplay of personal, psychological, social, and environmental factors, cyberbullying presents a multifaceted challenge, particularly in university settings. The widespread use of social media platforms, along with the increasing dependence on digital communication, has further exacerbated the prevalence of cyberbullying among undergraduate students in Malaysia. Therefore, this study seeks to examine the risk factors associated with cyberbullying among undergraduate students in Malaysia. By addressing these pressing concerns, the research aims to foster a safer and more supportive learning environment, mitigating the negative effects of cyberbullying on students' academic performance, social interactions, and mental well-being.

METHODOLOGY

Research Framework

This study adopts a structured research framework to examine the key risk factors influencing cyberbullying among university students.

Influencing cyberbullying among university students. Grounded in Social Cognitive Theory (SCT) and the Theory of Planned Behavior (TPB), the framework establishes the relationship between various independent

variables (IVs) such as personal, sociocultural, psychological, and environmental towards the dependent variable (DV), which is cyberbullying behavior.

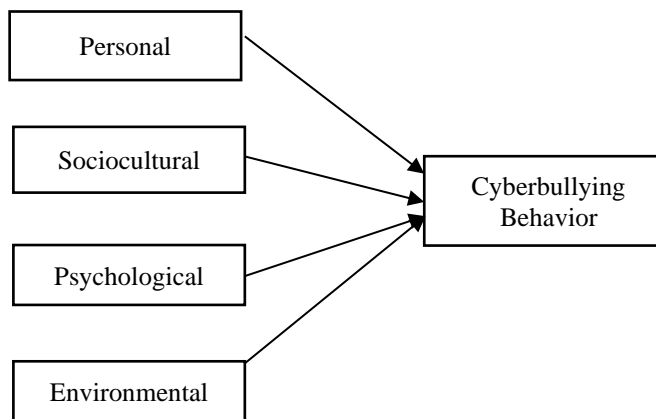


Fig. 1 Conceptual Framework

Hypothesis

- H1: Personal factors have a significant effect on cyberbullying behavior.
- H2: Sociocultural factors have a significant effect on cyberbullying behavior.
- H3: Psychological factors have a significant effect on cyberbullying behavior.
- H4: Environmental factors have a significant effect on cyberbullying behavior.

Research Design

The study adopts a quantitative, cross-sectional research design. This design allows for the collection of data at a single point in time, helping to assess the relationship between various risk factors and cyberbullying involvement among university students. According to [25] quantitative research is the most appropriate method for this study because it allows for the statistical analysis of variables and the identification of patterns in the data. Hence, a quantitative research method was used to collect and analyse the risk factors associated with cyberbullying among university students using a survey.

Population and Sampling Technique

The population for this study consists of undergraduate students from public universities across Malaysia, representing a diverse student demographic nationwide. This study focuses on students who frequently browse the internet for academic and personal purposes, actively engage on social media platforms, and seek information online. These digital activities are commonly associated with environments where cyberbullying incidents occur [14]. A random sampling technique is employed to select participants from the university student population. According to [26] simple random sampling ensures that every student meeting the study criteria has an equal opportunity to be selected, thereby minimizing bias and enhancing the generalizability of the findings.

Data Collection

The data for this study was collected through a self-administered online survey distributed to a total of 500 students from public universities across Malaysia. The selection of 500 students ensures a sufficiently large and

diverse sample, providing reliable insights into the prevalence and risk factors of cyberbullying among university students. Additionally, a sample of this size enhances the study's statistical power, allowing for more accurate and generalizable findings when analysing cyberbullying behaviours and contributing factors.

The questionnaire consisted of three sections designed to (1) gather participants' demographic information, (2) examine the risk factors influencing cyberbullying behavior among university students, and (3) assess students'

involvement in cyberbullying. A ten-point Likert scale, ranging from 1 (strongly disagree) to 10 (strongly agree), was used to measure respondents' level of agreement.

Data Analysis

The data collected from the survey will be analysed using Structural Equation Modelling (SEM) with the software AMOS (Analysis of Moment Structures). SEM is a powerful statistical technique that simultaneously tests complex relationships between multiple variables. This method is particularly suited to the study as it can analyse both direct and indirect relationships between risk factors and cyberbullying behaviours among university students.

CONCLUSION

Cyberbullying remains a pressing issue among undergraduate students in Malaysia, with various risk factors contributing to its prevalence. This concept paper has explored key determinants such as personal, sociocultural, psychological, and environmental factors, all of which shape students' vulnerability to online harassment. To mitigate the risks associated with cyberbullying, Malaysian universities should implement comprehensive digital literacy programs that promote ethical online behavior and responsible social media engagement. Awareness campaigns and psychological support services should be integrated into student support systems to foster resilience against cyberbullying. Besides, policymakers must strengthen Malaysia-specific legal frameworks and cybersecurity policies to align with national regulations on online safety. Additionally, digital platforms should enhance reporting mechanisms and proactive monitoring to curb online harassment effectively. Future research should empirically assess these interventions to ensure their relevance and impact within the Malaysian context.

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