



Relationship of Cyberbullying and Mental Health in Malaysian Society

Norazlinda Mohammad, Norena Abd Karim Zamri, Mastura Roni, Siti Nur Izyandiyana Ab Hadi, Aidah Alias

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v13-i6/17089 DOI:10.6007/IJ

DOI:10.6007/IJARBSS/v13-i6/17089

Received: 09 April 2023, Revised: 10 May 2023, Accepted: 21 May 2023

Published Online: 07 June 2023

In-Text Citation: (Mohammad et al., 2023)

To Cite this Article: Mohammad, N., Zamri, N. A. K., Roni, M., Hadi, S. N. I. A., & Alias, A. (2023). Relationship of Cyberbullying and Mental Health in Malaysian Society. *International Journal of Academic Research in Business and Social Sciences*, 13(6), 427 – 441.

Copyright: © 2023 The Author(s)

Published by Human Resource Management Academic Research Society (www.hrmars.com) This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non0-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <u>http://creativecommons.org/licences/by/4.0/legalcode</u>

Vol. 13, No. 6, 2023, Pg. 427 – 441

http://hrmars.com/index.php/pages/detail/IJARBSS

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at http://hrmars.com/index.php/pages/detail/publication-ethics





EXPLORING INTELLECTUAL CAPITAL

www.hrmars.com ISSN: 2222-6990

Norazlinda Mohammad

Faculty of Communication & Media Studies, Universiti Teknologi MARA Melaka Correspondent Author's Email: linda333@uitm.edu.my

Norena Abd Karim Zamri

Institut Alam dan Tamadun Melayu, Universiti Kebangsaan Malaysia

Mastura Roni

Faculty of Business and Management, Universiti Teknologi MARA Melaka, City Campus

Siti Nur Izyandiyana Ab Hadi

Faculty of Communication & Media Studies, Universiti Teknologi MARA Melaka

Aidah Alias

Kolej Pengajian Seni Kreatif, Universiti Teknologi MARA Melaka

Abstract

Due to the negative psychosocial repercussions as well as the challenges brought on by irresponsible use of technology, researchers and society have increased their attention on cyberbullying. In relation to this, online media has been reported to be linked with cyberbullying and mental health, nevertheless, the links remain unclear. Thus, this present study aimed to contribute to providing a framework that predicts cyberbullying factors that lead to mental health issues. Using the convenience sampling method, 154 questionnaires were collected from Malaysian respondents as part of the study's quantitative research approach. The data were analyzed through the Structured Equation Modeling (SEM) technique using Smart PLS version 3.2.8 to investigate the predictive capacity of cyberbullying antecedents (Cyberbullying Experience, Self-Esteem, and Social Connectedness) towards cyberbullying and an increase in mental health issues in Malaysian society. The study also confirmed that there is a strong link between social contagion theory and cyberbullying. The importance of this research will raise Malaysians' awareness by encouraging moral behavior when using social media and policing instances of cyberbullying.

Keywords: Cyberbullying, Internet, Mental Health, Malaysian Society, Social Media Platform

Introduction

The world of cyberspace, also known as the Internet, has revolutionized the way we communicate. Instead of relying solely on traditional face-to-face communication, we now communicate virtually on social media platforms. McLuhan (1964) famously referred to this phenomenon as the "global village," where the emergence of information communication technology (ICT) has made communication faster, easier, more convenient, and accessible from anywhere. This not only enables us to access information in a split second but also allows us to connect with other people or netizens worldwide. Additionally, the Internet allows for rapid development in interactive communication, which has led to the formation of a participatory culture where society connects and collaborates while sharing information.

According to Baum et al (2009), communication technologies provide new opportunities for people or bad actors to monitor, stalk, pursue, and invade the privacy of others by harassing or intimidating them in the cyber world. Unfortunately, a minority of social media platform users engage in problematic behavior, and some individuals appear to be unable to control themselves, thus behaving inappropriately on social media (Kuss & Griffiths, 2017).

These are the negative effects of social media that have been abused or misused by some irresponsible netizens. Cyberbullying is a disturbing act that violates the victim's privacy by provoking harsh words in text messages and spreading lies and rumors. Moreover, perpetrators can hurt the victim's feelings by posting hateful remarks, bashing statements, or making negative comments through status updates or disseminating false allegations. These include the use of graphic images or obscene videos on various social media platforms, simply to ridicule the person. As a result, this can cause deep emotional and mental distress to the victim of cyberbullying.

These unscrupulous acts can have detrimental effects on the victims of cyberbullying, as they are more likely to experience symptoms of mental health disorders such as depression, anxiety, insomnia, and eating disorders. Their cognitive, spiritual, and emotional well-being may also be affected, leading to isolation and feelings of loneliness. They may lose focus and have low self-esteem, becoming passive and avoiding social activities.

Consequently, victims of cyberbullying are at risk of suffering from emotional problems and psychological stress. If not addressed properly, it can even lead to suicide. National media coverage of teenage self-harm and suicide cases linked to cyberbullying has raised its political profile (Adams, 2019). Therefore, it is crucial for the country to have a prevention strategy in place to control the alarming rise of suicidal cases. This is because a healthy society is composed of physically and mentally fit individuals.

Literature Review

Cyberbullying on social media and its relationship with mental health in Malaysian society Cyberbullying is defined as acts of aggressive action that are repeated over time and involve an imbalance of power between the offender and their potential victims (Olweus, 1994). The perpetrator will commit cyber-aggression, internet harassment, and online bullying whenever they have the opportunity as they are brave enough to do so by being faceless or in a state of anonymity. Nevertheless, cyberbullying is different compared to traditional bullying as it involves a more severe invasion of privacy compounded by the anonymous offender and the

ability to disturb the victim regardless of any time or even stalking the target's whereabouts (Dehue et al., 2008).

According to Shaikh et al (2020), there are some common forms of cyberbullying which students practice, such as using abusive language online, intentionally forcing people to quarrel or fight, spreading rumors to harm a person's reputation, pretending to be someone else or hiding one's true identity, removing a person from an online social group, sharing one's personal information publicly, etc. Additionally, students create fake social media accounts and post inappropriate content on behalf of the real account owners to make others think the owner has submitted inappropriate information.

In another study, Schraedley et al (1999) discovered the relationship between internet harassment and depressive symptomatology. The possible factors based on the observation that contribute to cyberbullying on social media platforms are such as peer challenges, lack of social support, and lower social competence, mostly involving youth with depressive symptomatology and victims of bullying. Lack of social support related to depressive symptomatology can also contribute to the chances of being a victim of internet harassment (Haynie et al., 2001).

Currently, more than 55% of the world's population has an internet connection. The internet's enduring presence appears inevitable given its increasing personal intrusion. A comprehensive strategic strategy is required to protect vulnerable users and restore people's confidence in technology in the digital future (Landstedt & Persson, 2014).

The factors of Cyberbully acts that lead to mental health problems

Cyberbullying involves the intentional and continuous misuse of communication technology by a person or group to threaten, cause distress, and harm others (Popović-Ćitić et al., 2011; Roberto & Eden, 2010; Sourander et al., 2010; Tokunaga, 2010; Wade & Beran, 2011). There are several factors that contribute to the chance of being bullied, such as unpleasant educational environments (Landstedt & Persson, 2014), higher prevalence among teenage girls Cagirkan & Bilek (2021), poor body image Landstedt & Persson (2014), and membership in minority ethnic groups (Kwan et al., 2020). All forms of bullying are associated with depressive symptoms in both boys and girls, and all forms of bullying increase the likelihood of psychosomatic problems in girls (Landstedt & Persson, 2014). Cyberbullies can cause psychological harm to the victim by posting hurtful or aggressive messages, and cyberbullying victimization is associated with a range of problematic psychosocial health effects (Aboujaoude et al., 2015). Due to concerns raised and shared by educators, teachers, healthcare professionals, and parents on online aggression and internet safety, the UK government published the Digital Charter in 2018 to create new rules and norms for the internet and conducted research on the impact of social media and content on the mental health and well-being of youth.

The Social Contagion Theory

The underpinning framework for this study is the complex Contagion Model (Centola & Macy, 2007). According to this model, for a social norm to be contagious to one person, that person must have encountered not one (Watts & Strogatz, 1998) but several neighbors who practice that norm (Centola & Macy, 2007). Applying the Social Contagion theory to this research has

drawn attention to the fact that the population of netizens can be influenced in terms of their behavior, emotions, and how they perceive issues being spread on social media platforms. According to the Social Contagion Theory, an individual can exhibit behavior modeled by another person or adopt the attitudes of members of their social network (Christakis & Fowler, 2013; Aral & Nicolaides, 2017). In another study by Barabasi (2002), social networks are often described in terms of "nodes" and "ties," with each person in the network existing as an individual node, and each person they name or who names them as a friend being described as a tie. Therefore, nodes linked by a tie are assumed to be connected by friendship, which may or may not be reciprocated.

Thus, this research contributes to moral issues such as misinformation, misunderstanding, and shaping the minds of netizens into negative perceptions or overthinking. Moreover, the Social Contagion of health behaviors can be triggered by celebrities, peer groups, friends, and families (Cram et al., 2003). The spread or influence of behavior happens through socialization or interaction through social networks of peers, family members, or celebrities and influencers that they follow on social media platforms. It can be in the form of lifestyle, fashion, perceptions, views, and others. If the opinion is for a good cause, it is acceptable; however, if it is for the opposite side, it can affect the harmony, tranquility, or serenity of Malaysians and eventually cause misleading situations that affect mental health and endanger the public.

Moreover, Lai (2020) expressed that on the individual level, it might lead to psychological distress, panic buying, and anxiety among several groups in a community (Malaysia Ministry of Health, 2020). Besides, with the adverse effects of technologies, people might feel infected by following and comparing their day-to-day routines with the lives they read on web-based postings and building mind perceptions through pictures via social networking sites, which would make them feel dissatisfied and unhappy with their lives and ways of behaving towards an issue. This could lead to a major problem in their state of mind and feelings. Eventually, it leads to devastating emotions that contribute to horrifying social problems, thus increasing the rates of domestic abuse, violence, marriage problems, and homicide, and escalating the crime rates. Hence, this causes social threats not only to the netizens in cyberspace but also to the public at large.

According to studies by Rambaran et al (2020); Wang et al (2019), while cyberbullying is thought to be contagious via online social networks, this hypothesis has yet to be tested. As a result, the purpose of this present study is to examine the relationship between cyberbullying and mental health.

Methods

Research Design

A survey research strategy was chosen and conducted using self-administered questionnaires to collect quantitative data at a single point in time, cross-sectionally. Additionally, the research details the methodologies employed in terms of sampling procedures and questionnaire development. The self-administered online questionnaire was developed for data collection in three stages. First, a number of questions were formulated based on previous similar studies and relevant literature in accordance with the proposed hypotheses. Second, a questionnaire pre-test was conducted to determine the accuracy and consistency of the responses. Subsequently, the reliability and validity of the questions were assessed, and

revisions were made. The questionnaire was translated into the Malay language using standard translation and back-translation methodology to facilitate respondents' completion.

Questionnaire Design and Pre-Test

A cross-sectional quantitative study was conducted to examine cyberbullying experiences in Malaysian society. The survey instrument was constructed in dual languages (English and Malay) and pretested. Content validity and scale validation were established through expert reviews of two academicians in the social science field and two industry experts experienced in handling cyberbullying. Several changes were made to the instrument based on the experts' suggestions. Data collection initially started in April 2022, and respondents were assured that their data would be used for academic research purposes only.

Initially, 500 questionnaires were distributed over 6 months of data collection. Out of the 500 questionnaires distributed, 154 were returned and deemed usable for further analysis. The questionnaire included demographic profile details such as gender, age, race, education level, marital status, academic qualifications, and internet connection at home. The questionnaire also aimed to measure internet use patterns and cyberbullying experiences and included several items measuring the constructs of Social Connectedness (SC) adapted from Ismail et al (2021), Self Esteem (SE) from Rosenberg (1989), Cyberbullying Experience (CE) from Scholtz et al (2015), and depression from (Kroenke et al., 2001).

Data Analysis and Results

The present study employed Smart Partial Least Squares (SmartPLS) Version 3.2.8 for model assessment. Moreover, the study applied component-based structural equation modeling (SEM) to investigate the predictive capacity of the moderating variable (duration of internet use) and other SCT antecedents (cyberbully experience, self-esteem, and social connectedness) using prediction-oriented PLS-SEM.

The data were analyzed in two stages based on Anderson and Gerbing (1988), which include measurement model assessment and structural model assessment. Essentially, the measurement model was evaluated to satisfy the condition of a linear relationship between an explicit variable and the latent construct. Subsequently, the structural model of the construct was assessed for constructing path relationships. PLS-SEM is a statistical technique that permits simultaneous equation modeling with a large number of paths in a conceptual model comprising more than one dependent variable. According to Hair et al. (2019), covariance-based structural equation modeling (CB-SEM) is the dominant method for analyzing complex interrelationships between observed variables and latent variables. However, PLS-SEM has long been successfully employed in social science research and is currently widely applied in social science and business (Hair et al., 2019).

Findings and Discussion

Sample Characteristics and Procedures

The study utilized a multiple-item latent construct-based questionnaire as a survey instrument. The respondents were Malaysian society members above 18 years old. The primary reason for selecting this sample group was their greater likelihood of having experienced cyberbullying. Data were collected using convenience sampling and by distributing a self-administered questionnaire online across multiple social media channels.

The participants were exposed to several information and question filters to gauge their experiences of cyberbullying.

Table 1 <i>Demographic profile</i>				
Demographic variable	Frequency	Percentage (%) 32.5 67.5 35.7 18.2 27.9 13.0 5.20 95.5 2.62		
Gender	Male	50	32.5	
	Female	104	67.5	
Age	18-20	55	35.7	
	21-30	28	18.2	
	31-40	43	27.9	
	41-50	20	13.0	
	51 and above	8	5.20	
Race	Malay	147	95.5	
	Chinese	1	0.60	
	Others	6	3.90	
Marital status	Single	150	97.4	
	Others	4	2.60	
Highest academic qualification	SPM	30	19.5	
	Diploma	57	37.0	
	First degree	31	20.1	
	Master	26	16.9	
	Ph.D.	10	6.50	
Internet connection at home	Yes	141	91.6	
	No	13	8.40	

Data were collected from 155 responses, but one respondent had missing data of more than 50%, so they were entirely removed from the analysis, leaving only 154 usable responses. Table 1 displays the respondents' demographic information. Most respondents were females (67.5%) and of Malay ethnicity (95.5%). The percentage of Malay respondents reflects the demographic data of the Malaysian population, which is dominated by the Malay ethnic group. Most respondents were in the age group of 18 to 20 years (35.7%). Meanwhile, 97.4% of the respondents claimed that they were single, with a diploma as their highest academic qualification (37.0%), and almost 91.6% had internet access at home.

Apart from examining the profile of the respondents, this study also investigated their internet usage patterns and experiences with cyberbullying. Apparently, the respondents spent a significant amount of time using the internet every day (84.4%), with an average of 5 to 10 hours per day. Additionally, respondents mainly browsed the internet from home and office (50.64%) for multiple purposes such as sending and receiving texts, emails, chats, downloading music, films, or programs, playing online games, and shopping online (36.79%). The rest of the respondents reported engaging in one or two of these activities. Surprisingly, the number of respondents who reported having experienced cyberbullying was relatively small (23.40%), and most had last experienced it the previous year (75.30%). Furthermore, a significant proportion of respondents reported not knowing anyone who had experienced cyberbullying (59.70%).

Table 2

Internet use pattern and cyberbully experience

		Frequency	Percentage (%)		
Internet usage	Do not use the internet	2	1.30		
	Several times a day	130	84.4		
	Once a week	11	7.10		
	Several times a week	3	1.90		
	Once a month	8	5.20		
Duration of internet use	0-5 hours	ours 18			
	5-10 hours	55	35.7		
	10-15 hours	47	30.5		
	15-20 hours	22	14.3		
	20 or more hours	12	7.80		
Location when using the	Home and office	78	50.64		
internet	Others (café, friend's	76	49.36		
	house, bedroom)				
Purpose of using internet	Chat rooms,	41	36.79		
	send/receive messages				
	(Messenger, Direct				
	messages), send/receive				
	emails, downloading				
	music, films or				
	programs, Online games				
	Online shopping				
	Chat	59	63.21		
	rooms/send/receive	23	03.21		
	messages (Messenger,				
	Direct messages)/				
	send/receive emails/				
	downloading music				
	films or programs/				
	Online games/				
	Online shopping				
	Maa	26	22.40		
Have ever been cyberbullied	Yes	36	23.40		
	No	118	76.60		
When did that happen	Never	1	0.60		
	Within this week	4	2.60		
	Within the last week	4	2.60		
	Within last month	29	18.80		
	Within last year	75.30			
Knows anyone who has been	Yes	62	40.30		
cyberbullied	No	92 59.70			

Fitness of the Measurement Model

The measurement model describes the relationships between observed (measurable) and unobserved (latent) variables. Before assessing the measurement model's fitness, convergent and discriminant validity were primarily evaluated at the analysis stage. Convergent validity, factor loadings, composite reliability (CR), and average variance extracted (AVE) of each construct were examined. The CR and AVE values were extracted and presented in Table 3, which confirmed that the reliability and convergent validity are valid following the thresholds by (Hair et al., 2019). The significant cut-off value for composite reliability is 0.708, and items with factor loadings under 0.5 were considered for removal, whereas AVE is adequate at 0.5 and above (Hair et al., 2017).

The current findings revealed that the AVE value for the Cyberbully Experience (CE) construct was under 0.5 (0.343), hence several items (CE11; CE14; CE27; CE17; CE21; CE26; CE22; CE25; CE12; CE13; CE1; CE2; CE16; CE23) were removed. The AVE value of 0.508 for Cyberbully Experience was achieved after removing the items, thus exceeding the cut-off point of 0.50. In the current model estimation, CR is a more suitable measure of internal consistency compared to Cronbach's alpha reliability as it considers the actual loadings while measuring indicators. Observably, all the factor loadings ranged from 0.633 to 0.771, which were satisfactory.

The findings also reveal that the AVE value for the Social Connectedness (SC) construct was also under 0.5 (0.425), hence several items (SC2; SC4; SC5; SC16; SC14; SC1; SC19; SC10; SC8; SC12; SC13) were removed. The AVE value of 0.693 for Social Connectedness was achieved after removing the items, thus exceeding the cut-off point of 0.50, and all the factor loadings of the remaining items ranged from 0.617 to 0.888, which were satisfactory. For the construct Self-Esteem (SE), several items were also removed due to having AVE below 0.5 (SE3; SE1; SE9; SE8; SE4; SE7). The remaining SE items had factor loadings ranging from 0.805 to 0.860, with an AVE value of 0.711. The independent variable of Depression revealed a strong factor with factor loading ranging from 0.757 to 0.905 and AVE of 0.704. The fitness of the measurement model of the study is depicted in Figure 1.

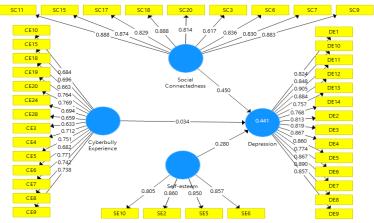


Figure 1: Measurement model of Cyberbully Experience, Social Connectedness, Self Esteem, and Depression

The Fornell-Larcker criterion and HTMT ratio of the constructs were tested to assess discriminant validity (Hair et al., 2017). This method compares the square root of the AVE with the correlation of latent constructs. A latent construct should explain its variance indicator better than the variance of other latent constructs (Hair et al., 2017). Thus, the square root of the AVE value of each construct in the study should demonstrate a greater value than the correlations with other latent constructs (see Table 3). The Heterotrait-monotrait (HTMT) ratio of correlation is another approach to measuring discriminant validity. An HTMT value close to 1 indicates a lack of discriminant validity. Using the HTMT as a criterion involves comparison against a predefined threshold. An HTMT value higher than the threshold indicates a lack of discriminant validity. In Table 4, all confidence intervals were under 1. Furthermore, the bias associated with the bootstrapping estimates was unlikely because the confidence intervals for the HTMT values provided additional evidence of discriminant validity. Thus, all the constructs were distinctive, which confirmed their discriminant validity (Hair et al., 2017).

Table 3

The Fornell-Larcker of Each Variable

Construct	Cyberbully experienc	Depression	Self Esteem	Social Connectedness	
	е				
Cyberbully experience	0.713				
Depression	0.156	0.839			
Self Esteem	0.212	0.557	0.843		
Social Connectedness	0.140	0.623	0.600	0.833	

Table 4

The HTMT Value of Each Variable

Construct	Cyberbully experienc e	Depression	Self Esteem	Social Connectedness
Cyberbully experience				
Depression	0.155			
Self Esteem	0.223	0.605		
Social Connectedness	0.170	0.643	0.656	

Fitness of Structural Model

The structural model coefficients test the relationship between constructs by estimating a series of regression equations (Hair et al., 2017). A bootstrapping procedure with resampling techniques was executed before examining the hypothesized relationships and their relevance (Hair et al., 2017). 5,000 resampling tests were conducted to estimate standard errors and the significance of parameter estimates in the study based on (Hair et al., 2017; Becker et al., 2015).

Collinearity statistics were also examined to ensure unbiased regression in the results.

The process is similar to assessing the formative measurement model, but the latent variable score of the predictor constructs in partial regression is used to calculate the VIF value. VIF values above 5 indicate possible collinearity issues in predictor constructs (Mason & Perreault,

n.d.; Becker et al., 2015). All VIF values in the study were close and under 5, indicating the absence of collinearity problems and allowing for the subsequent step of examining the R2 value of the endogenous construct (Hair et al., 2017).

R2 explains the percentage of the total variance in a regression model (Hair et al., 2019). R2 is demonstrated by explaining independent variables in the dependent variable. A greater R2 value increases the predictive capability of the structural model. R2 values in the current study were calculated by the PLS algorithm, as demonstrated in Table 5. The R2 value for the dependent variable (depression) was 0.441, indicating that the latent exogenous variable (Cyberbullying Experience, Self-Esteem, and Social Connectedness) explained 44.1% of the dependent variable. Table 5 displays the endogenous construct tested for standardized path coefficients (β), p-values, t-values, effect size (f2), and coefficient of determination (R2). Notably, self-esteem and social connectedness statistically and significantly affected depression in this model with (β = 0.280, p < 0.002, t-value > 3.118) with no effect size and (β = 0.450, p < 0.000, t-value > 5.240) with a small effect size.

Hypothesi s	Direct effect	β	Std. Erro r	t- Valu e	p- Valu e	R2	f2	Effec t size	Hypothesi s Result
H1	Cyberbully Experience ▼ Depression	0.03 4	0.06 0	0.56 2	0.57 4		0.00 2	No effec t	Not supported
H2	Self Esteem ▼ Depression	0.28 0	0.09 0	3.11 8	0.00 2	0.44 1	0.08 7	No effec t	Supported
H3	Social Connectednes s ▼ Depression	0.45 0	0.08 6	5.24 0	0.00 0		0.02 3	Small	Supported

Table 5 Fitness of Structural Model

Conclusion and Recommendation

Based on the findings of the present study, it can be concluded that the majority of the respondents spent a significant portion of their day on the internet, with most of their internet usage taking place at home and the office. The main activities performed by the respondents on the internet include sending and receiving texts, emails, and chats, downloading music, films, or programs, playing online games, and shopping online. However, the number of respondents who reported having experienced cyberbullying was relatively low and mostly took place in the previous year. Most respondents stated that they did not know anyone who had experienced cyberbullying. These findings indicate that social contagion of social norms occurs in both online and offline social networks (Ternovski & Yasseri, 2020). Hence, the pervasiveness of digital media renders established mechanisms of social attention and surveillance rapidly obsolete, while keeping in mind that empathy is essential for preventing cyberbullying and promoting prosocial behavior.

Statistical analysis was conducted to estimate the relationships' significance and ensure unbiased results by examining collinearity statistics. The results showed that self-esteem and

social connectedness had a statistically significant impact on depression. The predictive capability of the structural model was measured using the R2 value, which indicated that the latent exogenous variables (Cyberbullying Experience, Self-Esteem, and Social Connectedness) explained a significant portion of the dependent variable (Depression).

In response to the study, effective interventions are needed to curb cyberbullying that leads to mental health issues in Malaysian society. In fact, statistics show that 7,600 children aged between 8 and 17 demonstrated that one out of every three children in Malaysia was a victim of cyberbullying, as indicated by a study by Saharrudin et al (2019) utilizing the Global Youth Online Behavior Survey. The survey also stated that the level of awareness of cyberbullying among Malaysian parents was low, and only 38 percent of the parents were aware or concerned about this issue while slightly more than a quarter has informed or warned their children about the cyber threats of online communication.

Hence, society needs to be educated in social media literacy, creating awareness of the harmful effects of cyberbullying not only on the netizens but also on the parents themselves. In addition, inculcating netizens in communication skills, respect, cyber ethics, and positive vibes such as being compassionate, decent, mindful in their language, conscientious, empathetic, sensitive, rational, and wise in the virtual world are essential elements to be cultivated so that netizens behave in a courteous manner and do not violate ethical or undermine moral standards in communicating or uploading their posts on their social media platforms. It not only promotes a healthy culture but also educates society in coping with cyberbullying issues. Being responsible and able to control their emotions and feelings are vital in avoiding depression.

Extensive awareness campaigns to deter cyberbullying acts that contribute to mental health such as the "End Cyberbullying and False Information Dissemination" campaign should be carried out regularly and profusely to reduce the problem faced by society. Besides, the "I Am With You" campaign implemented by the Malaysian Communications and Multimedia Commission (MCMC) should be prolonged as it educates the public on protecting themselves from cyberbullying, humiliation, misrepresentations, and the spreading of false information. As for the victims, it is recommended that they should not keep quiet but stand up for their rights and be brave to report to the authorities such as the police or the MCMC for actions taken against the perpetrator. Cyberbullying is an unlawful act, so the offender needs to be punished severely.

Harsher punishments should be implemented for perpetrators of cyberbullying as it can cause severe damage, affecting their mental and psychological state, disrupting their emotions, and social connections in social media, and destroying their pride, dignity, and self-esteem enormously. As a consequence of their horrendous acts, violators can be charged under the Computer Crimes Act of 1997 and the Communication and Multimedia Act of 1998. Furthermore, offenders who are convicted can be liable to a fine of up to RM50,000 or maximum imprisonment for a year.

Based on the findings, it is recommended that further research should be conducted to understand better the relationship between the latent variables of Cyberbully Experience, Self-Esteem, and Social Connectedness and their impact on Depression. Future research could

explore other variables that may also contribute to depression and examine their relationship with the above-mentioned variables. The research could also be extended to different populations and cultures to determine the generalizability of the findings. Moreover, the development and implementation of interventions aimed at improving self-esteem and social connectedness could be explored to determine their effectiveness in reducing depression. These interventions could be targeted toward individuals who are at higher risk of experiencing depression, such as those who have experienced cyberbullying

Significance of Research

The findings of this research may contribute to the understanding of the relationship between cyberbullying and mental health. This study confirmed co-relation in terms of the effects of cyberbullying on the mental health of the individual who is affected by this problem. From a theoretical viewpoint, the study also highlights the impact on the cognitive mind and behaviour of the victims based on the Social Contagion Theory using a quantitative approach. The rigorous analysis conducted provides a clearer picture of current cyberbullying effects on mental health in society. In addition, this research provides relevant insights and added knowledge on this social issue by cultivating awareness, emphasizing the implications of cyberbullying if it is not curbed, and assisting the Malaysian Communication and Multimedia Commission (MCMC) in not only addressing the campaigns and ethics but also serve as guidance in strengthening the rules and regulation in monitoring the cyber thus, reducing the cyberbully acts. The outcome of this study will provide significant value on the importance of adhering to respect, rationale, and sensitivity in cyber. Hence, contributing to a healthy cyberculture among Malaysians.

References

- Aboujaoude, E., Savage, M. W., Starcevic, V., & Salame, W. O. (2015). Cyberbullying: review of an old problem gone viral. Journal of Adolescent Health, 57, 10-18. doi:10.1016/j.jadohealth.2015.04.011
- Adams, R. (2019). Social media urged to take 'moment to reflect' after girl's death. The Guardian. Retrieved from https://www.theguardian.com/media/2019/jan/30/social-media-urged-to-take-moment-to-reflect-after-girls-death#img-1
- Barlett, C. P., Simmers, M. M., Roth, B., & Gentile, D. (2021). Comparing cyberbullying prevalence and process before and during the COVID-19 pandemic. The journal of social psychology, 161(4), 408-418.
- Cagirkan, B., & Bilek, G. (2021). Cyberbullying among Turkish high school students. Scandinavian journal of psychology.
- Centola, D., & Macy, M. (2007). Complex contagions and the weakness of long ties. American journal of Sociology, 113(3), 702-734.
- Dehue, F., Bolman, C., & Vollink, T. (2008). Cyberbullying: Youngsters' experiences and parental perception. CyberPsychology & Behavior, 11(2), 217-223.
- Department for Digital Culture Media & Sport. (2019, October 28). Digital charter. Gov.UK. Retrieved from https://www.gov.uk/government/news/digital-charter-will-set-newonline-standards-for-years-to-come
- Farley, S., Coyne, I., & D'Cruz, P. (2021). Cyberbullying at work: Understanding the influence of technology. Concepts, Approaches and Methods, 233-263.
- Haynie, D. L., Nansel, T., Eitel, P., et al. (2001). Bullies, victims, and bully/victims: distinct groups of atrisk young people. Journal of Early Adolescence, 21, 29–49.

- Institute for Public Health. (2015). National Health and Morbidity Survey 2015 (NHMS 2015). Vol. II: Non-Communicable Diseases, Risk Factors & Other Health Problems. Ministry. Health Malays., 2, 185-186.
- Ismail, N. A., Abdul Majid, N., & Rajan Naidu, P. (2021). Cyberbullying and emotional implications among secondary school students: Buli siber dan implikasi emosi dalam kalangan murid sekolah menengah. Jurnal Pendidikan Bitara UPSI, 14(1), 62–69. https://doi.org/10.37134/bitara.vol14.1.7.2021
- Kazdin, A. E., & Marciano, P. L. (1998). Childhood and adolescent depression. In: Treatment of Childhood Disorders, 2nd ed. New York: Guilford Press.
- Kowalski, R. M., Limber, S. P., & McCord, A. (2019). A developmental approach to cyberbullying: Prevalence and protective factors. Aggression and Violent Behavior, 45, 20-32.
- Kroenke, K., Spitzer, R. L., Williams, J. B. (2001). The PHQ-9: Validity of a Brief Depression Severity Measure. Journal of General Internal Medicine, 16(9), 606-613.
- Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: ten lessons learned. International Journal of Environmental Research and Public Health, 14, 311.
- Lai, N. (2020). Enough goods, panic buying caused by fake news. Borneo Post. Retrieved from https://www.theborneopost.com/2020/03/23/enough-goodspanic-buying-caused-byfake-news/
- Lai, C. S., Mohamad, M. M., Lee, M. F., Salleh, K. M., Sulaiman, N. L., Rosli, D. I., & Chang, W.
 V. (2017). Prevalence of cyberbullying among students in Malaysian higher learning institutions. Advanced Science Letters, 23(2), 781-784.
- Landstedt, E., & Persson, S. (2014). Bullying, cyberbullying, and mental health in young people. Scandinavian Journal of Public Health, 42(4), 393–399. https://doi.org/10.1177/1403494814525004
- McLuhan, M. (1964). Understanding Media: The Extensions of Man (1st ed.). Signet Books.
- Ministry of Health Malaysia. (2020). Mental health and psychosocial support in Covid-19. In Guidelines Covid-19 Management No. 5/2020. Retrieved from https://www.moh.gov.my/moh/resources/Penerbitan/Garis%20Panduan/COVID19/An nex_33_Mental_health_and_Psychosocial_support_23032020.pdf
- Olweus, D. (1994). Bullying at school. In L. R. Huesmann (Ed.), Aggressive behavior (pp. 97– 130). New York: Springer.
- Popovic-Citic, B., Djuric, S., & Cvetkovic, V. (2011). The prevalence of cyberbullying among adolescents: A case study of middle schools in Serbia. School Psychology International, 32, 412-424. doi:10.1177/0143034311401700
- Rambaran, J. A., Dijkstra, J. K., & Veenstra, R. (2020). Bullying as a group process in childhood: A longitudinal social network analysis. Child Development, 91(4), 1336- 1352.
- Rosenberg, M. (1989). Society and the Adolescent Self-Image (Revised edition). Middletown, CT: Wesleyan University Press.
- Royal Society for Public Health. (n.d.). NewFilters: To manage the impact of social media on young people's mental health and wellbeing. Retrieved from https://www.rsph.org.uk/uploads/assets/uploaded/23180e2a-e6b8-4e8d 9e3da2a300525c98.pdf
- Schraedley, P. K., Gotlib, I. H., & Hayward, C. (1999). Gender differences in correlates of depressive symptoms in adolescents. Journal of Adolescent Health, 25, 98–108.

- Scholtz, B., Van Turha, T., & Johnston, K. (2015). Internet Visibility and Cyberbullying: A Survey of Cape Town High School Students. The African Journal of Information and Communication (AJIC), (15). doi:10.23962/10539/20333
- 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.
- Slonje, R., & Smith, P. K. (2008). Cyberbullying: Another main type of bullying. Scandinavian Journal of Psychology, 49(2), 147-154.
- Ternovski, J., & Yasseri, T. (2020). Social complex contagion in music listenership: A natural experiment with 1.3 million participants. Social Networks, 61, 144-152.
- TurkStat. (2016). ICT usage survey in households and individuals. Retrieved October 8, 2017, from http://www.tuik.gov.tr/PreHaberBultenleri.do?id=21779
- Wang, W., Xie, X., Wang, X., Lei, L., Hu, Q., & Jiang, S. (2019). Cyberbullying and depression among Chinese college students: A moderated mediation model of social anxiety and neuroticism. Journal of Affective Disorders, 256, 54-61.
- Amalina, Y. N. Y., Chinniah, M., Othman, A., Shamala, P., & Zolait, H. A. (2021). A systematic literature review on characteristics of cyberbullying. International Journal of Computing and Digital Systems, 1393-1406.
- Zsila, A., Orosz, G., Kiraly, O., Urban, R., Ujhelyi, A., Jarmi, E., ... & Demetrovics, Z. (2018). Psychoactive substance use and problematic internet use as predictors of bullying and cyberbullying victimization. International Journal of Mental Health and Addiction, 16, 466-479.