THE APPLICATION OF THEORY OF REASONED ACTION IN CYBERBULLYING
PREVENTION PROGRAM

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Approval Form

This research paper attached here to, entitled The Application of Theory of Reasoned in Cyberbullying Prevention Program prepared and submitted by Chin Pau Yee, Gina Wong Sie Suan, Lim Jie Wei, Shea Kher Yan and Tey Chin Fui in partial fulfillment of the requirements for the Bachelor of Communication (HONS) Public Relations is hereby accepted.

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Abstract

Cyberbullying has been identified as an important and serious problem amongst adolescents in the Malaysia. However, there are only few cyberbullying prevention programs exist in Malaysia to curb with the issue of cyberbullying. Therefore, the present study developed a cyberbullying prevention program built on Theory of Reasoned Action (TRA) to examine whether video-based cyberbullying prevention program can significantly change adolescents' behavior toward cyberbullying. In a paired sample t-test design where 384 secondary students with an age group of 15-17 years were randomly allocated to control group and experimental group. The result revealed that the present study had significantly increase adolescents' knowledge and level of empathy toward cyberbullying after the intervention program. Even though the result showed no significant decrease in subjective norm between pre-test and post-test at experimental group, but respondents' level of behavior intention and positive attitude toward cyberbullying had significantly decrease among pre-test and post-test for the experimental group. In conclusion, video-based cyberbullying prevention program is significant in changing adolescents' behavior toward cyberbullying. This research is crucial to serve as an existing material for educators and researchers alike in applying the Theory of Reasoned Action in cyberbullying and to improve ways of curbing the cyberbullying issue.

Keywords: Cyberbullying, Theory of Reasoned Action, adolescent

Declaration

We hereby declare that the material and data presented in this research paper are the end result of our own work. Acknowledgment has been given in the bibliography and references to ALL sources be it electronic, printed or personal.

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List of Abbreviations

CES	Cyberbullying Experience Survey
CG	Control Group
CI	Confidence Interval
EG	Experimental Group
ICT	Information and Communications Technology
M	Mean
SD	Standard Deviation
SPSS	Statistical Package of the Social Science
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
UTAR	Universiti Tunku Abdul Rahman

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Chapter 1

Introduction

Background of Study

During recent years, digital technologies have become a primary tool for people to communicate, exchange information and stay connected with one another. People see online communication and virtual communities in a way that looks seamless with their offline life to connect with their friends, especially for the young generation such as children and adolescents (Chisholm, 2014). As online communication provided a sense of privacy and encourages more self-disclosure when compared to face-to-face communication, it becomes so popular among youth (Chisholm, 2014). However, despite bringing a positive outcome to the young generation today, it has also brought some negative outcomes.

The misuse of ICT today has caused the negative consequences of cyberbullying occurrence globally, it has become a new societal problem damaging the image of a digital kids' empowered young generation (Heirman & Walrave, 2012). The adolescents have misused the internet, taking for granted at the fact that it provides high-speed information and communication (Bayar & Uçanok, 2012). In the past decade, cyberbullying has effects on a much broader age demographic compared to traditional bullying. However, it is now happening among the young generation included college students, older adolescents, young and older adults in the workplace (Walrave & Herman, 2011). The internet and ICT freedom has increased the risk of spreading negative attitude among internet users especially adolescents. Besides, it also increases the prevalence of cyberbullying phenomenon in the society (Beyazit, Simsek, & Ayhan, 2017).

Cyberbully is the proliferation of traditional bullying. The word "bully" is not a new word for the society nowadays, it can be traced back down to the 1530s (Donegan, 2012). The

primary sense of bullying involves two people, an intimidator or bully, and a victim. The victim of bullying usually being abused through verbal or physical by the bully to increase the sense of superiority and power (Donegan, 2012). In the society today, various forms of bullying, such as physical, relational, property damage and so on, has become a serious problem for students and society (Smith & Brain, 2000). The traditional bullying which happened physically, usually begins in neutral social setting such as classrooms or schoolyards (Kowalski, Limber, & Agatson, 2008). However, with the advent of the technology and the misuse of ICT, traditional bullying has transformed to cyberbullying, which is a new form of bullying that is more virtual and usually transpire on the internet (Slonje, Smith, and Frisen, 2013). The internet became attractive in a sense that it provides a platform for social interactions, allowing anyone to do and say something anonymously and the perception of being able to run away from responsibility for what they do and say online.

Cyberbullying carry the meaning of new types of bullying that involve hostile and cool-blooded attitudes of a group or an individual that hurt others by using of communication and information technologies (Langos & Sarre, 2015). However, Hinduja and Patchin (2010) define cyberbullying as an intentional behavior carried out by a person or a group with the purpose to harm people with the use of mobile phone, computer or other digital technology devices against the victims who are unable to defend themselves. In general, there are various types of cyberbullying, for example, sending a harassing text message or e-mail, posting a sarcastic comment about someone on social media such as Twitter or Facebook, physically threatening or insulting someone in the different online setting, or even scam online are consider a kind of cyberbullying (Dredge, Gleeson, & Garcia, 2014). Different labels are used by researchers to describe this behavior, such as online damaging, internet harassment, online bullying and electronic bullying (Langos & Sarre, 2015).

Cyberbully can act fast and anonymously without consideration of punishment, as the identity of the bully may be fake. Besides that, the cyberbullying experience survey was done by Doane, Kelley, Chiang, and Padilla (2013) also categorized cyberbullying into few sections which includes deception, public humiliation, malice and unwanted contact. These four sections reflected the most frequent types of cases reported by cybervictims. Slonje, Smith, and Frisen (2013) stated that explore different types of cyberbullying may be more suitable than only one construct as cyberbullying includes many aspects depending on the type.

Until recently, some studies showed concerns about the misuse of ICT and the harmful consequences on the bullies, bystanders, and victims of some online activities have focused the setting on middle or high schools' children and adolescents (Cowie & Colliety, 2010). The study found that adolescents aged ranging from 11 to 19 years old who are using the internet, especially heavy internet users has high chances to become cyberbullies or victims (Kowalski & Limber, 2007). Besides that, students, social media influencer, and artists also become victims of cyberbullying, where the bullies abuse them with foul languages or even threaten with sexual violence through social media that brought forward racial divisions, anger or fear among Malaysian (Shankar, 2013). Anyhow, Malaysia has no exception from cyberbullying, some newspaper report and survey have pointed out the cyberbullying is growing rampantly (Balakrishnan, 2015).

Despite the negative impact on national harmony, cyberbullying also have the negative impact which affects an individual physically and mentally especially the adolescents in secondary school who uses the internet (Sampasa & Lewis, 2015). The negative impact that cyberbullying can inflict includes low self-esteem, stressful, social anxiety, fear, and so on (Chisholm, 2014). Besides, it may increase the rate of committing a crime such as using drugs illegally or even committing suicide (Litwiller & Brausch, 2013). Other researchers founded that cyberbullying also affect the school life of the victims, they may suffer from low academic

performance, absent to school, or think that school is not safe (Slonje et.al, 2013). Adolescents who learned about technologies are more likely to involve in cyberbullying compare to others, likewise to traditional bullying (Sourander et al., 2010). Other than that, some research also suggested that there are factors such as low level of parental control, moral disengagement, aggression among adolescents and more are showing positive correlation with cyberbully behavior (Ng, Kanagasundram, Yee, Tan, & Teoh, 2016). In Malaysia, there are only a few studies conducted on cyberbullying to examine the physiological effects, emotional and behavior of the cyberbullies and victims among a group of university students (Faryadi, 2011).

However, it is important to build an effective prevention program to stop cyberbullying. Therefore, the society can have a better understanding of cyberbullying and create an effective way to minimize the level of cyberbullying.

Problem Statement

The issue of cyberbullying has grown rampant across the globe including Malaysia as technology advances (Balakrishnan, 2015). Due to the lack of information and full-blown cases of cyberbully in Malaysia, it is hard to generate a comprehensive prevention and intervention program. However, there was a co-occurrence between traditional bullying and cyberbullying (Tural & Ercan, 2017). Traditional bullying in Malaysia is more prevalent compared to cyberbullying. A study done by Noran-Fauziah (2004) showed that there were 82.7% of primary school students and 95.8% of middle school students were bullied psychologically, while those that were physically bullied consists of 65.3% secondary school students and 56% of primary school students. In 2014 there were 2,901 cases of the bully. Consecutively 3,011 cases of bully were reported in 2015, and the number increased to 3,448 in 2006 ("Steep rise," 2017). Cyberbullying studies also reported that cyber victims showed significantly more social difficulties, depression and higher anxiety levels than traditional victims (Campbell, Spears,

Slee, Butler, & Kift, 2012). Furthermore, cyberbullying will also result in cyberbullicide, a term that links cyberbully to suicide. Victims of cyberbullying ended up developing pro-suicide behavior (Luxton, June, & Fairall, 2012).

According to MyCERT Incident Statistics (2016), cyberbullying among students take place almost every day, with 300 cases of cyber harassment in 2012 to 529 cases in 2016. According to Lee (2017), Senior Vice-Chairman of Malaysia Crime Prevention Foundation, social media enables youths to engage in ill-mannered behavior at ease. Those behaviors include both physical bullying and cyberbullying. Other than that, in a report done by DIGI Telecommunications Sdn Bhd and Telenor Group, one in four students experienced cyberbullying; however, those did not include unreported cases (Maher, 2017). In 2012, among twenty-five countries surveyed in the Global Youth Online Behaviour Survey, Malaysia was placed as seventeenth highest in online bullying (Vijaindren, 2017). In 2013, only 64 percent of students have heard of cyberbully with 13 percent know they're being cyberbullied and 18 percent of them unsure whether they are bullied online ("Safety Net," 2013). In a survey involving 13,945 Malaysian school children between the ages of 7 and 19, there are 40% of them do not know how to protect themselves ("Safety Net," 2014).

Findings show that in Malaysian school, perpetrators mostly bully others because of low self-esteem, peer influence and racism. It was found that bullies mostly carry out their wrongdoings in a group, which suggests that subjective norm played a part in affecting their behaviors. It simply means their behaviors are subject to the opinions and attitudes of the people around them (Salleh & Zainal, 2014). The high number of cases is deduced to be related to high behavior intention in perpetrators to cyberbully as traditional bully occurs simultaneously in most cases. It is significant to build an effective prevention program to minimize the level of intention of cyberbullies using the Theory of Reasoned Action for prevention and intervention purposes among secondary school students.

Currently, there were only a handful of Malaysian laws take legal action towards online harassers. Only messages that contain threatening content were punished by law. However due to the pervasiveness of cyberbullying and anonymity characteristic of the internet, now there are laws being drafted to discipline the perpetrators. Malaysian Communications and Multimedia Commission chairman Datuk Mohamed Sharil Mohamed Tarmizi said from 2009 to 2011, a total of 625 cases of people who made offensive or obscene remarks via the Internet or phone were investigated. Only three were convicted among the 16 who attended court proceedings (Lee, 2012).

There were only a small number of laws in Malaysia drafted to provide some protection from online dangers and it is inadequate and lack of comprehensiveness. For instance, threatening messages are considered a criminal offense which is under Malaysia's Communications & Multimedia Act 1998 or Malaysia's Penal Code Section 503 pertaining to intimidation. Secondly is section 233 law in the case of spamming that states "individual whom initiate communication through any application service, whether continuously, repeatedly or otherwise". Henceforth the dire need for more research in the area of cyberbullying is significant to eliminate growing concerns about mental health and suicidal problems in Malaysia due to cyberbullying.

Significance of Study

The rise in cases of cyberbullying among adolescents in Malaysia indicates the importance of necessary measures to be taken in order to cope with the inevitable advent of the cyberbully. As cyberbullying is another form of psychological bullying, it is as harmful as the traditional bullying. The only difference is that cyberbullying transpires within the virtual world (Teasley, 2013).

Past researches were not sufficient and extensive to understand the level of awareness in cyberbullying across Malaysia and the behavior of the perpetrators in order for prevention measures. The issue of cyberbullying had only attracted research attention in recent years so that there is a need to find answers to important questions and to form preventive strategies based on evidence (Lazuras, Barkoukis, Ourda & Tsorbatzoudis, 2013). Therefore, it is significant to understand the reason behind the act of cyberbully as it is important for both early prevention and intervention efforts for this insidious form of bullying (Compton, Campbell, & Mergler, 2014).

An evaluation on prevention program based on Theory of Reasoned Action is relevant to the question on whether cyberbullying can be explained merely by individual characteristics and traits or through interaction between traits and social cognition that facilitate behavior initiation (Lazuras et al., 2013). It is significant to study the subjective norm, attitude and behavior intention of cyberbullies as it determines cyberbullying behavior. Therefore, this study will investigate the effectiveness of video-based prevention programs in decreasing cases of cyberbullying through reducing cyberbully intention in adolescents with the use of TRA. The outcome of the evaluation is also important for cybercrime prevention organization, government, schools and benefit other researchers in the use of TRA to develop an effective prevention program.

In addition, TRA will help us understand whether the act of cyberbullying is influenced by the attitude and subjective norm of perpetrators to be able to suggest the intervention to facilitate change in behaviors (Pabian & Vandebosch, 2014). Prevalence of internet bullying is found highest in middle school and high school (Williams & Guerra, 2007). Thus, suggesting adolescent as the main age group in this study.

In conclusion, this study will make several contributions in cyberbullying prevention program that should induce better understanding and to potentially help decrease the cases of cyberbullying in Malaysia. Through providing a framework to further explain on the internal and external factors that might drive cyberbullying, government, educators or parents are able to construct effective prevention measures in interventions to curb the behavior and its destructive effects (Varjas et al., 2010). Some studies were proven that it may be effective by adjusting TRA constructs to reduce cyberbullying perpetration (Doane et al., 2014; Heirman & Walrave, 2012). In addition, it is essential to equip teachers and parents to learn identifications of cyberbullying in Malaysian secondary schools to react accordingly and meaningfully. Thus, minimize its future manifestation in children and youths (Hinduja & Patchin, 2010). Many case studies in Malaysia on the subject of cyberbullying only focused on the occurrence, the number of individuals involved as well as the age group of victims and perpetrators. There was not enough case study in Malaysia on the cyberbully prevention program so that intervention can happen to reduce the unfortunate event. A study on the effectiveness of video-based prevention program will shed a light on how authorities, parents and other parties in Malaysia are able to help in reducing the incident by understanding the mindset of the cyber bullies. Therefore, this research can serve as a guideline for future research on the area of cyberbullying through the perspective of perpetrators due to limited knowledge of the current situation in Malaysia.

Objectives of Study

The current study aims to achieve these objectives:

1. To evaluate the effectiveness of a video-based cyberbullying prevention program on adolescents' knowledge toward cyberbullying.

2. To evaluate the effectiveness of a video-based cyberbullying prevention program on adolescents' level of empathy toward cyberbullying victims.

3. To evaluate the effectiveness of a video-based cyberbullying prevention program on adolescents' attitude toward cyberbullying.

4. To evaluate the effectiveness of a video-based cyberbullying prevention program on adolescents' subjective norm toward cyberbullying.

5. To evaluate the effectiveness of a video-based cyberbullying prevention program on adolescents' behavior intention toward cyberbullying

Research Question

Thus, the current study proposes the following research question:

1. To what extent cyberbullying prevention program significantly change adolescents' knowledge toward cyberbullying?

2. To what extent cyberbullying prevention program significantly change adolescents' level of empathy toward cyberbullying victims?

3.   To what extent cyberbullying prevention program significantly change adolescents' attitude toward cyberbullying?

4.   To what extent cyberbullying prevention program significantly change adolescents'

subjective norm toward cyberbullying?

5.   To what extent cyberbullying prevention program significantly change adolescents'

intention toward cyberbullying?

Hypothesis

1.   Positive attitude, subjective norm and behavior intention toward cyberbullying would

significantly decrease after the prevention program.

2.   Cyberbullying knowledge and level of empathy toward cyberbullying victim would

significantly increase after the prevention program.

3.   Experimental group's positive attitude, subjective norm and behavior intention toward

cyberbullying would be significantly lower and cyberbullying knowledge and

empathy toward cyberbullying victim would be significantly higher than the control

group after the prevention program.

Chapter 2

Literature Review

Theoretical Framework

The current study incorporated the Theory of Reasoned Action which is the transformation of Information Integration theory develop by Ajzen & Fishbein (1980). This theory is a widely accepted model that predicts the determinants of intended behavior (Thrasher, Andrew, & Mahony, 2007). These predictions have been applied in different fields in order to intervene in aggressive behaviors (Thrasher et al., 2007). An important aspect of the model is that it offers guidance on the specific behavior change strategies that will maximize a program's effectiveness (St-pierre, Derevensky, Temcheff, Gupta, & Martin-story, 2017). Therefore, this theory is useful to develop an effective cyberbullying prevention program.

In the definition of TRA, there are 3 determinants of human behavior which is intentions and its antecedents which is the attitude toward behavior and subjective norm. Attitude refers to the beliefs of a person which already in his mind lead to the formation of either a negative or a positive "attitude towards behavior". The judgment of an act can be influenced by attitude. It predicted when one person is in favor of negative attitude towards behavior, then his negative behavioral intention will be perceived (Azjen, 1985).

Subjective norm refers to the perceived of the normative expectation of the people around the person, motivate the person to comply with these expectations (Ajzen, 1985). The more the people around the person think that he should perform the behavior, the more the person is motivated to perform the behavior, either in negative or positive one (Azjen, 1985). One study was done by Heirman and Walrave (2012) also found that normative beliefs by peers accepting cyberbully were significantly affecting the cyberbullying among adolescent.

Intentions refer to how much a person's effort in planning to put to perform the behavior (Ajzen, 1985). TRA assumed that attitudes toward a certain behavior and subjective norm influencing behavioral intentions, which directly affect the behavior (Ajzen & Fishbein, 1980). According to TRA, modifies positive attitude toward the behavior and modified subjective norm are expected to affect a certain person's intentions to perform a certain behavior; ultimately, minimize a certain person's behaviour intention will affect this person's likelihood to carry out the behavior. It is explaining whether the behavioral intention is driving the individual behavior (Ajzen & Fishein, 1980). From the Figure 1, it clearly shows the relationship between attitude, subjective norm, behavioral intention, and behavior.
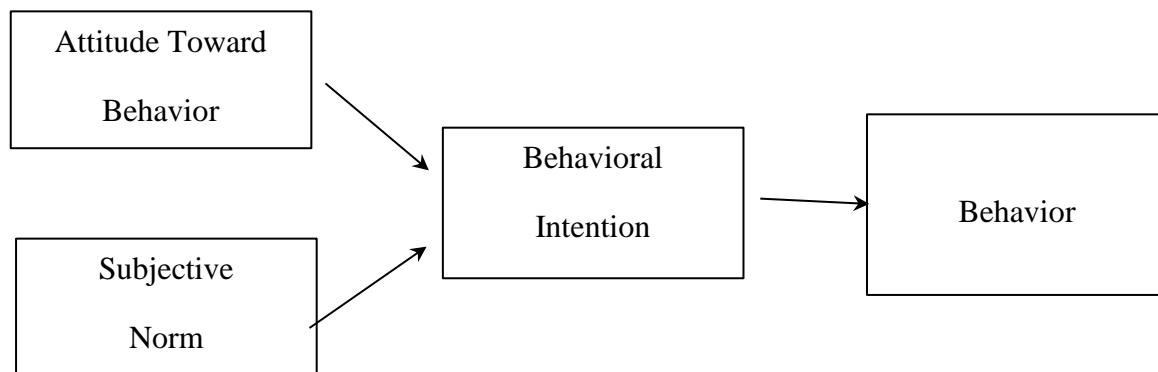
Figure 1. Theoretical Framework of Theory of Reasoned Action

Although the TRA was appropriate for the development of interventions for adolescent aggressive and risk behaviors, but this model has been criticized that too much focus was placed on cognitive processes (Gibbons, Houlihan, & Gerrard, 2009). According to Azjen (1980), attitude is considered as a cognitive variable. However, some researchers believe that attitude should consist of both cognitive and affective variable. The researcher has criticized that TRA overlooks numerous key elements of risky behavior such as emotion and affective reaction (Gibbon et al., 2009). One element largely ignored by the TRA is the impact of affective reactions on decision processes (Gibbons et al., 2009). Negative anticipated emotions such as

guilt and regret can be considered as a risk factor in influencing involvement of high-risk or addictive activities (Batson, Duncan, Ackerman, Buckley, & Birch, 1981).

In addition, TRA was criticized due to its extensive review with relevancy to the differentiation on attitude and subjective norms. To know the conceptual problem, the attitudes are determined by beliefs about consequences while the subjective norms are determined by normative beliefs. The researchers question the normative beliefs and behavioral beliefs are in fact different terms for the same element (Miniard & Cohen, 1981). Apparently, if the distinction is false, the difference that exists in between attitude and subjective norm could be doubt. Besides, Trafimow (2009) have act few sets of experiments that provided a reasonable risky test of the distinction which is concerning seatbelts use during risky or safe driving conditions. The researchers believed that people should use behavioral beliefs to other behavioral beliefs, by that occurring the association among the behavioral beliefs (Trafimow, 2009). Lastly, Trafimow (2009) conclude that the theory of reasoned action is wrong than to presume the reoccurring failures were because of auxiliary assumptions.

TRA in Predicting the Behavior of Cyberbullies

Besides that, TRA has been applied to several studies including physical activity, smoking and other aggressive behaviors (Guo et al., 2007). Currently, there are several studies which applied the TRA to the development of prevention program for the purpose of modifying attitudes, intentions and behavior for several adolescent risk activities (Buckley, Sheehan, & Shochet, 2010). Nevertheless, the theory has been relatively ignored in the field of cyberbullying.

In the past few years, several studies have proven that modifying TRA constructs will effectively reduce cyberbullying perpetration (Doane et al., 2014; Herman & Walrave, 2012). One of the studies done by Doane et al. (2014) showed that subjective norm and attitude are

significant in predicting cyberbully behavior. The study showed that cyberbullying intentions were associated with cyberbullying perpetration, while the attitudes were the greatest predictor of cyberbullying intentions.

Other than that, another study was done by Herman and Walrave (2012) also applied the TPB to predict cyberbullying perpetration. The result showed subjective norms, attitudes and perceived behavioral control were significant on predicting cyberbullying intentions. Therefore, there are at least two studies which proved that adjusting TRA construct may effectively reduce cyberbullying perpetration.

Although there is a lack of research in the field of cyberbullying with the use of TRA, but several studies have applied the TRA to predict and plan an intervention for aggressive or violent behavior. For example, Guo et al., (2007) utilized the TRA and TPB to explore whether the theory can predict adolescent smoking; French and Cooke (2012) used TPB to identify beliefs related to binge drinking and develop appropriate intervention; Cooner, McEachan, Lawton, and Gardner (2017) used the TRA to understand health risk behavior and protection; Walrave, Heirman, and Hallam (2014) applied the TPB to predict adolescent sexting; and Hawley and Williford (2015) applied the TPB to develop bullying intervention program. These studies proved that TRA and TPB are useful in understanding aggressive and violent behavior.

Cyberbullying and Empathy

Empathy refers to sharing another person's emotional status or an emotion that fits someone else's condition (Eisenberg et al., 2002). According to Batson et al., (1981), low empathy can be a risk factor for offensive or aggressive behavior. In the study done by Doane, Pearson, and Kelley (2014), empathy has been found to be negatively associated with cyberbullying perpetration which means that higher level of empathy was associated with less positive attitude, lower subjective norm for cyberbullying behavior.

In addition, another study was done by Steffgen, König, Pfetsch, and Melzer (2011) also stated that lower levels of cyberbullying to be related with a higher level of empathy. The result matched with the research done by Doane et al. (2014). The study suggested that a low level of empathy can be a risk factor for cyberbullying behavior. Steffgen et al. (2011) stated that if empathy became negatively associated with cyberbullying, a development of empathy for cyber victims should include in prevention efforts to reduce cyberbullying. The results indicate the empathy plays an important role in cyberbullying prevention program.

Impact of Cyberbullying

The rise of cyberbullying comes a deeper impact on those who are involved. The impact of cyberbullying in many ways is worse than traditional bullying, penetrate every part of a victim's life and caused them to suffer from the psychological struggles (Duverge, 2015). Some victims choose to end their lives because they were involved and were the victim of the cyberbullies.

A research from Faryadi (2011) mentioned that cyberbullying certainly affects students emotionally which further impact on the academic performance of the students. Hence, the results from data collection procedure with the question "do you think bullying affects students to suffer psychologically and emotionally" show that 85% of participants stated it does affect the student and 5% stated it does not affect the student's psychological or emotional. Furthermore, the victims of the cyberbullying experience hardship in terms of emotional and psychological stress and worsen their academic performance. Parents, teachers, and institutions need to emphasize that the internet is a risky environment and effective methods have to be taken to protect the victims.

A study conducted by Cowie (2013) about the impact of cyberbullying on adolescent's emotional health and wellbeing stated that victims suffer isolation and social isolation due to

the lack of approval from the peer groups. The social withdrawal of the youth is possibly leading to depression and even low self-esteem. The risk of dependency on alcohol and drugs from victims can be increased so as the thoughts of suicidal. Cyberbullying can negatively affect the victim's daily life and there are evidence of the cyberbullying risk toward the victims including harm to self-esteem, educational achievement, and emotional health. Studies of school age cyberbullying victims mention the upraised risk of depression, of physical illness such as abdominal pain, insomnia and headaches and the behavioral problem which is alcohol consumption (Perren, Dooley, Shaw, & Cross, 2010; Sourander, et al., 2010; Mitchell et al., 2007). Similar to traditional bullies, the cyberbullying victims report to have the feeling of insecurity and isolation at school and even their home. Victims engaged in such anti-social behaviors, conduct disorders, alcohol and drug misapply (Hinduja; Patchin 2008; Sourander et al., 2010).

On the other hand, Hinduja & Patchin (2010) had done a research on bullying, cyberbullying and suicide. In their research, there were around 2,000 randomly selected secondary students from the famous schools in the United States. The results showed that 20% of the respondents were reported to have serious thought of attempting suicide. Meanwhile, all forms of cyberbullying have been associated with the rise of suicidal ideation. Besides, the researchers suggested that future research may identify and precisely assess the contributive nature of the stress-inducing experiences. Furthermore, the cyberbullied were more often to have attempted suicide contrary to the adolescent that had never experienced cyberbullying (Hinduja & Patchin, 2010).

Victims and Bullies in Cyberbullying

A study conducted by Sahin, Sari, and Safak (2010) indicates the correlation between being a cyberbully or the victim and the social perception standard in a teenager. Individuals

that express cyberbullying behaviors described their perceptions towards themselves and the environment emerge to be negative. The behaviors of cyberbullying such as unpleasing attitudes towards their friends for instance insulting and threatening are the causes of an individual recognized by his or her social environment as a negative individual. Thus, this further allows creating a bad self-perception and unlikely to generate a friendly environment. Same goes for the cyber victims, as they grow negative perception of them themselves because of the outcome of exposed cyberbully behaviors.

Individual tend to develop "self-ego" throughout adolescent periods. As negative self-perception that happen due to many factors, related adolescents reported of having bothersome feelings like avoiding from people, not liking oneself or even the feeling of not being valued and loved by people (Sahin et al., 2010). Studies also illustrate that adolescents merit views of people about themselves. At the same time, adolescents observe people's views about them are primarily essential when it comes to determining self-behaviors.

Furthermore, a study that conducted by Willard (2007) stated that the twist in cyberbullying is that the difference between cyberbullied and the cyberbully is questionable. Once the cyberbullied became the cyberbully, the person no longer claims themselves as a victim. The victimization can be repeated. As it progresses, those involved frequently switch roles between bullied and bully. Besides, in the study of Trolley, Hanel, and Shield (2006) who base their work on the research of Willard and their own perception regarding the school system direction and understanding. They believe the school system must recognize the harshness of threat, therefore the school can make a report to outsiders' agencies.

On the other hand, Vandebosch and Cleemput (2009) studied about the cyberbullying among youngster's profiles of bullies and victims with a survey carried out on 636 primary school children and 1416 students from Flanders secondary school. The result shows that

cyberbullying is no longer a minor problem. 11 percent respondents admitted that they have been a victim, 18 percent had been perpetrators, and following by 27.9 percent had been bystanders. In additions, there is also a higher chance whereby respondents tend to become a cyberbully if their parents were less involved in their internet use (Vandebosch & Cleemput, 2009).

Cyberbullying-CyberSecurity Malaysia

According to the study of Manshor, Roslim, and Hussin (2014) which discusses the potential protections to the victims, the study found out that 46% of users in Malaysia enjoys sharing and sending their personal profiles and pictures without knowing their information was recorded by squatters. Manshor et al. (2014) stated that the issues of cyberbullying are not as serious as the crime as compared to the overseas which had caused suicides because of cyberbullying. This is why Malaysia has yet to have an official law against cyberbullying. However, there are a few laws that control the issues of cyberbullying such as the Computer Crime Act 1997, Communication and Multimedia Act 1998, and Child Act 2001 (Manshor et al., 2014).

According to the Computer Crime Act 1997 under section 3, if the person caused computer to act any function with purpose to secure access any program or data held in computer and the access he purposely secure is unauthorized, he should be guilty of an offence under this section with conviction, liable to fine not more than fifty thousand Ringgit Malaysia or to jail not exceeding five years or to both.

In addition, Communication and Multimedia Act 1998, Section 233 provides an individual who by means of any application services and network service, create or seek the transmission of any comment or request or other communication which is false, offensive or indecent in character with intent to abuse, harass or annoy other person using any application

services, whether constantly or repeatedly carried out during communication may or may not ensure, with or without exposing it identity, its commits an offence (Communication and Multimedia Act, 1998). Subsection (2) from this section provides that an individual who knows by mean of a network service or application services perform indecent communication for commercial use to anyone or permits a network or applications services under an individual control used for an activity stated in paragraph (a) of this section commits an offence (Communication and Multimedia Act, 1998).

On the other hand, researchers also added that Section 114A of the evidence Act 1950 also provide protection from cyberbullying. Under this section, an individual personal profile such as photos or details appears on any publication portray himself as the host, owner or who in any manner facilities to publish or republish the publication is presumed to have published or republished the content unless the contrary is proved (Act 56, 1950). Although Malaysia has yet to have official law against toward cyberbullying, the process of drafting cyberbullying law is ongoing in order to prevent the harassment of children on the internet such as social media (Chong, 2017).

Apart from that, some researchers also provide a useful idea to the legislator on how to carry out the legal protection of cyberbullying in public and school. For instance, a bullying prevention program is encouraged to be practiced by the school district that includes classroom lesson for the student about cyberbullying to ensure they acquire cyberbully knowledge (Manshor et al., 2014). A school policy about anti-bullying should be developed in order to figure out the causes and ways to barrier the issues of cyberbullying (Manshor et al., 2014).

On the other hand, a study was done by Young et al. (2016) found that participants were detached in their support of a criminal law against cyberbullying. Most of the participants thought a specific law was not authorized for cyberbullying (Young et al., 2016) which similar

to the result that found by Keeley et al., (2014). Studies showed that most the countries do not have official laws to take action against cyberbullying.

Cyberbullying Prevention Programs for Adolescents

Several cyberbully prevention programs were conducted around the world in order to reduce the behavior of cyberbullying. The prevention program can be in various form for example online training or school teaching. One of the famous anti-bullying program is KiVa which was conducted in Finland comprehensive school. KiVa included the program of internet learning KiVa Street, to empower student in knowledge of bullying in online environment and student lessons, for instance, small group discussion about bullying and its consequences and watching video film about bullying (Salmivalli, Kärnä, & Poskiparta, 2011). It aims to affect the skills, norms, behavior and attitude of the student through the designed program which included role play, discussion and video about bullying (Hutchings, & Clarkson, 2015). This prevention program was originally designed for traditional bullying; however, it is also effective in the prevention of cyberbullying (Slonje et al., 2013).

In Taiwan, a study was done by Lee, Zi-Pei, Svanström, and Dalal (2013) was using an online training named WebQuest as the tool to educate middle school students. The course of WebQuest consists of knowledge, attitude and intention aspect for preventing cyberbullying, and the procedure included the pre-test, post-test and follow-up post-test. The result showed that WebQuest can improve the knowledge of student immediately, therefore increase student awareness of their action on the internet, deeper understanding on internet laws, and finally, all of this can lead to reduce the intention of cyberbullying (Lee et al., 2013).

A campaign which named Pilot Campaign: Keep It Tame, promoted the respect between self and other people in the online and offline environment. This campaign also seek to let participants understand the importance of being respectful online. This campaign includes

workshop, online discussion, online consultation, and meeting. This campaign survey were implemented through an online setting, participants need to register online after signing a consent form, then linking to the pre-survey form. After that participants will be given access to the "Magic Tracker" server and are required to complete the post-survey once they finish the program. This campaign had utilized tools of technology to educate the participant the knowledge of cyberbullying (Spears et al, 2015).

Besides, a school-based prevention program Media Hero was conducted in German, this program targeted middle school students and it was carried out by trained teachers. The program is built on the knowledge and competency, subjective norm as well as perceived behavior control. Through these aspects, teachers educate the student and influence their intention and behavior. The students were educated on the knowledge of cyberbullying inside the school. At the end of this study, cyberbullying behavior has been decreased, and thus confirms that Media Hero prevention program is effective in educating students. (Wölfer, 2014).

All the prevention program mentioned above showed that modification of knowledge, attitude and empathy is effective to reduce the intention and positive behavior of cyberbullying. When students are aware of the nature of cyberbullying, they might find that their action is considered as cyberbully and will think twice before they carry it out on the internet.

Video media used as a tool to delivery message in the classroom is no longer uncommon nowadays, it has the powerful effect to capture attention from the viewer and increase the learning experience (Cruse, 2006). The advantages of using video for educational purpose includes arousing student's interest, ease in highlighting the key and difficult point of teaching and increase the efficiency of teaching (Li & Wang, 2011). Also, an extra advantage of using video in a prevention program is the consistency of information. Regardless of how many times

the video were played, the content, atmosphere, tone instruction is always the same. When it was displayed for a different group of respondents, they will receive the same message from the video. The effectiveness of using video-based prevention program has been proven with a successful outcome. A video-based intervention program conducted in America uses a video to deliver the information on stroke knowledge. The result showed that respondents gained the knowledge efficiency after watching the video (Denny, Vahidy, Vu, Sharrief, & Savitz, 2017). A study result has shown the significant improvement in food-purchasing knowledge, self-efficiency and behavior after watching the videos (Amaro, Cortés, Garcia, Duan, & Black, 2017). A study which was conducted in China, has given respondents a video-based health education package. It was complemented with classroom discussion, pamphlet summarizing key message delivered by the video "The Magic Glasses" and drawing and writing competition to reinforce the message. At the end of the program, the result showed that the video-based prevention program is highly efficient in enhancing respondent's knowledge, significantly change respondent's behavior, and highly decrease STH incident within the one school- year program (Bieri, 2013).

Chapter 3

Methodology

Research Design

The experimental method which is pre-test and post-test is used to conduct this research. The quantitative research is an approach to examine the relationship between the variables. This research is carried out using a causal-comparative research design which is the Paired Sample T-Test. It discusses the problems that need to be identified (Williams, 2007).

First, researcher developed a video about cyberbullying through a compilation of online resources with permission from the author. Then, questionnaires are distributed to the students in order to collect information from the targeted sample. Next, pre-test is conducted among the experimental group to test their prior knowledge, attitude, subjective norm, intention toward cyberbullying and level of empathy toward cyberbullying victims. From the pre-test, data is collected to analyse the mean of existing knowledge, attitude, subjective norm, intention and level of empathy. An approximately 10 minutes long video-based treatment or also known as prevention program is given to the experimental group, whereas control group was given the survey without watching the video.

Prior to the prevention program in various private secondary level institutions, the researcher has conducted a pilot study with a group of 30 students age 14-17 from a tuition centre. The main objective of the pilot study is to test the effectiveness and reliability of the program. The objective was achieved once results were shown to be positive, as the knowledge and empathy on cyberbullying increased, while the intention to cyberbully decreased.

Upon the completion of pilot test, the researcher proceeded with the program and evaluated the outcome through 2 evaluation design. First, the researcher conducts pre-test

before showing the cyberbullying related video to the experimental group. After the video, a post-test was conducted to test the significant difference in the mean of knowledge, intention and the level of empathy. Next, the researcher further examines the effectiveness of the prevention program by analyzing the difference between an experimental group that received the video-based treatment and control group that did not receive the video-based treatment. The results are then compared to further verify the effectiveness of the program.

Sample

Convenience sampling is used in this research to recruit the participants. Convenience sampling is one type of the non-probability sampling method that depends on who is conveniently available from the population members to be apart in this study (Saunders, Lewis, & Thornhill, 2012). The reason to choose convenience sampling in the research is that data collection can be simplified in a short period and requires relatively lower cost to carry out compared to alternative sampling methods. The calculation for the sample size of this research is based on calculation sample size from Krejcie and Morgan (1970). It stated that 384 people with standard error = .05 is the minimum size of a sample for the population that over 1,000,000 (Krejcie & Morgan, 1970). The total number of target participants is 404. Confucian Private Secondary School, Pei Yuan High School, Yong Peng High School and Westlake International School are the four private secondary schools that had participated in this research.

The number of participants were set to 404 because an additional 20 should be included to avoid respondent bias. Secondary level students of different private schools in Malaysia were selected as respondents of this cyberbully research. The age of the participants is among 15-17 years old and all of them come from different races. 202 students from experimental group took the pre-test and were given treatment that serves to decrease their cyberbullying tendency then post-test was given after the treatment. Whereas another 202 of them are from a controlled

group that on took pre-test with no treatment given in order to verify the credibility and effectiveness of treatment.

Instrument

The questionnaire consists of 6 sessions related to cyberbullying. The first part of the questionnaire is about the demographic of the respondents. Second part of the cyberbully questionnaire was designed to test the knowledge of the respondents towards cyberbullying with 10 items and response answer with true or false. The questionnaire consists of 10 questions including "cyberbullying knowledge", "internet security", and "network etiquette". For every correct answer, 10 points are given and no point is given for wrong answers. Thus, it can be concluded, the higher is the score on the test the higher is respondents' level of the knowledge and vice-versa.

The third part is Cyberbullying Experience Survey (CES). This questionnaire was adapted from Doane et al., (2013) it measures the respondents' level of empathy towards cyberbully by using 10 perpetrator scales ranging from (0) "Strongly Disagree" to (5) "Strongly Agree". These empathy subscales have been shown to have strong close correlation to cyberbullying perpetration, higher empathy leads to lower positive intention to cyberbully (Doane et al., 2014). The reliability for all CES subscales was greater than .70 (Doane et al., 2013).

The fourth part is attitude scale which consists of six items. This questionnaire was created by Pabian and Vandebosch (2014) to measure the attitudes of respondents towards cyberbully with 6 points-scale as a direct measurement of attitudes ranging from "Bad" to "Good", "Not fun" to "Fun", "Boring" to "Exciting", "cowardly to bravely", "not funny to funny", and "immature to mature". The reliability for attitudes scales is .77.

The fifth part is subjective norms scales which consist of 4 items. This questionnaire was created by Pabian and Vandebosch (2014) with five-point Likert-scales with item response ranging from (0) "Strongly disagree" to (5) Strongly agree". The reliability for subjective norms scales is .63.

Finally, the last part is intention scales which consists of two items. This questionnaire was also created by Pabian and Vandebosch (2014) to measure the intentions of the respondents with five-point Likert-scales ranging from (0) "Strongly disagree" to (5) "Strongly Agree". The reliability for intentions scales is .71.

Research Procedure

Before the distribution of survey questionnaire, research proposal has been reviewed and approved by project supervisor, Professor Dr. Cheah Phaik Kin. Subsequently, an approximately ten minutes long cyberbullying related video that targets on knowledge, empathy, and behavior intention was produced through a compilation of online resources. Each of the authors was contacted to acquire consent in using the video for research purposes to avoid infringement of rights.

Other than that, to conduct this research, the researcher has contacted the Ministry of Education Perak to get approval for conducting research in secondary schools in Perak. However, upon receiving reply on process of application would require 6 months long the researcher did not proceed with government secondary schools. Therefore, the researcher continued with sending emails and phone calls to private secondary level institutions to acquire the approval of research. Time and date were arranged shortly after approval was given to coordinate the research schedule with the school's academic timetable to conduct the research. Before the commencement of the research program, students were briefed about the nature of voluntary participation, they are free to withdraw from the program should they feel

uncomfortable or do not wish to proceed any further. Guardian consent were obtained prior to the research. However, there are proximately 160 students that were given verbal approval from guardian instead of consent form due to time constraint.

Prevention Program Development and Content

In this prevention program, a 10 minutes' video related to cyberbullying were shown to the respondents. The selection of the language of the video is in English audio and were attached with bilingual subtitles. There are 3 difference parts in the video, the first part is about the knowledge of cyberbullying which included the definition and facts. It plays with an entertaining narrative; hence it is very informing and entertaining which can effectively grab the attention of the respondents. The second part of the video is about an instructional message into a real-life situation and demonstration of correct behavior when encounter with cyberbullying. Using video to show the real-life situation have the advantage which respondents can identify with the situation, and it encourages behavior change as well. The last part of the video is about the impacts of cyberbullying, and the consequences of a victim who was involved in cyberbullying.

In this program, participants are separated into 2 groups, which are control group and experimental group. The prevention program designed for control group and experimental group is slightly different. Experimental group will receive education about cyberbullying through the video which was mentioned previously, they will have pre-test before the video in order to test their existing knowledge, then only fill up post-test after watching the video. Control group will only involve in the process of survey, no video will be shown to them, the purpose of control group is to prove the effectiveness of the video prevention program, which implies that a participant who has watched the video will have significant increase in their knowledge or awareness of cyberbullying compared to the ones that don't.

Furthermore, the content of the video is aligned with the sequence of questionnaire. In the video, knowledge was the first part followed by empathy. Participants are required to answer the questionnaire after watching the video. As the video was adapted online, permission has already given by the author. Hence, the prevention program will not be interrupted by any copyright issue.

The previous program is done by Doane et al., (2014) showed that modifying the construct with video content can be the support for empathy and Theory of Reasoned Action in intervention of cyberbullying perpetration. The first video from Media Literacy Council, includes various information about cyberbullying, for example, the term and definition, different types of cyberbullying, the facts of cyberbullying, and the prevalence of cyberbullying around the world. This is able to increase the awareness of cyberbullying, respondents could understand the correct concept of cyberbullying, because they might not know that their previous action is considered as bully. Apart from this, the second video is a public service announcement produced by a Singaporean author for an internet campaign, it is an emotional video and consists of a real-life situation related to cyberbullying. From the video, respondents could understand the actual feeling of a victim when being bullied by other people, it can improve victim empathy and attitudes of respondents towards cyberbullying. The last part of the video educates the respondents on ways to handle cyberbullying by themselves. When they become a victim of cyberbullying, the subsequent action is very important because most of the time victims would choose to be silent when it happened. The ability in taking a right action is essential in order to help the victim protect themselves.

To increase the empathy of victim and reduce positive attitude of cyberbullying, the video inputs a real-life situation, whereby producer demonstrates actual cyberbullying cases, and what people would usually do. There are two siblings that were involved in cyberbullying. The elder brother had cyberbullied his friend without realizing that his younger sister is being

cyberbullied by other people at the same time. At the end, his sister decided to commit suicide because she cannot handle the emotional pain of being cyberbullied anymore. After confronting his sister, he realized that his action is very hurtful towards his friend as well. At the end of the video, the brother made an apology to his friend whom was bullied by him. The video portrayed the true feeling of being a victim of cyberbullying. Respondents were given a glimpse of reality to further understand the feeling of the victim, thus raising the level of empathy among respondents.

The rationale of including the definition of cyberbullying, cyberbullying events and demonstration of impact towards the victim is to decrease the positive attitude of cyberbullying. The increase in empathy is able to reduce the intention of cyberbully; when a person attempts to bully others, they might consider how they would feel if they were being bullied by others. The video is equipped with narrations, subtitles, interesting animation and emotional appeal to retain attention from the respondents. In addition, the third video is from Strutt Central in which the author used virus to represent the behavior of cyberbullying. It showed elements that caused the start of cyberbully such as envy, hate and peer pressure. On top of that, the video also included correct ways in handling cases of cyberbullying for bystanders and those involved as well as self-protection for victim. In this prevention program, a 10 minutes video related to cyberbullying is shown to the respondents. The language selection of the video will be in English with Chinese subtitle. Besides, the video content will combine the knowledge with an entertaining narrative, so it can be informing yet entertaining to effectively grab the attention of the respondents. The video also contain instructional messages into a real-life situation and demonstration of correct behavior. Using video to show the real-life situation is beneficial in which respondents can identify with the situation, thus encourage behavior change. Also, the content of the video is arranged to suit the criteria measurement in the questionnaire. Therefore,

the participants will be able to answer the questionnaire after watching the video. As the video

was adapted online, permission was sought after to avoid any copyright issue.

Data Analysis

The data is analyzed with the assistance of SPSS software and the data was captured

directly in SPSS format. For demographic characteristic like age, sex and race will be measured

in descriptive statistic (mean, standard deviation, frequency and percentage) which can be

easily interpreted by readers. In addition, Paired Sample T-test are used to measure the

comparison of mean differences between pre-test and post-test for each item. Lastly, the

experimental group are compared to control group on all study variables (knowledge, empathy,

attitude, subjective norm and behavioral intention) to determine their significant difference

after the prevention program.

Chapter 4

Finding and Analysis

Introduction

Further interpretation and explanation about the research study will be provided in this chapter. Survey questionnaires has been distributed and a total of 384 respondents from a few independent secondary schools in Malaysia has completed the survey questionnaire.

Demographic

As shown in graph 1, the questionnaire was equally distributed in term of gender, which 180 is females and 204 is males. Over 331 of respondents are Chinese, while 26 are Malays, 10 are Indian and 17 are from other races due to private secondary school have more non-Malay students than the government secondary school. Other than that, the average age range of respondents was between 15 to 17 years old as shown in figure 3.

In graph 4, out of 384 of the respondents, there were 46% which is 177 of the respondents have the experience on cyberbullying, whereas, 54% which is 207 of the respondents have no experience on cyberbullying. Besides, graph 5 shows that, 169 of the respondents which is 44% of them agreed to add the elders or their parents into their most frequently used community website account, meanwhile 55% which is 215 of the respondents did not agree to add their parents or elders into their most frequently used community website account.
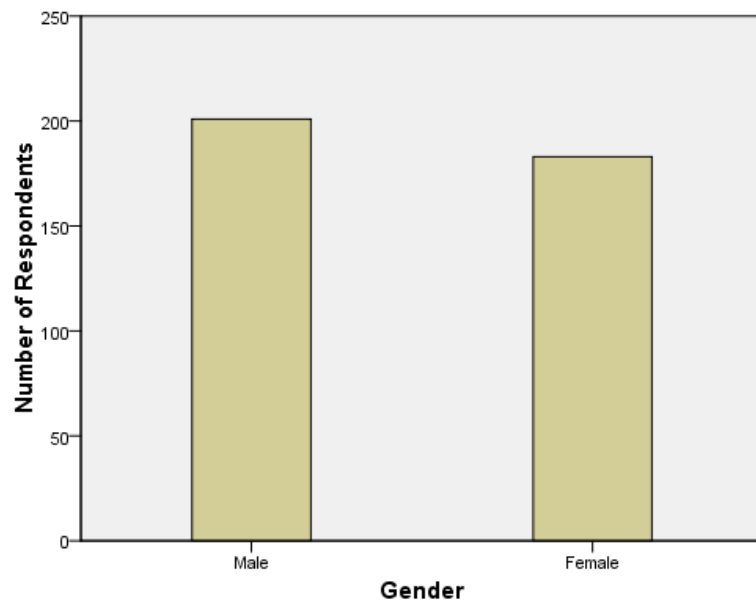
Graph 1. Gender breakdown of respondents.
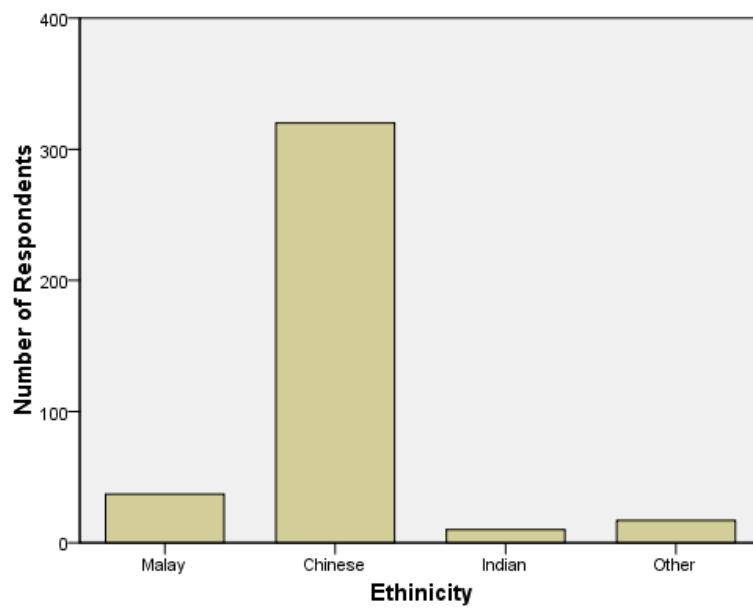
Graph 2. Ethnic breakdown of respondents.
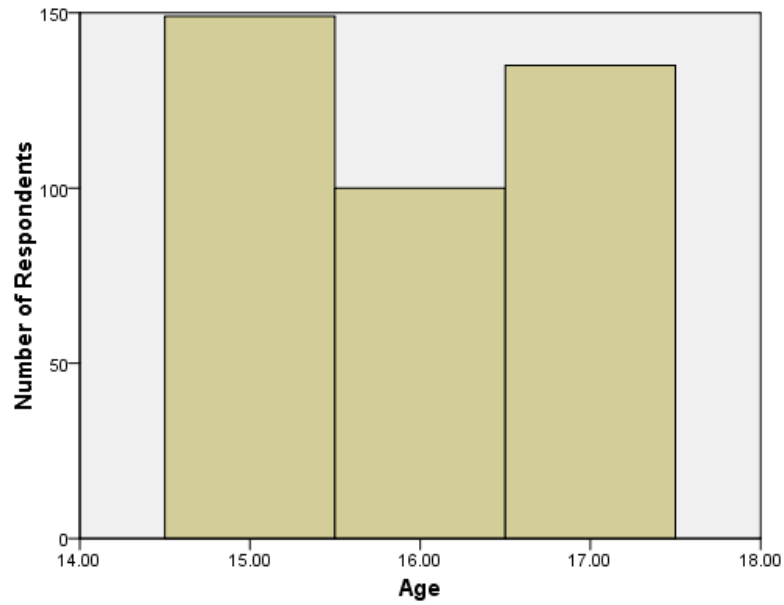
Graph 3. Age distribution of respondents.
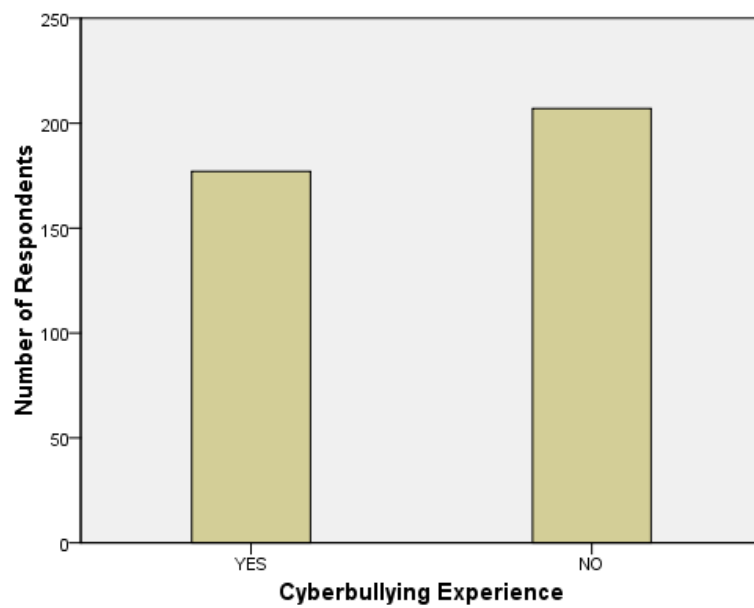
Graph 4. Student's experience in participating or suffering from cyberbullying
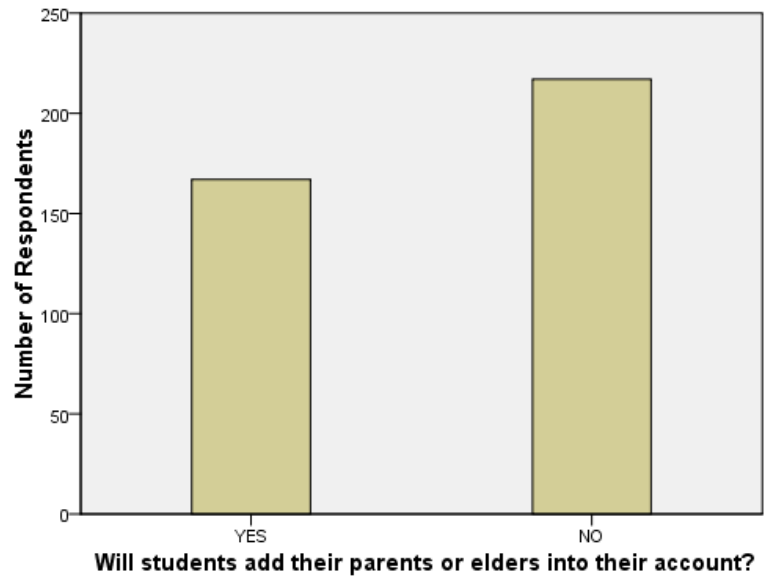
Graph 5. Student's willingness to add their elders /parents into their most frequently used community website account

Inferential statistics

Table 1.0

Research Question 1: To what extent cyberbullying prevention program significantly change adolescents' knowledge toward cyberbullying?

Differentiation between pre-test and post-test (Knowledge)

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Knowledge	Pre	**68.49**	192	15.050	1.08614	0.000**
	Post	**83.75**	192	10.805	.77980	

Noted. Responses were coded 0 to 100 marks.

A paired-sample t-test was carried out to measure the immediate effect of the cyberbullying prevention program on student's knowledge towards cyberbullying. Moderately, the respondents had a higher score in knowledge during post-test (M=83.75, SD=10.805) when compare with pre-test (M=68.49, SD= 15.050). The difference, +15.26, 95%CI, p<0.00 indicated the cyberbullying prevention program significantly change adolescents' knowledge toward cyberbullying. Thus, the result revealed that the hypothesis is failed to reject.

Table 2.0

Research Question 2: To what extent cyberbullying prevention program significantly change adolescents' level of empathy toward cyberbullying victim?

Differentiation between pre-Test and post-Test (Empathy)

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Level of empathy	Pre	**3.6**	192	.86835	.6267	0.001
	Post	**3.875**	192	.67954	.04904	

Noted. Responses were coded 5=strongly agree, 4=agree, 3=neither, 2=disagree, 1=strongly disagree

A paired-sample t-test was carried out to determine the immediate effect of the cyberbullying prevention program on student's level of empathy. On average, the pre-test had a moderate change in the level of empathy (M=3.6, SD=0.868) when compared to post-test (M=3.875, SD=0.679). Overall, the result (+0.275, 95%CI, p>0.001) indicated there was a significant difference between pre-test and post-test. Thus, the present study fail to reject the hypothesis.

Table 3.0

Research Question 3: To what extent cyberbullying prevention program significantly change

adolescents' attitude toward cyberbullying?

Differentiation between pre-test and post-test (Attitude)

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Attitude	Pre	**2.24**	192	1.19854	.08650	0.000**
	Post	**1.83**	192	.9434	.06808	

Noted. Responses were coded 7= extremely agree, 6=strongly agree, 5==agree, 4= neutral
3=disagree, 2=strongly disagree, 1=extremely disagree

A paired-sample t-test was carried out to examine the effects of the cyberbullying

prevention program on student's attitude towards cyberbullying. Overall, the respondents have

score higher in attitude during pre-test (M=2.245, SD= 1.199) when compared to post-test

(M=1.83, SD= 0.9434). The differences, -0.41, 95%CI, p>0.00, has shown a medium effect

size which indicated a significant difference between pre-test and post-test. Therefore, the

present study failed to reject the hypothesis which showed the prevention program has

significantly decreased respondents' positive attitude towards cyberbullying.

Table 4.0

Research Question 4: To what extent cyberbullying prevention program significantly change

adolescents' subjective norm toward cyberbullying?

Differentiation between pre-Test and post-Test (Subjective Norms)

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Subjective Norm	Pre	**2.1667**	192	1.71903	.12406	0.25
	Post	**2.0104**	192	.71942	.05192	

Noted. Responses were coded 5=strongly agree, 4=agree, 3=neither, 2=disagree, 1=strongly

disagree

A paired sample t-test was carried out to determine the respondent's subjective norms

toward cyberbullying. As shown in table 4, the respondents had a higher score in subjective

norm during pre-test (M= 2.16, SD= 1.719) when compared with post-test (M=2.01,

SD=.71942).   However, the difference, -0.15, 95%CI, $p<0.25$, indicated that there is no

significant difference between pre-test and post-test. Therefore, the hypothesis is rejected

which has shown that cyberbullying prevention program failed to decrease respondents'

subjective norm towards cyberbullying.

Table 5.0

Research Question 5: To what extent cyberbullying prevention program significantly change adolescents' intention toward cyberbullying?

Differentiation between pre-test and post-test (Intention)

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Level of Behavior	Pre	**1.5547**	192	.85668	.06183	0.001
Intention	Post	**1.2943**	192	.53478	0.3859	

Noted. Responses were coded 5=strongly agree, 4=agree, 3=neither, 2=disagree, 1=strongly disagree

A paired-sample t-test was carried out to determine the effect of the cyberbullying prevention program on adolescent's intention toward cyberbullying. As shown in table 5, the respondents had a higher score in behaviour intention during pre-test (M =1.55, SD 0.857) when compare to post-test (M=1.29, SD=0.536). The difference, -0.26, 95%CI, p>0.001, indicated respondent's level of behaviour intention has significant decrease after the intervention program. Thus, the present study failed to reject the hypothesis.

Table 6.0

Differentiation between control group and experimental group for five items

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Knowledge	CG	**66.4583**	192	15.48376	1.11744	0.000
	EG	**83.7500**	192	10.80527	.77980	
Level of Empathy	CG	**3.8700**	192	.71738	.051777	0.928
	EG	**3.8800**	192	.67954	.04904	
Attitude	CG	**2.2231**	192	1.19609	.08632	0.00
	EG	**1.8264**	192	.94340	.06808	
Subjective Norm	CG	**2.0234**	192	.73308	.05291	0.74
	EG	**2.0104**	192	.71942	.05192	
Behavior Intention	CG	**1.7500**	192	.85767	.06190	0.000
	EG	**1.2943**	192	.53478	.03859	

Noted. Responses were coded 5=strongly agree, 4==agree, 3=neither, 2=disagree, 1=strongly disagree

Total of five factors of cyberbullying behavior has been tested in this study, statistically, three out of five factors were found to have significant difference between control group and experimental group. The result showed the respondents' knowledge has significant increase in experimental group (M=83.75, SD=10.80) compare to control group (M=66.45, SD=15.48) where a significant difference (-13.7) was found (p>0.00). Besides, the respondents' attitude towards cyberbullying had shown a significant difference between control group (M=2.22, SD=1.19) and experimental group (M=1.18, SD=2.02), (p>0.000), whereas, the behaviour intention of respondents towards cyberbully for experimental group (M=1.29, SD=0.53) is significantly lower than the control group (M=1.75, SD=0.85), (p>0.00).

However, out of five variables, there is two variable which is the subjective norm and level of empathy has shown no significant difference between the control group and experimental group. The result indicated there is a slightly change in experimental group's

subjective norm (M=2.01, SD=0.719) when compared to control group (M=2.02, SD= 0.733)

which showed a non-significant difference (p<0.74). Furthermore, analysis also showed that

experimental group's level of empathy (M=3.88, SD=.679) was only slightly higher than the

control group (M=3.84, SD=.717).

Chapter 5

Discussion and Conclusion

The purpose of the study is to examine whether the intervention program can significantly increase adolescent's knowledge and empathy toward cyberbullying and decrease their behavior intention, attitude and subjective norm toward cyberbullying. Giving the expense and effort expended in implementing the cyberbullying program (Sherman, 2000), an intervention program with a low-cost nature would be useful for a policy maker. In this study, adolescents were randomly assigned to either the control or experimental group. Experimental group has attended a video-based prevention program to learn about the basic concept of cyberbully, meanwhile, control group has not attended any of the prevention programs.

Prevalence of Cyberbullying

Out of the 384 respondents in the present study, 45.9% reported that they have experience in participating or suffering from cyberbullying. The result is similar to the report done by Digi Telecommunications Sdn Bhd and Telenor Group which showed one out of four students experienced cyberbullying; however, those did not include the unreported cases. The higher percentage of cyberbullying experience among respondent is mainly due to the low level of knowledge about cyberbullying and higher behavior intention toward cyberbullying.

In this present study, there are 167 out of 384 respondents which are 44% of them befriended with their parents on their most frequented social media, while 56% of them are not friends with their parents on social media. The result is similar with the research in Abu Dhabi which involved 3100 students from grade 6 and above showed that 68.7 % of them are friends with their parents on social media which shows a slight difference with Malaysian respondents (Badri, Alnuaimi, Rashedi, Yang, & Temsah, 2016). Nonetheless, despite the relatively small difference in the number of youths befriending their parents in Malaysia and Abu Dhabi, the

percentage of those who are cyberbullied in Abu Dhabi is only a mere 5.89%. Overall, it is perceived that transparency exists between parents and their children on social media to an extent in Malaysia, thus enable a certain level of social media monitoring. Subsequently, it is also important to highlight the possibility that there may be a number of them that were not reported who have limited their parent's access to their activity in social media. Thus, it can be deduced that cyberbullying may fall out of the parents' radar even with the act of parents befriending their children on social media. Overall, it can be concluded not all parents keep track of digital footprints of their children.

Effectiveness of Video-Based Cyberbullying Prevention Program

The present study is the first video-based prevention program built on the Theory of Reasoned Action to prevent cyberbullying in Malaysia secondary school. The cyberbullying prevention program has the necessary scientific background to ensure the reliability in expecting reasonable effects.

In this study, we first tested our prevention program by examining immediate effect on respondent's knowledge and level of empathy with the use of paired sample t-test. Through the analysis of the study, it was found that respondents scored a relatively lower score in cyberbullying knowledge and level of empathy. The result was similar to the survey done by Microsoft Corporation which revealed that Malaysian's knowledge of cyberbullying is substantially lower than average if compared to 25 countries surveyed (Simon, 2017). Meanwhile, a study done by Steffgen, Konig, Pfetsch and Melzer (2011) also found that training of empathy skills might be an important tool to decrease cyberbullying as the result showed cyberbullies have less empathy for others being victimized than non-cyberbullies. Overall, the comparison between pre-test and post-test indicated the cyberbullying prevention

video has immediate effect on respondents' level of knowledge which respondent is able to score 83.75 marks in post-test compared with 68.49 marks in pre-test.

Moreover, similar with the level of knowledge, the result also indicated a moderate increase in respondent's level of empathy. The significant change has proved that increasing empathy in cyberbullying prevention video might be a suitable strategy to increase adolescents' level of empathy. Overall, the immediate result of pre-test and post-test suggested our prevention program was successful in increasing adolescent's knowledge and level of empathy toward cyberbullying. The result is in a match with our first hypothesis which shown that video-based cyberbullying prevention program proved to be successful in changing respondent's knowledge and level of empathy as demonstrated by significant rise of respondent's knowledge and level of empathy toward cyberbullying after prevention program.

Besides that, the study also found moderate changes in intention (-0.26), and moderate to large change in attitude (-0.41), and small or non-significant changes in respondents' subjective norm after the intervention program. The no significant difference in subjective norm can be explained with the length of 10 minutes long cyberbullying prevention video may not be enough to induce subjective norm. The result can be explained by the study done by Salleh and Zainal, (2014) regarding Theory of Reasoned Action which showed that subjective norms are difficult to change by the prevention program as subjective norm often depend on the social networks and organization that they belong. Thus, it can be concluded that the 10 minutes cyberbullying prevention video has failed to change the respondents' subjective norms towards cyberbullying.

Furthermore, the difference between pre-test and post-test showed that the prevention program has immediate effect on the respondents' attitude towards cyberbullying. The significant difference between pre-test and post-test can be explained by the Bobo doll

experiment conducted by Albert Bandura (1961) which suggested that aggression attitude can be obtained by observation and imitation. As the video was played during the prevention program for the experimental group, within this 10 minutes, the respondents observe and learn from the video. Thus, their level of empathy toward cyberbullying victim has increased and the positive attitude towards cyberbullying has decreased.

The increase in level of empathy and decrease in respondents' positive attitude towards cyberbullying may predicted lower cyberbully behavior intentions. The level of behavior intention in post-test of experimental group has significantly decreased after the intervention program. Theory of planned behavior introduced by Azjen (1991), suggested that intention is an important variable in predicting one's behavior change and behavior is always linked to personal motivation. This explained that the information presented in the prevention video has effectively reshaped the behavior of respondents by emphasizing subjective norms or opinions that support the behavior. Therefore, the video-based cyberbullying prevention program is effective in reducing the respondents' behavior intention in performing cyberbullying.

Among the difference between control group and experimental group at the post-test, we found a large change in knowledge (+17.30), moderate changes in intention (-0.46), and moderate to large change in attitude (-0.42), and small or non-significant changes in level of empathy and subjective norm. However, the result is different with the result we have found in the pre-test and post-test within experimental group which shown that only subjective norm shown non-significant change. Thus, there are two interpretations of our result. First, the intervention program was not effective in increasing level of empathy and decreasing subjective norm toward cyberbullying. Second, the control group has already portrayed a relatively higher level of empathy toward cyberbullying which may cause the non-significant difference between experimental group and control group. In this study, we adhered our result to the second interpretation as the prior study had successfully shown that cyberbullying

prevention video can effectively increase adolescents' level of empathy. Based on the research done by Doane et al., 2016, the study demonstrates a brief cyberbullying video is capable of improving the adolescents' level of empathy and cyberbullying knowledge, as well as to help reduce cyberbullying. Besides, the prior study also showed that cyberbullying prevention video might be a suitable strategy to increase adolescent's level of empathy. A study done by Notar, Padgett, and Roden (2013) also showed a prevention video included with the consequences of cyberbullying and presents accurate information about anti-cyberbullying which will change the perception of adolescent and may increase their level of empathy.

Overall, the result in this study was in line with the research done Wolfer et al (2014) and Doane (2014) which showed cyberbullying prevention program was effective at changing a number of factors that may lead to cyberbullying behavior. Nevertheless, the content of the cyberbullying prevention video, the duration of the video and the research design may also cause our study to show contrast in result with the study done by Wolfer et al., 2014 and Doane et al., 2016. Although the prevention video (10min) can be considered short but the result promised the low-cost and effective way to aim at effecting TRA constructs.

Implication

This research is crucial to serve as an existing material for educators and researchers alike in applying the Theory of Reasoned Action in Cyberbully and to improve ways of curbing the issue. Through this research, the cyberbully prevention program not only raise awareness of students on cyberbullying, but also found to be informative for teachers as well. The program opens up discussion on actions that the majority do not consider as cyberbully but the opposite. Thus, educators will understand what constitutes cyberbully and perpetrators' intention to continue to instill greater awareness in cyberbully and lower the tendency of cyberbully.

It is deemed that increasing level of empathy may lower the chances of cyberbullying, as perpetrators that do not understand the psychological harm that they've caused, are more likely to continue their wrongdoings (Bergmann & Baier, 2018). Hence by utilizing the Theory of Reasoned Action, the program would more accurately pave a way in targeting the crucial variables that may lead to the decrease in cyberbullying among secondary school students (Pabian & Vandebosch, 2014). Compilation video based on Theory of Reasoned Action in this research may be further developed with higher accuracy in targeting ways to decrease behavior intention and increase the level of empathy for future cyberbully prevention program. This is due to the fact that there are very few video-based prevention programs that was derived from the Theory of Reasoned Action.

Limitation of Study

In this cyberbully video-based prevention program, despite that implementation of the program had been carried out vigilantly, several limitations have been found and must be considered. Firstly, the ethnic group which involved in this prevention program are majority Chinese adolescent, follow by Malay and Indian. This limitation causes the unreliable result because the certain ethnic group cannot represent the whole Malaysian adolescents' mind and idea. This prevention program included the test of adolescent attitude, subjective norm, behavior and level of empathy. Therefore, different ethnic group have different background and culture, their perception might have slight difference from each other. Hence, the result of this prevention program would be more focused on Chinese adolescent in Malaysia.

In addition, the present study can only test the immediate effect of cyberbullying prevention program but exclude the testing of long-term effect. The whole program is conducted within a day which began with the pre-test survey form, followed by the cyberbullying prevention video and ends with a post-test survey. Therefore, due to the

limitation of time, the result were not able to test the long-term effect of the prevention program.

Lastly, all the video used in this prevention program is in English version. Therefore, the respondents may not fully understand the content of the video, even when mandarin subtitle was attached. Every respondent has their own mother language, so most of the respondents cannot comprehend the meaning accurately as they need to watch the English version video and read the subtitle at the same time. This situation caused respondents only receive part of the knowledge from the video, hence when proceeding to the post-test survey, it may lead to inaccuracy in result.

Recommendations for Future Research

There are few recommendations will be suggested as a guideline for future research due to the shortcoming of study. First, the research sample should include more other races instead of focusing on Chinese adolescent as Malaysia is a multiracial country which Malay, Indian and Chinese is the majority of Malaysia population. Therefore, Malay, Indian and Chinese should be included in the future research which both government secondary school and private secondary school should be taken into consideration as our target sample in order to make sure the result is more reliable.

Second, long-term follow-up instrument over a prolonged period should be included in the future study as the present study is not able to test the long-term effect of the intervention program. It is important to note that testing the long-term effect of the prevention program on student's cyberbullying behavior is more important than just focus on immediate effect. Moreover, multicultural element such as language, religion and culture should be taken into consideration when designing the video for the prevention program. For instance, the video content should be modified in a more localized context and continuation of subtitle in

multilanguage such as Chinese, English and Bahasa Malaysia so that respondents will be more engaged in the video and has a better understanding about the content.

Lastly, future researchers can include new variable such as perceived behavioral control in the future research as research done by Pabian (2014) had shown that perceived behavior control is one of the variables that will affect an individual's behavior intention towards cyberbullying. Therefore, perceived behavior control should be included as a variable in order to improve the cyberbullying prevention program.

Conclusion

In conclusion, the use of TRA in constructing video-based prevention program is proven significant to yield positive results in improving respondents' knowledge and level of empathy; and decreasing respondents' positive attitude and behavior intention toward cyberbullying. Although the result showed there was no significant difference in the subjective norm between the pre-test and post-test, the result still showed that the video-based cyberbullying prevention program has immediate effect on respondents' behavior toward cyberbullying. This research demonstrated the fact that cultivating deeper understanding about cyberbullying complements empathy and attitude leverage. Behavior intention towards cyberbullying may not be changed when there is inadequate knowledge, low level of empathy and positive attitude toward cyberbullying. Overall, the prevalence of cyberbullying among adolescents in Malaysia requires more effective intervention through accurate identification of variables in TRA based on current research to deliver a stronger message on impact of cyberbullying to adapt into future research.

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Appendix A: Questionnaire (English Version)

Section A: Basic Questions

Instruction: Please √ on the option suits to you the most.

1. What is your gender?

   □ Male   □ Female

2. How old were you on your last birthday?

   _____

3. What is your ethnicity?

   □ Malay   □ Chinese   □ Indian   □ Other

4. Do you have any experience in participating or suffering from cyberbullying?
   □ Yes   □ No

5. Will you add your elders/parents into your most frequently used community website account?

   □ Yes   □ No

Section B: Cyberbullying Knowledge

Below is a list of questions to test your knowledge about the cyberbullying. Please √ on the appropriate column.

	True	False
1. Messaging is private	□	□
2. The internet is anonymous	□	□
3. Cyberbullying is as destructive as traditional bullying	□	□
4. Sending a mean message is cyberbullying	□	□
5. Posting a harmful photo is cyberbullying	□	□
6. Responding in a mean or threatening way does not make me a cyberbully	□	□
7. Pretending to post as someone else is OK	□	□
8. You should ignore a mean or threatening message	□	□
9. You can not block a sender	□	□
10. It is easy to misinterpret a message	□	□

Section C: Empathy

Below is a list of questions to understand your level of empathy toward cyberbullying. Please √ on the appropriate column.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
11. I feel very sorry for a person who has been cursed at by others electronically.	□	□	□	□	□
12. I feel very sorry for a person who has been called mean names by others electronically.	□	□	□	□	□
13. I feel very sorry for a person who has received rude messages from others electronically.	□	□	□	□	□
14. I feel very sorry for a person who has been made fun of by others electronically.	□	□	□	□	□
15. I feel very sorry for a person who has had others lie about themselves to the person electronically.	□	□	□	□	□
16. I feel very sorry for a person who has had others post embarrassing pictures of them electronically where other people could see it.	□	□	□	□	□
17. I feel very sorry for a person who has had others post pictures of them electronically that they did not want others to see.	□	□	□	□	□
18. I feel very sorry for a person who has received unwanted sexual messages from others electronically.	□	□	□	□	□
19. I feel very sorry for a person who has had others try to meet them in person that they talked to electronically who they did not want to meet in person.	□	□	□	□	□
20. I feel very sorry for a person who has received unwanted pornographic pictures from others electronically that were not spam.	□	□	□	□	□

Section D: Attitude toward Behavior

Below is a list of questions to understand your attitude toward cyberbullying. Choose your level of disagreement or agreement with the following items (even when you are not involved in this behavior).

FOR EXAMPLE: What do you think of chocolate?

If you think that chocolate is not tasteless but also not delicious, you color the box in the middle.

Tasteless	O	O	O		O	O	O	Delicious
				●				

FOR EXAMPLE: What do you think of chocolate?

If you like chocolate a little, you color the fifth box.

Tasteless	O	O	O	O		O	O	Delicious
				●				

Bullying others via the Internet or mobile phone, is:

21. Bad	O	O	O	O	O	O	O	Good
22. Not fun	O	O	O	O	O	O	O	Fun
23. Boring	O	O	O	O	O	O	O	Exciting
24. Cowardly	O	O	O	O	O	O	O	Brave
25. Not funny	O	O	O	O	O	O	O	Funny
26. Childish	O	O	O	O	O	O	O	Mature

Section E: Subjective Norm

Below is a list of questions to understand the perception of what other think of the cyberbullying and your motivation to comply with them. Choose your level of disagreement or agreement with the following items.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
27. Most of the people who are important for me would approve if I would bully someone via the Internet or mobile phone.	□	□	□	□	□
28. It is normal that people bully each other via the Internet or mobile phone.	□	□	□	□	□
29. There is a lot of bullying going on via the Internet and mobile phone, that's just the way it is.	□	□	□	□	□
30. It is expected from me that I bully via the Internet or mobile phone	□	□	□	□	□

Section F: Behavioral Intention

Below is a list of questions to understand your intention toward cyberbullying. Choose your level of disagreement or agreement with the following items.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
31. I expect that I will bully someone via the Internet or mobile phone within the next month	□	□	□	□	□
32. I am planning to bully someone via the Internet or mobile phone within the next months.	□	□	□	□	□

Questionnaire (Chinese Version)

Section A/甲：基本资料

指示：请在以下 ▢ 空格里 √ 出您的个人资料。

1. 性别：
   ☐ 男生   ☐ 女生

3. 年龄：_____

3. 种族：

   ☐ 华裔   ☐ 巫裔   ☐ 印裔   ☐ 其他

4. 你有任何参与或遭受网络霸凌的经验吗？

   ☐ 有   ☐ 没有

5. 你会将你的长辈或父母加入你最常使用的社交网站的账号吗？

   ☐ 会   ☐ 不会

Section B/乙：网络霸凌知识测试

以下的问题是测试您对于网络霸凌的知识。请在以下☐空格里√出您的答案。

	对	错
1. 网络讯息是私人且受保密的	☐	☐
2. 网络是匿名的	☐	☐
3. 网络霸凌与传统霸凌具有一样的破坏性	☐	☐
4. 发送一个恶意的讯息是一种网络霸凌	☐	☐
5. 发布一张具有危害性的照片是一种网络霸凌	☐	☐
6. 以带有恶意且威胁性的方式回应并不会让我成为一个网络霸凌者	☐	☐
7. 伪装成他人发布讯息是可以接受的	☐	☐
8. 你应该忽略一个具有恶意且带有威胁性的信息	☐	☐

9. 你无法封锁发件人   ☐   ☐

10. 网路上的讯息是非常容易被误解的   ☐   ☐

Section C/丙: 同情程度

以下的问题是了解你对于受网络霸凌者的同情程度。请在以下☐空格里√出适合您的
答案。

	非常不认同	不认同	无意见	认同	非常认同
11. 我对于那些被人通过电子的方式诅咒的人感到遗憾。	☐	☐	☐	☐	☐
12. 我感到遗憾当某个人被人通过电子的方式用不文雅的字眼辱骂。	☐	☐	☐	☐	☐
13. 我感到遗憾当某个人通过电子的方式收到不文雅的讯息。	☐	☐	☐	☐	☐
14. 我感到遗憾当某个人被人通过电子的方式嘲弄。	☐	☐	☐	☐	☐
15. 我感到遗憾当某个人被人通过电子的方式欺骗。	☐	☐	☐	☐	☐
16. 我感到遗憾当某个人被人通过电子的方式散播骚扰性的照片。	☐	☐	☐	☐	☐
17. 我感到遗憾当某个人被人通过电子的方式散播他不想被人看到的照片。	☐	☐	☐	☐	☐
18. 我感到遗憾当我某个人通过电子的方式收到性骚扰的讯息。	☐	☐	☐	☐	☐
19. 我感到遗憾当某个人被他不想遇见的人通过电子的方式联络。	☐	☐	☐	☐	☐

20. 我感到遗憾当某个人通过电子 □ □ □ □ □
   的方式收到色情图片。

Section D/丁: 网络霸凌态度

下列问题是了解您对于网络霸凌的看法，请依自身实际的情形回答，并涂黑适合你的
答案。

例:你认为巧克力如何?

如果你觉得巧克力即不是无味也不是美味的，请涂黑中间的圆圈。

无味的	0	0	0	0	0	0	美味的
			●				

如果你只是稍微喜欢巧克力，请涂黑第五个圆圈。

无味的	0	0	0	0	0	0	美味的
				●			

网路霸凌是:

21. 不好的	0	0	0	0	0	0	0	好的
22. 无趣的	0	0	0	0	0	0	0	有趣的
23. 无聊的	0	0	0	0	0	0	0	刺激的
24. 胆小的	0	0	0	0	0	0	0	勇敢的
25. 不可笑的	0	0	0	0	0	0	0	可笑的
26. 幼稚的	0	0	0	0	0	0	0	成熟的

27. 我认为大多数对我重要的人都将
    赞同我通过网络霸凌他人。

28. 我认为人们通过网络或手机互相
    攻击是正常的。.

29. 网络上或手机上有许多网络霸凌
    的行为，这就是他的方式。

30. 我期望通过网络或手机进行霸
    凌。

Section E/戊: 主观规范因素

下列问题是了解您对于网络霸凌的看法，请依自身实际的情形回答，并在以下□空格里√出适
合您的答案。

非常不认同　　不认同　　无意见　　认同　　非常认同

Section F/己: 行为意念

下列问题是了解您对于网络霸凌的行为意念，请依自身实际的情形回答，并在以下□空格里√
出适合您的答案。

非常不认同　　不认同　　无意见　　认同　　非常认同

31. 我将在下个月内对某人进行网络
    霸凌。

32. 我正在计划对某人进行网络霸
    凌。

Appendix B: Parental Consent Form for Child's Participation in Research

(English Version)

Parental Permission for Child's Participation in Research

We are from Universiti Tunku Abdul Rahman (UTAR) Year 3 Semester 3 Public Relation Undergraduate Students. Your child is invited to participate in a research about Cyberbullying. Because your child is under the age of 21, your consent is required in order for your child to participate in these studies.

What would your child be asked to do?
Your child will answer a set of questionnaires designed consists of 6 sections which are section A, B, C, D, E and F. The questions will be investigating student's perception toward cyberbullying.

Is participation compulsory?
Your child's participation is voluntary. In all studies, participants are fully informed of what they will be asked to do before the study begins and they are allowed to ask any questions at any time during the study. Your child may refuse to participate, discontinue participation, or skip any part of the task they don't wish to work on at any time without penalty. You are also free to withdraw your child from these studies at any time. Withdrawal will not affect your child's grades or status at school.

What are the risk and benefit your child will gain?
Your child's participation in this study does not involve any significant risks and will not benefit anyone personally, but the outcome of this study might help in the research study.

How will my child's privacy be protected?
Your child's participation in this study will remain confidential, and his or her identity will not be stored with the data. The responses will be keep confidential and use for academic purpose only.

Whom should I contact regarding questions or clarification?
You may contact Mr. Tey Chin Fui, person in charge of this research, at baobao960624@1utar.my.
If you permit your child to be in these studies, please sign and return this form to UTAR through your child.
I have read the above information and give consent for my child's participation in these studies.

_____

Signature of Parent/Guardian

Date:

Parental Consent Form for Child's Participation in Research

(Chinse Version)

网路霸凌研究之家长同意书

您好，我们是来自霹雳金宝拉曼大学公关系三年级学生。您的孩子被邀请参与一项关于网络霸凌研究。由于您的孩子属于未成年学生，因此需要得到家长/监护人的同意以便让学生参与该项研究。

学生将会：

回答六系列的问题，分别分为甲，乙，丙，丁，戊和己。这三系列的问题将测试青少年对于网络霸凌的态度。

这项调查是否必须参与：

学生的参与将全属自愿义务性质。在开始回答问卷之前，调查员将会清楚的解释问卷的内容与指示，在回答问卷的过程中若有任何疑问，学生允许发问任何问题。与此同时，学生可随时弃权参与此项调查。

风险与利益：

这项调查不含任何的风险与利益，但却对此研究有巨大的帮助。

隐私权：

此调查所收集的资料将会被保持机密。学生的身份将会与资料分开保存。所有的调查结果与资料将被保持机密与被用于学术用途而已。

调查员联络人：

若有任何问题您可联络郑钦辉，电邮为 baobao960624@1utar.my。

若您允许孩子参与此研究，请在以下栏位签名后退还研究调查员。

我了解以上的每款条例。我同意让孩子参与此项研究调查。

_____

家长/监护人签名

日期：

Appendix C: Student Consent Form for Participation in Research

(English Version)

UNIERSITI TUNKU ABDUL RAHMAN

Informed Consent

Dear participants, we are from Universiti Tunku Abdul Rahman (UTAR) Year 3 Semester 1 Public Relation Undergraduate Students. This is a research for our final year project. Please consider this information carefully before deciding whether to participate in this research.

What you will do in this research:

You will answer a set of questionnaire designed consists of 4 sections which are section A, B, C, D, E, F and G. The questions will be examining on your overall Level of knowledge, empathy, attitude, subjective norm and intention toward cyberbullying.

Time required:

Participation will take approximately less than 30 minutes to complete.

Risks and Benefits:

Your participation in this study does not involve any significant risks and will not benefit anyone personally, but the outcome of this study might help in the research study.

Confidentiality:

Your participation in this study will remain confidential, and your identity will not be stored with your data. Your responses will be keep confidential and use for academic purpose only.

Participation and withdrawal:

Your participation in this study is completely voluntary, and you may withdraw at any time without penalty. You may withdraw by informing the researcher that you no longer wish to participate and your compensation will be calculated based on the time you spent in the study.

Thank you for your cooperation.

Agreement:

*I have read the foregoing information. I have had the opportunity to ask questions about it and I understand that I am free to withdraw at any time without incurring any penalty. I agree to be a participant in this study.

_____

Signature of Participant

Date:

Student Consent Form for Participation in Research

(Chinese Version)

拉曼大学

同意书参与调查

您好，我们是来自霹雳金宝拉曼大学公关系的学生。这是我们毕业前必须完成的一项毕业论文。敬请同学们慎重思考是否参这份问卷。

您会在这份问卷里：

回答六个系列的问题，分为甲，乙，丙，丁，戊和己。整体的问卷将测试您对于网络霸凌的看法。

所需时间：

不超过 30 分钟。

风险与利益：

这项调查不含任何的风险与利益，但却对此研究有巨大的帮助。

隐私权：

所有收集的资料将会被保持机密。您的身份将不会与资料储存在一起。所有的调查结果与资料将被保持机密与被用于学术用途而已。

参与及退出：

这项参与是完全属于义务性质，您可随时提出退出的要求，不含任何处分。您只需通知调查者您的退出要求，

衷心感谢您的配合！

协议：

*我同意以上的条规。我拥有发问以及随时退出参与调查的权利。我同意参与这项研究的调查。

_____

学生签名

日期：

Appendix D: SPSS Output: Pilot Testing

Reliability

Scale: Level of Empathy

Case Processing Summary

		N	%
	Valid	192	50.0
Cases	Excluded[a]	192	50.0
	Total	384	100.0

a. Listwise deletion based on all variables in the

procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.908	10

Item Statistics

	Mean	Std. Deviation	N
E1	3.8073	.93189	192
E2	3.7917	.94804	192
E3	3.6667	.84589	192
E4	3.7552	.90228	192
E5	4.0417	.97526	192
E6	4.1667	1.01987	192
E7	4.0469	1.01965	192
E8	3.9740	.96230	192
E9	3.4948	.99737	192
E10	3.9375	1.08596	192

Inter-Item Correlation Matrix

	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10
E1	1.000	.476	.456	.436	.412	.442	.489	.479	.424	.521
E2	.476	1.000	.709	.479	.372	.426	.508	.453	.370	.440
E3	.456	.709	1.000	.530	.417	.326	.467	.433	.476	.462
E4	.436	.479	.530	1.000	.660	.511	.576	.529	.519	.497
E5	.412	.372	.417	.660	1.000	.646	.667	.559	.355	.373
E6	.442	.426	.326	.511	.646	1.000	.657	.623	.428	.501
E7	.489	.508	.467	.576	.667	.657	1.000	.652	.446	.561
E8	.479	.453	.433	.529	.559	.623	.652	1.000	.472	.600
E9	.424	.370	.476	.519	.355	.428	.446	.472	1.000	.522
E10	.521	.440	.462	.497	.373	.501	.561	.600	.522	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
E1	34.8750	43.084	.614	.395	.901
E2	34.8906	42.841	.622	.580	.901
E3	35.0156	43.670	.633	.601	.901
E4	34.9271	42.298	.712	.578	.896
E5	34.6406	42.085	.666	.639	.898
E6	34.5156	41.403	.687	.585	.897
E7	34.6354	40.526	.762	.632	.892
E8	34.7083	41.517	.727	.566	.895
E9	35.1875	42.740	.593	.419	.903
E10	34.7448	40.976	.670	.520	.899

Reliability

Scale: Attitude

Case Processing Summary

		N	%
Cases	Valid	192	50.0
	Excluded[a]	192	50.0
	Total	384	100.0

a. Listwise deletion based on all variables in the

procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.810	6

Item Statistics

	Mean	Std. Deviation	N
A1	1.7135	1.26003	192
A2	2.0990	1.56051	192
A3	2.0781	1.59158	192
A4	2.7396	1.80601	192
A5	3.0104	2.19707	192
A6	1.7969	1.46705	192

Inter-Item Correlation Matrix

	A1	A2	A3	A4	A5	A6
A1	1.000	.648	.627	.499	.285	.540
A2	.648	1.000	.747	.500	.258	.404
A3	.627	.747	1.000	.461	.266	.482
A4	.499	.500	.461	1.000	.466	.330
A5	.285	.258	.266	.466	1.000	.241
A6	.540	.404	.482	.330	.241	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
A1	11.7240	39.122	.692	.550	.764
A2	11.3385	36.487	.674	.625	.758
A3	11.3594	36.095	.679	.614	.756
A4	10.6979	35.175	.615	.405	.769
A5	10.4271	36.330	.395	.227	.838
A6	11.6406	40.064	.506	.333	.793

Reliability

Scale: Subjective Norm

Case Processing Summary

		N	%
Cases	Valid	192	50.0
	Excluded[a]	192	50.0
	Total	384	100.0

a. Listwise deletion based on all variables in the

procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.690	4

Item Statistics

	Mean	Std. Deviation	N
S1	1.7240	.90481	192
S2	2.1979	1.04476	192
S3	2.3698	1.08956	192
S4	1.7500	.94896	192

Inter-Item Correlation Matrix

	S1	S2	S3	S4
S1	1.000	.457	.253	.517
S2	.457	1.000	.437	.330
S3	.253	.437	1.000	.186
S4	.517	.330	.186	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S1	6.3177	5.213	.544	.361	.585
S2	5.8438	4.677	.556	.327	.568
S3	5.6719	5.216	.377	.195	.692
S4	6.2917	5.454	.435	.279	.648

Reliability

Scale: Behavior Intention

Case Processing Summary

		N	%
Cases	Valid	192	50.0
	Excluded^a	192	50.0
	Total	384	100.0

a. Listwise deletion based on all variables in the

procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.826	2

Item Statistics

	Mean	Std. Deviation	N
BI1	1.6458	.93763	192
BI2	1.5729	.91233	192

Inter-Item Correlation Matrix

	BI1	BI2
BI1	1.000	.704
BI2	.704	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
BI1	1.5729	.832	.704	.495	.
BI2	1.6458	.879	.704	.495	.

T-Test

Scale: Knowledge

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Knowledge	Pre	**68.49**	192	15.050	1.08614	0.000**
	Post	**83.75**	192	10.805	.77980	

Scale: Level of Empathy

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Level of Empathy	Pre	**3.6**	192	.86835	.6267	0.001
	Post	**3.875**	192	.67954	.04904	

Scale: Attitude

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Attitude	Pre	**2.24**	192	1.19854	.08650	0.000**
	Post	**1.83**	192	.9434	.06808	

Scale: Subjective Norm

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Subjective Norm	Pre	**2.1667**	192	1.71903	.12406	0.25
	Post	**2.0104**	192	.71942	.05192	

Scale: Level of Behavior Intention

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Level of Behavior Intention	Pre	**1.5547**	192	.85668	.06183	0.001
	Post	**1.2943**	192	.53478	0.3859	

Scale: Differentiation between control group and experimental group for five items

		Mean	N	Std. Deviation	Std. Error Mean	Sig(2-tailed)
Knowledge	CG	**66.4583**	192	15.48376	1.11744	0.000
	EG	**83.7500**	192	10.80527	.77980	
Level of Empathy	CG	**3.8700**	192	.71738	.051777	0.928
	EG	**3.8800**	192	.67954	.04904	
Attitude	CG	**2.2231**	192	1.19609	.08632	0.00
	EG	**1.8264**	192	.94340	.06808	
Subjective Norm	CG	**2.0234**	192	.73308	.05291	0.74
	EG	**2.0104**	192	.71942	.05192	
Behavior Intention	CG	**1.7500**	192	.85767	.06190	0.000
	EG	**1.2943**	192	.53478	.03859	

Scale: Differentiation between control group and experimental group for five items

Appendix E: Permission Letter- Yong Peng High School

Yong Peng High School (YPHS)

Jalan Sekolah Cina, Yong Peng

83700 Yong Peng, Johor, Malaysia

Date: 14/5/2018

Dear Dr/Sir/Madam

APPROVAL TO CONDUCT CYBERBULLYING RESEARCH

I, Tey Chin Fui, ,NRIC no 960624-01-5103 would like to seek your approval to conduct the research titled *"The Application of Theory of Reasoned Action in Cyberbullying Prevention Program"* at *"Yong Peng High School"*. This also serves as an assurance that our students will comply with requirements, rules and regulations of your esteemed school.

The name of students whom will participate in this program shall not be disclosed and our researchers will ensure that participant's wellbeing is prioritized throughout the whole program.

APPROVED BY

YONG PENG HIGH SCHOOL
Principal : Tey Kok Fu

Name

Designation :

Permission Letter- Confucian Private Secondary School

Confucian Private Secondary School

Lorong Hang Jebat

50150, Kuala Lumpur

Date: 27/6/2018

Dear Dr/Sir/Madam

APPROVAL TO CONDUCT CYBERBULLYING RESEARCH

I, Tey Chin Fui, NRIC no 960624-01-5103 together with my team Chin Pau Yee, Gina Wong Sie Suen, Lim Jie Wei and Shea Kher Yan would like to seek your approval to conduct the research titled *"The Application of Theory of Reasoned Action in Cyberbullying Prevention Program"* at *"Confucian Private Secondary School"*. This also serves as an assurance that our students will comply with requirements, rules and regulations of your esteemed school.

The name of students whom will participate in this program shall not be disclosed and our researchers will ensure that participant's wellbeing is prioritized throughout the whole program.

APPROVED BY

Name   : Teh Chui Lie

Designation : 教务处（教师助理）

Permission Letter- Westlake International School

Lot 18662, Jalan Universiti

Taman Bandar Barat

31900 Kampar

Perak, Malaysia

Date: 2/7/2018

Dear Dr/Sir/Madam

APPROVAL TO CONDUCT CYBERBULLYING RESEARCH

I, Tey Chin Fui, NRIC no 960624-01-5103 together with my team Chin Pau Yee, Gina Wong Sie Suen, Lim Jie Wei and Shea Kher Yan would like to seek your approval to conduct the research titled *"The Application of Theory of Reasoned Action in Cyberbullying Prevention Program"* at   *"Westlake International School"*. This also serves as an assurance that our students will comply with requirements, rules and regulations of your esteemed school.

The name of students whom will participate in this program shall not be disclosed and our researchers will ensure that participant's wellbeing is prioritized throughout the whole program.
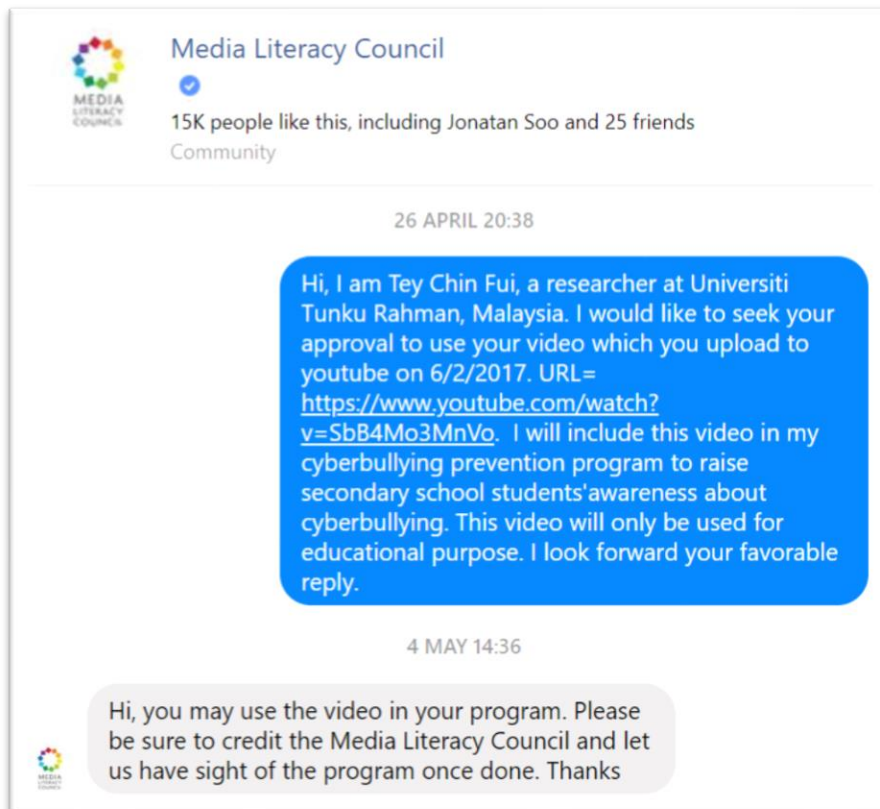
APPROVED BY

For Westlake International
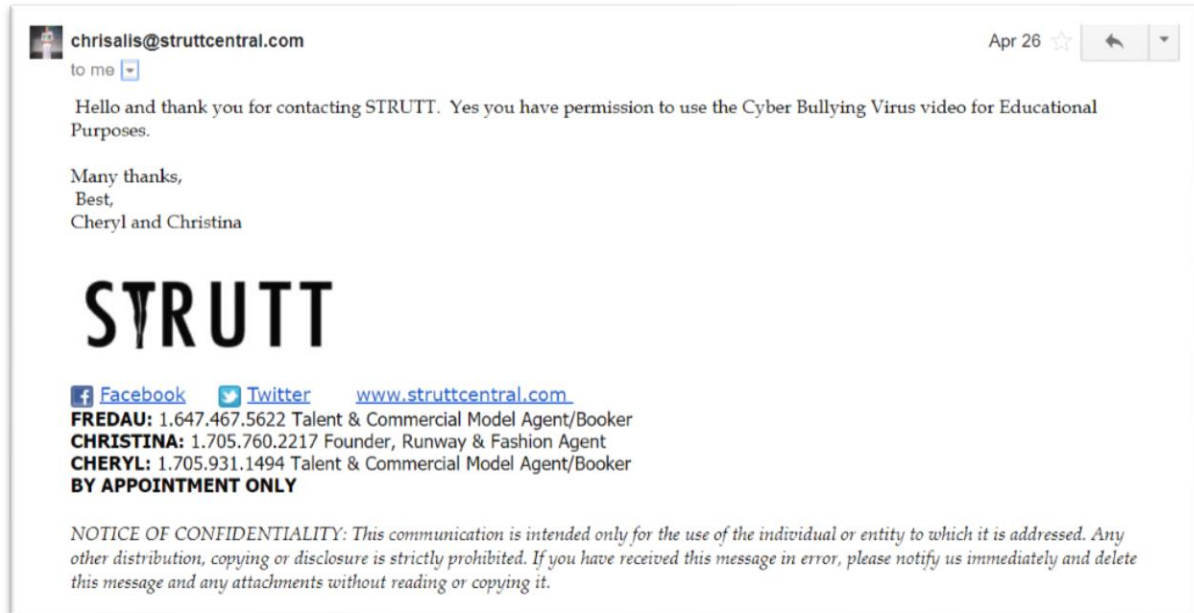School Only

Name   : Victor Lau

Designation : Head of Student Wellbeing

Appendix F: Permission for Using Cyberbullying Prevention Video

- Media Literacy Council Singapore

Permission for Using Cyberbullying Prevention Video- Strutt Central

chrisalis@struttcentral.com	Apr 26
to me	

 Hello and thank you for contacting STRUTT. Yes you have permission to use the Cyber Bullying Virus video for Educational Purposes.

Many thanks,
 Best,
Cheryl and Christina

STRUTT

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CHRISTINA: 1.705.760.2217 Founder, Runway & Fashion Agent
CHERYL: 1.705.931.1494 Talent & Commercial Model Agent/Booker
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Appendix G: Turnitin Report

The Application of Theory of Reasoned Action in Cyberbullying Prevention Program

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