THE INFLUENCE OF PERSONALITY TRAITS ON CYBERBULLYING BEHAVIOUR AMONG MALAYSIAN STUDENTS

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by

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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CBO	Cyberbullying Offender
CBV	Cyberbullying Victim
CMV	Common Method Variance
DV	Dependent Variable
EXT	Extraversion
EXT	Extraversion
FBK	Facebook
FBK	Facebook Usage
IAT	Internet Addiction
IMP	Impulsiveness
INT	Introversion
IV	Independent Variable
MCMC	Malaysian Communications and Multimedia Commission
MEVs	Mediating Variable
MLMV	Measured Latent Marker Variable
MOVs	Moderating Variable
MYCERT	Malaysia Computer Emergency Response Team
NAR	Narcissism
NEU	Neuroticism
PEMANDU	Malaysia's Peformance MNgement and Delivery Unit
PII	Personally Identfiable Information
PIU	Problematic Internet Use
PVC	Privacy Concern
SCT	Social Cognitive Theory
SLF	Selfitis

TBP   Theory of Planned Behaviour

TRA   Theory of Reasoned Action

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PENGARUH CIRI KEPERIBADIAN TERHADAP TINGKAHLAKU SIBERBULI ANTARA PELAJAR MALAYSIA

ABSTRAK

Budaya buli telah wujud sejak zaman manusia lagi, tetapi tidak diberi kepentingan atau penekanan pada masa tersebut. Sejak kebelakangan ini budaya tersebut menjadi gejala teknologi sosial yang tidak diundangi. Salah satunya yang menjadi kerisauan ialah buli yan dikenali sebagai 'Cyberbullying'. Ia adalah cara membuli dengan menggunakan teknologi siber melalui peralatan elektronik oleh individu atau kumpulan yang sengaja berniat untuk pemakluman atau penyampaian berita palsu dan menyebabkan kekecohan yang tidak diingini atau memalukan individu yang ditarget. Berdasarkan penerbitan berita dalam The Star dan NST pada 2017 hingga 2018, segelintir individu di Malaysia telah cuba untuk membunuh diri akibat gejala siber buli. Kajian dan penyelidikan ini telah dilakukan untuk mengetahui, sejauh manakah siber buli ini mempengaruhi seseorang individu. Sifat-sifat pembuli siber yang telah dikaji adalah individu yang Bersifat Sosial, Pendiam, Neurotik (gangguan emosi), Mudah Terpengaruh, dan salah satu sifat keperibadian yang paling buruk ialah Sikap Mengkagumi Diri Sendiri (Narcissism). Kajian tersebut juga mendedahkan factor-faktor lain yang menyebabkan pembulian siber ini adalah melalui halaman-halaman social seperti Facebook, Ketagihan Internet, Twitter dan lain-lain lagi. Individu yang suka berselfi juga membanjiri halaman sosial dan sekaligus mempengaruhi dan menyenangi Sikap Mengkagumi Diri Sendiri (Narcissism) terhadap pembuli siber. Ia adalah kaedah kajian yang berstruktur persoalan dan contoh tujuan yang dikehendaki. Kajian scala nominal juga dilakukan untuk mendapat maklumbalas latar belakang responden. Sebanyak 574 soalan yang

menumpukan umur (16-35) telah dikumpul melalui atas talian media. Kadar maklumbalas yang diterima ialah 91.21% dengan penyelesaian lengkap untuk 523 persoalan amat bermanfaat. Kaedah Perisian Statistik 25 IBM SPSS telah digunakan untuk penghuraian kajian ini. Manakala perisian 'Structual Equation Modelling (Smart PLS 3)' digunakan untuk ujian model dan hipotesis. Maklumbalas yang ketara diterima melalui ujian hipotesis. 3 daripada 9 hipotesis utama telah dihasilkan melalui kajian ini, iaitu peramal yang bersifat sosial, pendiam dan mengkagumi diri sendiri telah mendedahkan perhubungan dengan pembuli siber. Ketagihan Internet adalah pengantara individu bersikap sosial, gangguan emosi, pendiam, dorongan mendadak dan mangsa buli siber, manalaka rahsia persendirian menjadi pengantara ganguan emosi dan pesalah siber buli. Individu yang suka mengambil selfi mendedahkan perhubungan moderat antara sifat mengkagumi diri sendiri dan sifat pembuli siber. Kesimpulanya kajian ini akan memberi pencerahan terhadap sektor pendidikan, golongan ibu bapa dan keseluruhan masyarakat terutama yang suka meluangkan masa berpanjangan di laman sosial. Hasil kajian ini dapat membantu sektor pendidikan tinggi, Kementerian Pendidikan dan bermanfaat kepada pihak tertentu, untuk lebih mendalami faktor-faktor penyebab sikap siber buli. Ia juga dapat membantu mengurang dan membanteras peningkatan keadaan yang makin membimbangkan.

THE INFLUENCE OF PERSONALITY TRAITS ON CYBERBULLYING BEHAVIOUR AMONG MALAYSIAN STUDENTS

ABSTRACT

Bullying has existed since the dawn of humanity, but not much emphasis was placed on the issue in the early days. In recent years, the use of technology unethically had caused many undesirable social issues. One of the most worrying concern was "Cyberbullying". Cyberbullying is an act conducted through any electronic device by an individual or group with deliberate intend to send offensive messages to cause mischief or inconvenience to others. Based on published news in The Star and NST from 2017 till 2018 there were cases of suicides and attempted suicides in Malaysia relating to cyberbullying. This research has undertaken to determine the influence of personality traits on cyberbullying behaviour. The traits investigated are Extraversion, Introversion, Neuroticism, Impulsiveness and one of the dark triad personality traits, Narcissism. In addition, the study suggests that other vital factors that act as conduit pipe for cyberbullying, are Facebook Usage, Internet Addiction, and Privacy Concern. Moreover, Selfitis, a trait that many users are showing nowadays, is also hypothesised to moderate the relationship between Narcissism and Cyberbullying Behaviour. This study used a structured questionnaire via the purposive sampling method. The questionnaire survey was divided into two sections. A nominal scale was employed to obtain the respondents' background information. A total of 574 questionnaires were collected via online, mainly focusing on the age range of 16–35 years old. The response rate was 91.21% with 523 completed questionnaires; a sample size that was considered usable for this study. IBM SPSS Statistics 25 software was used to conduct the descriptive statistics

analysis, while Structural Equation Modelling (Smart PLS 3) software was used to conduct the model testing and hypothesis testing. The findings showed a significant acceptance of the study's hypotheses. From the nine main hypotheses, which were developed in this study, three predictors namely Extraversion, Impulsiveness, and Narcissism revealed a significant relationship with Cyberbullying Behaviour. As for the mediation effects, Internet Addiction significantly mediates the relationship between Extraversion, Neuroticism, Introversion, Impulsiveness, and Cyberbullying Victim, while Privacy Concern significantly mediates the relationship between Neuroticism and Cyberbullying Offender. It is interesting to see that the moderating effects of Selfitis had revealed significant relationship between Narcissism and Cyberbullying Behaviour. In conclusion, this study will greatly enlighten the education sector, parents and the society at large, especially those who spend long hours online. The findings of this study will assist the Ministry of Education, the Higher Learning Institutions (HLIs) and other relevant authorities to gain a greater insight into the key factors that contribute to Cyberbullying Behaviour and, in turn minimise and curb the situation, which is steadily deteriorating and increasingly unmanageable.

CHAPTER 1

INTRODUCTION

1.0 Overview

This chapter is divided into several sections to illustrate the aim of this research, which is to determine the influence of personality traits on cyberbullying. The first section presents the introduction to the research area, while the next section provides a brief research background with a review of the issues. Subsequently, the issues and challenges encountered in cyberbullying are discussed, following which the research questions and research objectives are developed. Finally, the significance of study, research scope, and the definitions of key terms, are clearly explained.

1.1 Introduction

The risk of Internet usage is now being researched and investigated throughout the world. One of the most worrying threats in recent years is "cyberbullying" (Song et al., 2019). Some researchers claim that direct bullying, a dilemma in the olden days, has been extended and perpetrated in the current age via Information and Communications Technology (Donegan, 2012; Tokunaga, 2010). This particular social issue is seriously affecting students, raising many stakeholders' concern about the ethical use of new technologies (Balakrishnan, 2018; Neves & Pinheiro, 2010).

Cyberbullying is described as an aggressive and intentional behaviour that uses digital means such as social networking sites (SNS) to cause harm against victims who cannot protect themselves (Smith et al., 2008). Cyberbullying usually

involves many parties, namely the victim and the offender, whereby the offender is the one who commits the crime and the victim is the one who is being harassed. All this takes place virtually or online (Balakrishnan, 2018). The progressions of current innovation have encouraged negative conduct among students for instance cyberbullying (Shireen, 2017). People tend to use social media frequently as a place to communicate and interact with their friends and family. However, the frequent use of the Internet and SNS and no proper security to protect the personal data of the individual could expose users to cyberbullying. The cyberbullying offender could be defined as aggressive and having low empathy when committing harmful actions against the victims (Wong, Chan, & Cheng, 2014). Meanwhile, the victim is often associated with a lack of self-esteem, a condition that could exacerbate into mental health problems such as depression. Some behaviours related to cyberbullying include cyberstalking, insulting, and flaming (writing harassing comments online), exclusion, in addition to imitating a person on social media to pass off as someone else (Newey & Magson, 2010).

Based on the above evidence (Peled, 2019), it is vital to prioritise the issue of cyberbullying. To do this, one must first understand the origin of bullying. Therefore, this study investigates the cause of indirect bullying (know-how) known as "cyberbullying".

1.2 Background of Study

Cyberbullying is a form of harassment using electronic means such as mobile phones and the Internet to harass a victim (Kowalski, Giumetti, Schroeder, & Lattanner, 2014). This global issue is a concern for various nations since adolescents and students have both experienced cyberbullying, and as evident from studies

conducted in Malaysia (Balakrishnan, 2015), England (Marczak & Coyne, 2010), Australia (Campbell et al., 2012), the United States (Bauman & Newman, 2013), Canada (Bonanno & Hymel, 2013), the Netherlands (Kerstens & Stol, 2014), Austria, Sweden (Petra Gradinger, Yanagida, Strohmeier, & Spiel, 2015; Laftman, Modin, & Ostberg, 2013), Greece (Kokkinos, Antoniadou, & Markos, 2014), Ireland (Callaghan, Kelly, & Molcho, 2015), and Spain (Elipe, Mora-Merchán, Ortega-Ruiz, & Casas, 2015). Tanrikulu (2015) stated that cyberbullying impacts the well-being of an individual. These adverse impacts stress the importance of furthering insight into understanding cyberbullying behaviour.

Research has shown that cyberbullying could happen due to the frequent use of technological means such as mobile phones and the Internet (Casas, Del Rey, & Ortega-Ruiz, 2013). Cyberbullying is a harmful occurrence, as it leaves many negative impacts on both the offender and the victim, especially leading to psychological problems such as depression, anxiety, and the intention to commit suicide.

In contrast to the negative impact of traditional bullying, bullying via electronic means is believed to be more negative, as it results in more elevated feelings of uneasiness and sorrow. Many studies have also uncovered the social challenges faced by the electronically hassled (Campbell, Spears, Slee, Butler, & Kift, 2012). Cyberbullying not only feel hurtful, it can also affect a person mentally and emotionally; emotional abuse is just as painful as physical abuse.

The increasing report of cyberbullying in the news media in Malaysia had brought about the public's concern and therefore a requirement for an immediate resolution to the issue of cyberbullying. Based on a survey measuring cyberbullying

for ages between 16-64, conducted by a compare and review site, it is alarming to note that Malaysia is placed sixth among 28 countries in which the survey was done (Cook, 2019). Cyberbullying in Malaysia is a severe problem, but with the modern advancement and rapid growth of technology worldwide, bullying has taken on a whole new meaning. Unlike traditional bullying, cyberbullying occurs 24 hours a day throughout the year; it enables cyberbullies to attack victims anywhere, even in places where the victims should feel safe and secure.

The Star reported a case on (18, October and 2017) where a nine-year-old had thoughts of committing suicide after being called appalling names on Facebook. The Star Online news (Brown, 2017), in October 2017, reported that one in six men (as opposed to 1 in 9 women) have experienced online harassment, and had their personal details and photos exposed by someone who was not satisfied with them.

Additionally, the New Straits Times (NST) reported that 73 per cent of women and girls have been exposed and had experienced some form of online crime, according to the United Nations (Vijaindren, 2017). Furthermore, it was highlighted that 71% of cyberbullies in Malaysia use social media, while 53% of the cyberbullies were classmates from school or colleges. These statistics are based on a survey conducted by Tengku Zatashah on cyberbullying (The Star Online, 2018). "Cyberbullying is far more subtle, as the attacker does not need to physically confront others in order to harm them" (The Star Online, 2018). Some people post negative comments on social media without thinking about the negative consequences to others. Moreover, cyberbullies can even turn the comment into violent, life-threatening ones.

Tengku Zatashah also urged the victims to inform their parents and school authorities to put a stop to the cyberbullying (The Star Online, 2018). According to a survey conducted by Ipsos, one in four or 23% of parents revealed that their children have experienced cyberbullying. Out of these, 7% of their children have experienced digital bullying on a regular basis. An individual that spends more time on digital platforms could have a higher risk of exposure to cyberbullying. It was reported that cyberbullying offenders used mobile phones (57%), online messaging (33%), online chat rooms (31%), emails (23%) and other websites (19%) to harass the targeted victims.

Faryadi (2011) used a triangulation method to study the relationship between cyberbullying and academic performance among 365 students at a university in Malaysia. He found that (85%) of the students felt emotional and psychological stress when dealing with cyberbullying. Also, a total of 70% of the university students admitted that cyberbullying affected their academic performance. Another study was conducted in Perlis on 105 students, who expressed that cyberbullying had raised their stress levels and that they were at a loss as to how to handle it (Abu Bakar, 2015).

Cyberbullying is now a major concern in society, where students are the most prevalent victims. For instance, The Malaysian daily mainstream newspaper, the Star (4, May and 2017) reported a case where a victim of cyberbullying had committed suicide. The victim, Teh Wen Chun, had fallen into depression after getting harassed by an offender on the Internet. In a letter, he explained that he had taken his own life because of cyberbullying (Shiying, Chiam & Chern, 2017). Cyberbullying could affect the mental health of both the victim and the offender. In the end, both parties

will harm themselves and the situation could escalate from bad to worse (Reijntjes, Kamphuis, Prinzie, & Telch, 2010). Cyberbullying has aroused concerns among the public, who are now taking active precautions to prevent cyberbullying. The increasing cases of cyberbullying in Malaysia had motivated this study to determine its root cause i.e. by investigating factors (personality traits) that influence cyberbullying in Malaysia.

The prevalence and severity of cyberbullying among students emphasise the need for further research and additional measures to investigate the factors or aspects that lead to cyberbullying (Wong, Choon, & Cheng, 2014).

1.3   Cyberbullying among Malaysian Students

There is an increasing trend in incidents of traditional bullying or cyberbullying in Asian countries, Malaysia notwithstanding (UNICEF, 2015). It is necessary to recognise the influences that push people to bully others, and how to overcome this issue (The Star, 2014). Internet accessibility is an essential amenity to every citizen, but there are some irresponsible individuals that misuse the technology while online, particularly students who are openly exposed to unsafe content while surfing the Internet. The former Prime Minister of Malaysia, Datuk Seri Najib Tun Razak, voiced his concerns by highlighting that cyberbullying is on the rise and that it is a "serious threat to Malaysian children". CyberSecruity Malaysia, the Education, Ministry and Digi Telecommunication Sdn. Bhd. 2013 conducted a study in 2013 on both 9651 primary and secondary school students, and found that 13% (1255) of the students had been cyberbullied and 26% (2509) had experienced cyberbullying.

On the other hand, CyberSAFE concluded that 49% of the students knew that their friends were victims of cyberbullying, while four out of ten children's

parents did not discuss online risks. Perpetrating online threats is very destructive behaviour. Global Youth Online (2013) identified that 8 out of 10 children have been targets of cyberbullying. This raises the alarm about the seriousness of this matter and that individuals should really take stock of the issue.

According to research done by Microsoft (2012), a total of 33% teenagers between 8 and 17 years old claimed that they have been bullied online, and there is no proper policy or guideline at school to prevent cyberbullying. The Government, therefore, conducted a child's online protection seminar to improve the situation. Also, a series of intervention programmes were implemented aiming to reduce cyberbullying cases. The Deputy Science, Technology, and Innovation Minister, Datuk Abu Bakar Mohamad Diah, launched a 19-paged 'Cyber Security Handbook', published by CyberSecurity Malaysia (The Star, 2014) to increase awareness of cyberbullying among students. The books were distributed to all citizens at no cost. Furthermore, a Safer Internet Day Campaign was conducted in 2014 to highlight the ethical use of online resources among students (Ministry of Education Malaysia, Commission, CyberSecurity Malaysia, & Digi Telecommunication, 2014). Not only had that, but the Malaysian Computer Emergency Response Team (MyCERT) also set up investigations to help victimised individuals. The former Malaysian Prime Minister, Datuk Seri Najib Razak, added that strict actions should be taken to overcome this issue (The Star, 2015).

Although various preventive measures have been implemented to overcome this issue, cyberbullying is still a rising epidemic in Malaysia. According to Ipsos, the Global Advisor study had highlighted that 71% of the parents in Malaysia were aware, mostly through social network sites that their children had experienced

cyberbullying or knew that someone from their community had been bullied (Ipsos, 2018).

On the contrary, students are too dependent on the digital environment where information can be easily obtained and spread in a single click. Some elements of cyberbullying can be particularly harmful to victims. For example, a cyberbully can post messages that are untrue, intended to tarnish the victim's reputation and dignity. The bully then sends threatening messages to the victim's inbox regularly. These tricks and tactics are done to make sure that there is no way for the victim to escape or slip away from being cyberbullied. Viral videos, audio, text messages, pictures, and gossip can reach a large number of audiences via SNS, blogs, website, forums, chat rooms, and emails within seconds. Significant information was gathered from Malaysia's national reports of students' on perception of cyberbullying. It was found that students do not care about online protection and many were unsure about cyber protection rules. Moreover, a total of 40% commented that they were not sure and were unaware of how to protect and safeguard themselves while surfing online (CyberSAFE, 2014) .

We cannot blame the technology or the Internet service providers. Technology can evolve indefinitely and its progress cannot be stopped. Today, many students label various social networks, such as Facebook, as their favourite site; it is impossible to predict the next big technology or trend. Students do not understand the consequences of posting anything online and are not aware that the Internet remembers everything that is posted or shared. The former Prime Minister Datuk Seri Najib Razak stressed in his speech that mistakes that lead to negative behaviour are still inherent in society (The Star, 2012). Zulkarnain Mohd Yasin,

SKMM's Head of Monitoring and Enforcement Division, stated that under the Communication and Multimedia Act 1998 (AKM 98) Section 223, a perpetrator could be forced to pay a fine of RM50, 000 or imprisonment or both, due to his or her negligence (Malaysian Digest, 2014). However, Eneng Faridah Iskandar, a Senior Director of Malaysian Communications and Multimedia Commission (MCMC), highlighted that adding new enforcement is not the approach to stop the abuse. Penalising and putting the child in juvenile custody is not the proper way to handle the matter as reported (The Star Online, 2015). Dr Mariani, a psychology professor expert, highlighted that attitude plays an essential role for people that spend long hours on SNS. She believes that there must be a reason for the child to behave negatively (The Star Online, 2015). The act that led to negative behaviours like being a victim or perpetrator are still relied on the way parents raise their children in the homes and their parenting skills (Meikeng, Lee, & Say, 2018).

The statistics show that cyberbullying is on the rise, particularly among youngsters and adolescents in Malaysia, and often through social media sites, blogs, and messages via Internet-connected devices such as computers and smartphones (MCMC, 2018). Within a split second, disgraceful messages could reach a wide range of cyber users, leaving the victim scarred and creating lifelong adverse effects (Shuib, 2014). The severity of these dangerous incidents shows that cyberbullying needs serious consideration and attention (The Star, 2015).

1.4 The Start of Bullying

"Bullying" has existed since the dawn of humanity, but not much emphasis was placed on this issue in the early days. According to Vanderbilt (2010), people were trained to face challenges in any environment, especially in education, sports,

social, and economic settings. By doing so, one could achieve success and overcome difficulties. Donegan (2012) further gave an example of a child that has been taught by his or her parent to strive and be the best in his or her school. This upbringing eventually influences the child as he or she grows and gains knowledge. However, some children will misuse their parents' advice. They start to learn and follow illegal and dishonest ways to stay ahead of others and compete for more recognition and rewards, not only for educational purposes but also to be on par with their peers in school. In other words, children could go astray in the learning process. The parents' intentions of guiding their children to become competitive and to achieve outstanding results could result in the child taking a shortcut i.e. by bullying others to obtain their goals. This kind of attitude will continuously grow in oneself to later cause harm to others.

Competitiveness in learning creates egoistical and hostile behaviours (Donegan, 2012). Those who fear losing out academically or losing their competitive position could resort to bullying. Thus, when a student finds that bullying is more effective for achieving his means, he will continue to indulge in this type of behaviour and lifestyle.

The issue of bullying rose to the forefront after three young boys aged 10 to 14 committed suicide due to extreme harassment from their peers (Abrapia, 2006). In fact, a Psychology Professor, Dan Olweus from the University of Bergen, Norway, first investigated "Bullying" in the late 70s. He researched and received many awards for his work on bullying intervention (Olweus, 2007).

1.5 Cyberbullying Cases in Malaysia

Some shocking cases were reported in 2014 and 2015, primarily cases of bullies that liked to hide behind the keyboard with the intention of posting upsetting information to embarrass others, also known as the keyboard warrior. Some cases have even hit news headlines. As pointed out by Eneng Faridah Iskandar, the Senior Director of MCMC, the existence of online problems originating from offline abuse was proven in the case of Kiki Kamaruddin (The Star, 2015) .

Kiki Kamaruddin took aggressive action when a senior citizen accidentally knocked her car bumper. Kiki took this issue seriously and harassed the man, Sim Siak Heong, in a public place, by hitting his car with a steering lock. The video went viral, and many viewers posted comments about the violence that took place (Malaysian Digest, 2014). Likewise, another fistfight video of a female student went viral; mixtures of comments and judgement were given on the viral video before the authorities took action. In today's Internet era, it is easier to upload photos, videos, and send hurtful messages to tarnish the reputation of others, which is seen as a form of enjoyment and fun for bullies (Malaysian Digest, 2014). As there are many avenues for students to release their emotions, they take the opportunity to hide behind the screen and use a secret identity to express hurtful content openly. This malicious habit is tough for the victims to handle, as the perpetrator is difficult to identify.

Similarly, a girl was kicked, punched, and dragged by another female student in a school. They took a "Selfie" using a cell phone while dragging and beating the victim. The bullies posted a "peace sign" and concealed their faces before they

captured the scene on camera. The selfie went viral online and ended with the police taking over investigations (Dina Murad, 2014).

Sheena Liam, a top Asian model, was a victim of cyberbullying. After she won the competition with two other contenders from the Philippines, they used social media to assault her by saying that she was not qualified to be the champion, and her fans continued to criticise by commenting and using offensive words (Shuib, 2014).

Amy (not her actual name), a fifteen-year-old girl, was bullied on a Facebook page. Her classmates posted upsetting messages and unfavourable photos to hurt her feelings. Even so, unknown people joined and spread unwanted messages about her. The incident made her depressed and prevented her from going to school, but she gave unnecessary reasons instead to her parents. Her parents noticed that she was upset whenever she received unwanted messages and began to monitor her movement, and finally found that the reason for her behaviour was cyberbullying (The Star, 2015).

According to The Star news (Shiying, Chiam & Chern, 2017), in May 2017, Teh Wen Chun, a 20-year-old Electrical and Electronic Engineering student, was reported to have fallen to his death from a flat nearby his university college in Georgetown, Penang, due to the stress of cyber harassment. His last words found on his Facebook page were "Cremate my body and release the ashes into the sea. I do not need a tombstone or a funeral. Goodbye". Beng Hock, 49, described his son, Teh Wen Chun, as a good and an obedient son. He performed fairly well during his first-year studies at the university college. His father said that, "He started to behave differently when some college mates started to criticise and shame him on Facebook with some nasty and negative remarks". His father told that Wen Chun's college

mates even called him bad names. The father knew that this had affected his son badly although he always told his parents that he was fine. Beng Hock also disclosed that the reason his son committed suicide was that he could not bear the constant cyberbullying. George Town OCPD Senior Asst. Comm Mior Faridalathrash Wahid said that he interviewed Wen Chun's friends and it was found that the victim was also having a difficult time coping with his studies. He also reported that post-mortem results showed that the cause of death was caused by a few injuries due to falling from a height (Shiying, Chiam & Chern, 2017).

Advancements in technology coupled with good Internet access have enabled more Malaysians, including children, to discover the virtual world. However, the misuse of technology has also exposed the children to other problems such as cyberbullying, which includes stalking, racial and religious insults, and sexual manipulation in the virtual world. Tan Sri Lee Lam Thye, Senior Vice Chairman of the Malaysian Crime Prevention Foundation, said, "I am sure cyberbullying is more serious than what has been reported, as many victims choose to suffer in silence for various reasons" (The Star, 2017). He added that the reason is rooted in the fear of being mocked or being left out by friends in or out of school.

Besides that, the popular Malaysian celebrity couple, Awal Ashaari and Scha Alyahya, have also experienced cyberbullying, as reported by the New Straits Times in April 2018 (Alhamzah, 2018). Awal, 36, recounts, "I remember when our daughter Lara Alana became the subject of cyberbullying. I took the initiative to find out from MCMC about my rights to protect my family" (Alhamzah, 2018). He told that he tried not to become emotional when he read all the negative comments about his child, but being a parent, at the same time, he also felt hurt by those comments.

Scha and Awal addressed this issue by holding an awareness campaign supported by the MCMC aimed at educating the public on the rights to protect themselves against cyberbullying and fake news. Scha hoped that through this campaign, more people would realise that cyberbullying is a huge issue in society nowadays (Alhamzah, 2018).

The New Straits Time (Pillay, 2017) also reported the views of Dr Ong Beng Keat, a consultant psychiatrist based in George Town, Penang, in that cyber harassment on social media, which is a form of discrimination, appears to be connected to suicide. Karen Yong, a school guidance counsellor and psychologist, said that, nowadays, troubled youth tend to seek the attention of friends and family through social media such as Facebook and Twitter. She says that, "It's scary to realise that the number of youth suicides has increased by leaps and bounds in recent years because of social media" (Pillay, 2017). Many of the victim's acquaintances and friends thought that the victim's actions were an attempt to seek attention. Instead of talking nicely to them and asking about their problems, they made fun of them instead, which made the bad situation worse. Troubled youth would then feel neglected, rejected, and alone (Pillay, 2017).

Recent news from the New Straits Times (Chua, 2018) reported a female fan of the actress, Nora Danish, insulting her son Ney Ney and calling him a " really ugly baby". The actress said that, "If you have an opinion that borders on insult, it is best that you keep it to yourself. Calling my baby 'ugly' shows that you are the ugly one." She gave this statement at the launch of the End Cyber-Bullying and False Information Campaign at the Kuala Lumpur Performing Arts Centre (Chua, 2018). However, Nora Danish has forgiven the unnamed netizen, who had tweeted a quick

apology after being soundly condemned on cyberspace. Nora said that she was glad that Malaysians had resoundingly said 'No' to the bully. The rude fan had erased her tweet and asked for an apology from Nora and Nedim via Instagram. Nora felt grateful and thankful to the netizens for standing by her family and for "giving an earful" to the rude fan (Chua, 2018).

Last year, someone who was suffering from mental illness wrote about her intention to commit suicide on her social media page. However, she received negative comments and responses, plus Malaysian netizens started posting bad words up to the point of harassment, which constitutes cyberbullying. This matter impacted her self-esteem and placed her at a higher risk of ending her life. Ardy emphasised that the communication between parents and children was crucial to keeping things in check and to lower the risk of the victim committing suicide due to cyber harassment. Professor Datuk Dr Chiam Heng Keng, a leading figure in child and adolescent psychology and early childhood education, urged parents to put greater effort in engaging with their children to avoid any suicidal cases due to digital crime (Pillay, 2017).

1.6   Cyberbullying Terms and Definition

The absence of a clear and specific definition of bullying has prompted researchers to look into the issue from different perspectives. Many perceive that cyberbullying is an extension of traditional bullying. However, the actual constituents of cyberbullying (Betancourt, 2016; Corcoran, Guckin, & Prentice, 2015; Lee, Abell, & Holmes, 2015) and the way in which its defining criteria is measured are still part of an on-going argument among researchers (Menesini et al., 2012).

The presence or absence of the word "bully" in the definitions gives highly positive or negative interpretations of the results. This false information has been replicated and compared throughout several studies (Ybarra, Boyd, Korchmaros, & Oppenheim, 2012). Berne et al. (2013) observed that there is lack of reliability and valid psychological measurement after reviewing 44 designed instruments, where only 12 had used either exploratory or confirmatory factor analysis. Similarly, Tabachnick and Fidell (2013) reported that most of the instruments designed did not contain any cyberbullying concepts. A review of 1092 Italian adolescents (Menesini et al., 2012) showed that multi-item scales were used to measure cyberbullying constructs. The researchers acknowledged that a clear definition criterion was still required for further research and exploration into the field.

In addition, Guerin and Hennessy (2002) stated that the respondents must explicitly understand the purpose of the bullying behaviour, as sometimes the perpetrator has no intention to harm anyone. Instead, it is only assumed as such by the victim. It is also unnecessary to often repeat cyberbullying incidents because every occurrence can have a long-lasting effect. These types of issues should be interpreted clearly in the measurement process.

On the other hand, scholars have defined methods based on the differences in the occurrence rate of cyberbullying (Camacho, Hassanein, & Head, 2018). The inappropriate use of definitions and measures could influence the significance and relevance of conclusions drawn, mainly when used to compare and draw meaningful statements (Price et al., 2013). This is because there are too little studies that use proper measurements to analyse. There are studies that share a similar definition (Olweus & Limber, 2018) that has also been used in traditional settings, but this

might give inaccurate results today (Thomas, Connor, & Scott, 2015). This dissimilar clarification has resulted in inaccurate responses regarding the understanding of the concept, which results in an evaluation inconsistency (Kowalski, Giumetti, Schroeder, & Lattanner, 2014). The indifferent clarification has caused a discrepancy in the studies, hindering comparative research from being carried out (Tokunaga, 2010). Hence, it is essential to precisely define the term 'bullying' from the beginning. A precise definition or construction to use is however lacking and therefore this matter should be analysed further.

Cyberbullying has been explained as an extension of traditional bullying that takes place in electronic media (Donegan, 2012). The traditional definition of bullying may not apply to cyberbullying investigations due to the former missing some essential techniques such as anonymity and the distancing effect (Donegan, 2012). Various studies have developed different bullying characteristics and definitions that may create conflict while comparing the prevalence level of cyberbullying (Felix, Sharkey, Green, Furlong, & Tanigawa, 2011). Although the classification of traditional bullying can be used in cyberbullying, repetition and power imbalance is a big question mark in cyber settings (Thomas et al., 2015).

Anonymity and publicity are the sole criteria of cyberbullying compared to repetition and power imbalance (Dooley, Pyzalski, & Cross, 2009; Slonje & Smith, 2008). Perpetrators take advantage of "anonymity", seeing it as an opportunity to behave indecently behind the screen, which could reduce the power imbalance (Kowalski, Limber, & McCord, 2018). Besides, publicity makes the victims of cyberbullying more vulnerable to the harmful messages, as these can quickly circulate around the globe (Slonje & Smith, 2008). Meanwhile, Hinduja and Patchin

(2008) defined cyberbullying "as willful and repeated harm inflicted through the use of computers, cell phones, and other electronic devices". The National Crime Prevention Council stated that cyberbullying occurs when "the Internet, cell phones, or other devices are used to send or post text or images intended to hurt or embarrass another person (Common Sense Media, 2015)".

Olweus (2013) explained three key criteria, which are, harm, repetition, and power imbalance as the most applicable criteria in cyberbullying are. Besides that, some researchers emphasise the term cyberbullying to identify different types of behaviour (Wang et al., 2009) and that it is similar to the "environment" at school (Ybarra et al., 2012).

However, it is difficult to establish measures to estimate the prevalence of cyberbullying due to the absence of a consensus on particular parameters that describe the phenomenon (Olweus, 2012; Smith, Del Barrio, & Tokunaga, 2012; Ybarra et al., 2012). Furthermore, in both traditional and cyberbullying, there are entirely different ways to reach the victim (Nansel et al., 2001).

Sense and White (2010) refers to cyberbullying as an overt, intentional act of aggression towards another person online. Moreover, cyberbullying also encompasses harassment, psychological pressure, verbal abuse, threat, theft of personal data, and image manipulation through new technologies, especially via computers with Internet access (Neves & Pinheiro, 2010).

"Cyberbullying is a behaviour performed through any electronic or digital media by an individual or group that repeatedly communicate with aggressive messages intended to inflict harm or discomfort to others" (Tokunaga, 2010). A generally new type of harassment, cyberbullying is spread via the Internet, mobile

devices, or advanced electronic devices to persistently and repetitively harm other(s) over and over (Hinduja & Patchin, 2013).

A comprehensive analysis was conducted (Menesini et al., 2012) to identify the six importance of cyberbullying, which are intention, imbalance of power, repetition, anonymity, and publicity with different forms of behaviours (image, written, imposture, and exclusion). It is also acknowledged that repetition is not relevant in the context of cyberbullying, while anonymity is an important criterion. For instance, recirculating embarrassing pictures and nasty messages means that digital content can be easily re-distributed, reviewed, and re-tagged in the digital environment. This scenario should be taken into consideration when it comes to measuring the extent of cyberbullying.

Cyberbullying is usually defined as a violent behaviour that is deliberately perpetrated via social media sites such as via e-mails, blogs, instant messages and text messages, and chat rooms, all targeted towards an individual who cannot protect him or herself (Hinduja & Patchin, 2013; Kowalski et al., 2014; Robin Kowalski, Limber, & Agatston, 2012). Moreover, the sharing of unauthorised and upsetting photographs, videos, or personal data of the victim through connected mobile devices or Internet platforms, and sending nasty, offensive, sarcastic, sexual, or provoking messages also constitute cyberbullying (Semerci, 2017).

Many studies have interchangeably used "cyberbullying" with "online-bullying", "Internet harassment", "electronic bullying", "online harassment", "cyber-aggression", or "cyber harassment" (Barlett & Gentile, 2012; Tokunaga, 2010), and "electronic bullying" and "computer-mediated bullying" (Bauman, Toomey, & Walker, 2013; Tokunaga, 2010). The expression "cyberbullying" was chosen for this

study and standardised throughout the entire discussion. Cyberbullying is distinguished as "an act performed via electronic or any advanced media by a person or a group of people communicating more than once with the intention of threatening or sending hurtful messages to cause mischief or distress to others" (Tokunaga, 2010).

1.7 The Similarities and Differences Between "Bullying" and "Cyberbullying" Characteristics

Studies (Erdur-Baker, 2010; Patchin & Hinduja, 2010; Van Geel, Goemans, Toprak, & Vedder, 2017) show that there is a substantial relationship between traditional bullying and cyberbullying. Some even identify that those involved in traditional bullying tend to perpetuate their anger onto the cyberspace (Foody, Samara, & Carlbring, 2015; Ford, 2013). Researchers have an on-going argument regarding the definition of the actual characteristics of both types of bullying. A lack of proper classification of this issue has prompted studies to carry out different approaches (Peluchette, Karl, Wood, & Williams, 2015). Some researchers have doubts as to whether similar criteria should be utilised for measurement or an entirely different approach altogether is more reasonable (Betancourt, 2016; Corcoran et al., 2015; Lee, Abell, & Holmes, 2017).

The current study aims to clarify and reduce the dissimilarities among researches. Table 1.1 was therefore developed to explain the characteristics and to clarify the doubts among researchers. Cyberbullying and traditional bullying share three primary features: an action of aggressiveness that takes place between individuals and shows an imbalance of power and behaviours that are often repeated (Hunter, Boyle, M.E, & Warden, 2007; Olweus, 2013; Kowalski et al., 2012; Smith

et al., 2012). An imbalance of power could occur if one individual is more technologically savvy than the other (Barlett & Gentile, 2012). In addition, the anonymity inherent in many cyberbullying situations may create a sense of powerlessness in the victim (Dooley et al., 2009; Vandebosch & Cleemput, 2008) .

Table 1. 1

The similarity and differences between "Bullying" and "Cyberbullying"

Characteristics	Bullying	Cyberbullying
People involved in the activity	Bullying involves two people, the bully (or the intimidator) and the victim	Between two or a group of students, the bully and the victim (Reuters, 2014)
Venue	School, playground, park, office, university, college	School, university, home, inside the bedroom, college, office, outside of school, anywhere
Characteristics/Behaviours involved	Aggressive behaviour, hostility, physical abuse, hitting, verbal assaulting, gossip, rumours, harmful acts, threats, torture or torment, inflicting distress or discomfort others, punching, kicking, yelling, punching, spitting, pushing, and belittling (Barlett & Gentile, 2012)	Cyber-aggression, aggressive comments directed peer to peer, online harassment, impersonation, outing, flaming, trickery (Dilmac and Aydogan, 2010; Makri-Botsari & Karagianni, 2014; Rebecca Marie Gasior, 2005; Willard, 2008)
Types of media used	Face-to-face, the bully abuses the victim physically or verbally (Barlett & Gentile, 2012)	Cell phones, social media sites, chat rooms, e-mails, online gaming, digital messages/images sent to a cellular phone or smartphone (Kowalski et al., 2014)
How these activities are conducted	Repeatedly, intentionally, and frequently (Whittaker & Kowalski, 2014)	Repeatedly, intentionally, frequently, publicly, re-distributed, re-tagged (Whittaker & Kowalski, 2014)
Reason for committing the activities	To gain higher power over the other person, to intimidate others and to extort money or other valuables	To hurt or embarrass another person and to extort money or other valuables
Effects	Depression, alienation, feeling of abandonment and dishonour (Breguet, 2007) Challenged, embarrassed, loss of dignity, and other mental disorders	Depression, sadness, fear, poor school grades (Strom & Strom, 2005; Patchin & Hinduja, 2006)

1.8   Research Problem

While bullying usually involves physical abuse, digital bullying is more damaging and could leave a long-term psychological effect on the victims. A survey by DIGI Telecommunications Sdn. Bhd. and Telenor Group reported that one in four students confessed that they had experienced cyberbullying last year. Tan Sri Lee Lam Thye, a prominent Malaysian social activist reported that students that are humiliated repeatedly on social media may suffer from low self-esteem and will not be interested to study or join any activities held in school (The Star Online, 2018). A survey conducted last year by People ACT reported 400 Malaysians respondents felt that hateful comments were one of the violent forms of cyberbullying that could affect a person's emotions and lead to adverse circumstances (Brown, 2017).

The Incident Statistics by MYCERT (2019) Cyber Security Malaysia, on cyberbullying are outlined in Table 1.2. Overall, for the past 5 years since 2014, the total incidents of cyberbullying have increased steadily. However, from 2014 to 2015, the total incidents decreased from 550 to 442, correlating to a percentage decrease of (19.6%). From 2015 to 2016, the incidents increased again by 87 cases from 442 to 529 incidents. From 2015 onwards, the cases kept increasing up until 2017. Generally, the total number of incidents every year has kept on increasing, except for the year 2015. These statistics show that the cases of cyber harassment in Malaysia have gradually increased, and are spreading widely due to many factors. Therefore, these factors have to be determined and a way to prevent or reduce the cases of cyberbullying must be identified, as it causes major harm to the public (MyCERT, 2019). These could impact the emotions of the individual being bullied,

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as they are subject to view the abusive the message repeatedly, which, invariably cause damage to their mental psychology and well-being, over time.

Table 1. 2

MyCERT Incident Statistics of Cyber Harassment in Malaysia

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2014	57	41	45	44	46	48	52	44	53	36	50	54	550
2015	30	40	32	51	30	45	42	32	24	43	43	30	442
2016	46	36	35	36	33	42	45	31	30	48	98	49	529
2017	41	45	64	71	119	39	27	25	32	36	31	30	560
2018	27	31	22	38	24	28	33	30	42	30	25	26	356

Source: Cyber Security Malaysia MyCERT (2019)

From the article of the New Straits Times on May 2017 (Pillay), the KL Publicity Director of Befriender, Ardy Ayadali, said that, majority of the 7,446 of the people that had called in last year had suicidal intentions due to cyberbullying. Although the pervasiveness of cyberbullying has been surveyed in Malaysia, the cause of this dangerous behaviour has still not been found. As said by Eneng Faridah Iskandar, Senior Director of MCMC, punishment is not the way to handle the matter (The Star, 2015). Investigating the critical factors that influence cyberbullying behaviour and how to deal with it is a bigger challenge that must be addressed.

It is important to note that this area of research is still at its infancy; although many studies have been conducted in Western countries, no comprehensive studies have been conducted in Malaysia, particularly studies on the crucial factors that lead to cyberbullying incidents. Sadly, the number of cyberbullying cases has remarkably increased in the last five years. This is understandably worrying, as Internet usage in

the country is also rapidly rising. Therefore, it is essential to investigate this issue among the concerned age group from an early stage, as this situation has the potential to lead to severe consequences.

1.9   Purpose of Study

Previous research has discovered that cyberbullying is a common occurrence among teenagers and young adults (Lai et al., 2017; Balakrishnan, 2015) especially school-going and young teenagers below the age of 18 in Western countries e.g., the United States (Raskauskas & Stoltz, 2007), Canada (Li, 2007, 2010),Sweden (Beckman, Hagquist, & Hellstrom, 2014), and Spain (Navarro, Serna, Martinez, & Ruiz-Oliva, 2013); and in some Asian nations e.g. Taiwan (Huang & Chou, 2010) and South Korea (Park, Na, & Kim, 2014).

In addition, most of the literature shows that the vast majority of studies on cyberbullying has been focused in Europe (Beckman, 2013; Esther Calvete, Orue, Estevez, Villardon, & Padilla, 2010; Li, 2007a; Navarro et al., 2013; Smith, Mahdavi, Carvalho, Fisher, Russell, 2008) and the United States (Drouin & Landgraff, 2012; Hinduja & Patchin, 2013; Kowalski & Limber, 2007), with not many concentrating on Asian nations (Ang & Goh, 2010; Huang & Chou, 2010; Park et al., 2013). A lack of studies on cyberbullying was also observed in Malaysia, although a couple of studies were discovered, albeit mainly focusing on psychological impacts (Balakrishnan, 2015; Faryadi, 2011; Lai et al., 2017). It is therefore important to examine whether cyberbullying behaviours are just restricted to school-going students or above this age group, considering that not many studies have been conducted for students of more than 18 years old (Balakrishnan, 2015).