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Relationship between Beliefs Underlying Attitude, Subjective Norm, Perceived Behavior Control and Cyberbullying Intention of Adolescents Among Secondary School Students in Selangor, Malaysia

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Abstract
Empirical research has recognized attitude towards cyberbullying, perceived norms, and risk perception as correlates of cyberbullying in adolescents. Moreover, study on relationships between attitudes, subjective norm, and perceive behavioral control, and cyberbullying are still at early stage especially among middle hood adolescents in Malaysia. Using the theory of planned behavior (TPB), this study investigated the linkages amongst beliefs underlying attitude, subjective norm, perceived behavior control and cyberbullying intention of adolescents which aims to contribute to the research field on cyberbullying. In total 1463 secondary school students at age 16, from 10 secondary schools across six districts in Selangor, Malaysia participated in the study, which using Attitude towards Cyberbullying Scale, Subjective Norm Scale, Perceived Behavioral Control Scale, and Intentions towards Cyberbullying Scale. Results showed that beliefs underlying attitude towards cyberbullying, subjective norms, and perceived behavioral control are significantly correlated to cyberbullying intention. However, there was no significant relationship between Information Communication Technologies (ICT) knowledge with cyberbullying intention. The findings may be useful in designing various prevention and intervention programs that aim at teaching adolescents ways to resist negative social pressure, change group norms when they are favoring cyberbullying as well as reducing the perceived acceptability of cyberbullying.
Keywords: Cyberbullying, Attitudes, Injunctive Norms, Descriptive Norms, Adolescents

Introduction
In the school context, school bullying is the most common type of deviant behavior that happened in the period of adolescence. However, as the information and communication technologies have been rapidly developed and have become widespread, bullying has taken on a new form or method which is from physical bullying to virtual form bullying (Ang, 2015; Peker, 2015). Information and communication technologies (ICT) have brought benefits to human life; however, it can be seen that excessive and uncontrolled use can cause several problems. The most significant problem is cyberbullying. Cyberbully is defined as "any

behavior performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive message intended to inflict harm or discomfort on others" (Tokunaga, 2010, p. 278). As compared with traditional bullying, cyberbully is another form of bully that uses an electric form of contact or digital communication technologies to harm others. There are many forms of cyberbully victimization which includes sending threatening or insulting message, e-mails, or images, uploading images or disseminating rumors that are cruel or harmful to a victim's reputation, infiltration of someone's online account in order to send messages that cause trouble for or endanger the victim, and recorded images or video of a person who is attacked or humiliated (Smith, 2012).

The rapid growth of the ICT today has turned cyberbullying into a common social problem in our society. There has been a steady increase in studies focusing on cyberbullying. Research has identified that students aged 13 to 18 have found out that almost 20% of the participants are cyberbully while 50% of them are victims (Raskuaskas & Stoltz, 2007). Furthermore, Peker (2015) found out that 17% of the sample study experience cyberbullying, 10.5% of the student bully other, and 35.2% of them are bully/victim. Meanwhile, according to CyberSecurity Malaysa (2013), 27% of students admitted to having been bullied online while 13% of students claimed that they were still being bullied online.

Victims and perpetrators of cyberbullying are at greater risk for experiencing several mental health problems including depressive symptoms, suicidal ideation and suicide attempt, anxiety, helplessness, lineless, sleep disturbances, and difficulties in maintaining concentration (Bauman et al., 2013; Bonanno & Hymel, 2013; Sampasa- Kanyinga et al., 2014; Faucher et al., 2014; Cassidy et al., 2017; Musharraf & Lewis, 2018). In addition, school-age victims tend to have low academic performance (Kowalski & Limber, 2007). Therefore, identification of risk factors and preventions for cyberbullying has become an important responsibility among the health professionals. Studies have to be conducted to investigate the factors that put the adolescent at risk to becoming perpetrators of cyberbullying. The findings of the study can be useful for interventions that can be implemented to cope with this problem.

Literature Reviews
Past studies on cyberbullying perpetration have mostly focused in terms of sociodemographic characteristics (e.g., age, gender; Wade & Beran, 2011), personality traits (e.g., self- control, narcissism; Pornari & Wood, 2010) and involvement in traditional bullying and cyberbullying (Smith et al., 2008). On the other hand, many studies documented aggression as indicator of cyberbullying behavior (Law et al., 2012; Ang et al., 2013; Chua et al., 2020). According to a study done by Chua and colleagues (2020) on 225 undergraduates in Malaysia found that individuals with high proactive aggressions tend to involve more in cyberbullying as compared individuals with reactive aggression. In general, individuals that have higher levels of proactive aggressive qualities are more likely to engage in extreme negative conduct in order to compensate and readjust their cognitive, physiological and psychological states (Song et al., 2019). Nevertheless, according to Tokunaga (2010), theory of planned behavior might be a favorable framework for explaining cyberbullying. More recently, the focus has been shifting toward the study to determine the behavior more directly. For instance, some researchers have explored the relationship between cyberbullying perpetration and attitudes

(Lee & Wu, 2018; Suriyabandara, 2017), perceived norms (Piccoli et al., 2020; Wright & Li, 2013), risk perception (Hinduja & Patchin, 2008).

Theory of Planned Behavior
According to the theory of planned behavior developed by Ajzen and Fishbein, human behavior helps to explain which influences affect an individual's involvement in specific behavior. There are three determinants of behavioral intention which are attitude, subjective norm, and perceived behavioral control (Ajzen, 2002). In order to identify the factors in providing behavioral intention to foster adolescents' cyberbullying behavior, attitudes, subjective norm, and perceive behavioral control are identified as key factors to promote adolescents' cyberbullying (e.g., Heirman & Walrave, 2012; Doane, Pearson, & Kelly, 2014; Pabian & Vandebosch, 2014).

The theory of planned behavior (TPB) has emerged as one of the most influential and popular conceptual frameworks for the study of human behavior (Ajzen, 2001). According to the TPB, human behavior is guided by a person's behavioral beliefs, normative beliefs, and control beliefs. These beliefs will result in produce favorable or unfavorable attitude toward the behavior and perceived social pressure of subjective norm as well as the perceived ease or difficulty of performing the behavior (Ajzen, 2002). In addition, the three TPB constructs, attitude toward the behavior, subjective norm, and perception of behavioral control will be combined to lead to the formation of a behavioral intention (Ajzen, 2002; Hierman & Walrave, 2012). Furthermore, intention is assumed to be the immediate antecedent of the behavior because the individual is expected to fulfill his or her intentions when there is sufficient degree of actual control over the behavior (Doane et al., 2014).

Attitude towards Cyberbullying
In TPB, attitude is referred to a person positively or negatively evaluates a behavior. A person will value the behavior with a positive attitude when the behavior is having desirable outcome. Conversely, a person will tend to have negative attitude towards the behavior when it will lead to negative outcome (Ajzen, 1991). Finally, the attitude will influent the intention to perform a certain behavior.
Past studies have explored the predictive value of attitudinal factors. For instance, Olweus (1993) found out that bullies often have more positive attitudes toward violence and low empathy towards their victims. A similar finding also revealed that the individual tends to behave aggressively is related to their justification about the aggressive behavior towards someone is deserves it (Bosworth et al., 1999). In the context of cyberbullying, Elledge and colleagues (2013) in their study found out that Finnish children were less likely to report having cyberbullied others when they have more positive attitudes toward victims. Furthermore, past study also found out that respondents scored on justification of violence scale is positive related to the respondents' perception about aggression as appropriate and their involvement as perpetrator in cyberbullying (Calvate et. al., 2010). In addition, invisibility identity in cyberbullying increases the chance for the perpetrator to continue bully other behind the screen. Barlett and Gentile (2012) indicated that respondents' attitudes towards anonymity and belief that everyone can cyberbully via technology, even physically weak can harm others have more favorable positive attitudes towards cyberbullying perpetration, which in turn predicted cyberbullying behavior.

Cyberbullying provides a range of positive and negative outcomes beliefs that might underlie adolescents' attitude towards cyberbullying. For instance, the adolescent belief that cyberbullying enhanced or reconfirmed their status in peer-group (Festl, Scharkow & Quandt, 2013), or to evoke positive feelings such as feeling funny, more powerful, and better than others (Mishna et al., 2010) might be regarded as positive outcome of cyberbullying. Similar to study conducted by Balakrishanan & Norman (2020) on 399 Malaysian young adults found that revenge, entertainment and empowerment to be main motives for cyberbullying behavior. On the other hand, the negative outcomes such as disapproval by peers and punishments by the parents and teacher, negative feeling such as feelings of guilt and knowing the victim is hurt will result in negative attitude towards the cyberbullying which in turn lower the intention to perform the behavior (Menesini, Nocentini & Camodeca, 2013; Perren & Gutzwiller-Helfenfinger, 2012).

Subjective Norm on Cyberbullying
The second construct of TPB, subjective norm is referred to a person's perception towards the social pressure whether to perform or not to perform the behavior (Ajzen, 1991). According to TPB theory, a person has more motivation to comply with the pressure exerted by the significant others when he or she thinks that the important others believe they should perform the behavior. Conversely, the more a person thinks that the significant others will react negatively towards the behavior, the less motivated the person will perform the disapproval behavior (Ajzen, 1991). Previous studies have examined the predictive value of subjective norm on behavioral intention (Hierman & Walrave, 2012; Pabian & Vandebosch, 2014). In Malaysia context, Jafarkarimi and colleagues (2017) apply theory of planned behavior to determine factors of cyberbullying among university students found that subjective norms have the highest effect on intention to cyberbullying, however, non-significant effect of attitude and perceived behavioral control on cyberbullying intention. In terms of traditional climates, studies have found out that children tend to act as perpetrator in bully when their friends sharing positive attitudes towards bullying (Espelage, Swearer, 2003; Fleming & Towey, 2002). In cyberbullying context, adolescents' intention to perform such behavior is also related to their normative belief towards the significant other's approval of cyberbully. For instance, adolescent who perceiving negative social pressure from significant others in their lives such as parent, teachers, and peers show less intention to engage in cyberbullying (Hierman & Walrave, 2012; William & Guerra, 2007).

More recently, the study of the perceived norm has been expanded to take both injunctive norms and descriptive norms into account. Injunctive norm is referred to the perceptions of other's approval or disapproval to perform the behavior. In the meantime, descriptive norms refer to a person's perception the significant other actually perform the behavior. Both injunction and descriptive norm are believed to influent contrarily the intention to perform the behavior. In the recent study done by Doane, Person and Kelly (2014), injunction norms on cyberbullying behavior were directly via cyberbullying intention, whereas descriptive norm has a direct effect on cyberbullying of malice and public humiliation. Specifically, perceiving one's peer as more likely to approve and to engage in cyberbullying was associated with one's report of engaging in cyberbullying.

Perceived Behavioral Control on Cyberbullying

A person's perception about the ease or difficulty of performing the behavior will affect the person choose to execute the behavior. Regarding cyberbullying, perpetrators perceiving that the anonymity offered by the internet and the lower risk of being caught play a facilitating role in cyberbully behavior (Kowalski & Limber, 2007; Law et al., 2012). The lack of direct, face-to-face contact causes people to feel less restrained about verbally and doing hurtful things towards the victim (Walrave & Heirman, 2010, p. 40). This is supported by research finding by Noh & Ibrahim (2014) on undergraduate students from University Malaysia Terengganu indicated that students be susceptible to perform cyberbully than traditional bullies because they think the Internet protect them from anonymity which they are invisible. In the virtual world, the bullies can remove the concerns of being caught and socially punished. Furthermore, Aricak and colleagues (2008) stated that the anonymity provided by the internet or ICT can serve to reduce self- awareness resulting in deindividuation which in turn will weaken the person's ability to regulate their behavior and lower the likelihood of caring about other's approval or disapproval their behavior. Subsequently, it leads them to react impulsively and aggressively to other individuals online.

A person will be likely to engage in cyberbullying is due to the lack of boundaries of time and place for potential bullies to reach their targets (Kowalski & Limber, 2007). Technology provides a perfect medium for bullies to bully their victims. As compared to traditional bullying, cyberbullying is 24/7- attainable by digital media in every place. Therefore, the bullies can cyberbully others at any place and anytime they think is necessary. Consequently, adolescents who perceived cyberbullying as easy to perform will show higher intention to perform it.

Cyberbullying among adolescents is a significant concern in Malaysia. According to a statistic by The United Nations Children's Fund (UNICEF) in 2018, three out of ten Malaysian youngsters had been victims of cyberbullies. The finding also shows that Malaysia is the second-highest country in Asia for cyberbullying among adolescents. Furthermore, a study reported that more than 53% of Malaysian teenagers have moderate to high tendencies of becoming cyberbullies (Yuen, Lim & Say, 2018). Despite cyberbullying among adolescents is overgrowing in Malaysia, unfortunately, majority of the available studies on cyberbullying have mainly focused on undergraduate students in Malaysia (Noh & Ibrahim, 2014; Balakrishanan & Norman, 2020; Chua et al., 2020). Only a handful of studies that focused on middle school-age adolescents in Malaysian context (Bakar, 2014; Sivabalan, Zaki & Choo, 2020), haven't extensively used the theory of planned behavior in investigating the factors which drive adolescents towards cyberbullying behavior. Moreover, examinations of relationships among attitudes, subjective norms, and perceived behavioral control, and cyberbullying of adolescents are still at an early stage, especially in Asian countries. Given the fact that understanding cyberbullying is influenced by cultural differences and perceptions (Scheithauer, Smith, & Samara, 2016), it is believed necessary to conduct studies within Malaysia, an Asian country, to expend researchers' understanding on cyberbullying of adolescent in Malaysia. Hence, this research intends to narrow down the existing gap by engaging in quantitative analysis to investigate the relationship between beliefs underlying the attitude, subjective norm, perceived behavior control and cyberbullying intention of adolescents among secondary school students in Selangor, Malaysia.

Method

Participants and Procedure

A total of 1464 school-going adolescents from ten public Malaysian secondary schools in Selangor Darul Ehsan were involved in this study. The participants involving students from forms three, four and five (with age 15, 16, and 17). According to the statistic revealed by Malaysia Communications and Multimedia Commission (MCMC), percentage distribution of internet users of age below 15 is 0.4% and age 15 to 19 is 9.3%. Hence, Form Three, Form Four, and Form Five secondary students with age 15, 16, and 17 were selected as the subjects in this research. However, there is restriction from Ministry of Education Malaysia to involve Form Three and Five students in research because these students need to focus on their national examination. Therefore, only Form four students will be selected as target population in this research. Furthermore, statistical report from MCMC indicated that Selangor is the most populated state in the country and most of the internet user is proportionate to the population distribution in Selangor (20.9%) in year 2016. Therefore, it is necessary to conduct research in this state. Probability Proportional to Size cluster sampling was used to recruit the participants from ten public Malaysian secondary schools across six districts in Selangor: Kuala Selangor, Gombak, Hulu Selangor, Klang, Hulu Langat and Petaling. A total of 150 participants from each school were involved in the study to achieve the target population.

A quantitative approach using a self-administered questionnaire was adopted by using cross-sectional method. Before the survey was administered, permission to conduct the research in government secondary school from Education Planning and research Development (EPRD), Ministry of Education Malaysia and Department of State Education, Selangor were obtained. Students filled in the questionnaire during school time in their school in the presence of a researcher and class teacher. Prior answering the questionnaire, students were are to read and sign the informed consent form. Students were assured verbally and in writing that their responses were anonymous and confidential. Given the fact in Malaysia, school authorities such as principals and teachers are the proxy for student's matters, hence permission from school authorities to conduct the study among students in schools was sufficient. Each respondent will be given a token of appreciation after they return their questionnaire.

Instruments

All of the TPB- items were assessed using five- point Likert- scales with item responses ranging from 1 (strongly disagree) to 5 (strongly agree), as described below. Malay language is the national language of Malaysia; therefore, the instruments were prepared in Malay language. All instruments utilized in this study underwent thorough back- to- back translation processes to translate measures from English to Malay. The instruments were sent for review by UPM Centre for Advancement of Language Competence (CALC) and a psychology expert who is well versed in English and Malay.

Intention to cyberbully. Cyberbullying intention was measured using the two items Intention to Cyberbullying Scale (Pabian & Vandebosh, 2014). An example of the item is "I intend to bully someone via the internet or mobile phone in the next six months"). On this scale, a higher score indicates higher level of intention towards cyberbullying. The scale consists of Cronbach's alpha .74 (*M*= 3.14, *SD*= 1.45).

Attitude. Attitude towards cyberbullying intention was measured with belief on positive and negative outcomes of cyberbullying by using Attitude towards Cyberbullying Scale (Pabian & Vandebosh, 2014). The scale consists of 13 items with nine items were measure the possible positive outcome of cyberbullying and four items measured the possible negative outcome of cyberbullying. Peer group benefits, emotional release, defencing yourself and low chance of being caught were regarded as possible positive outcomes of cyberbullying. Peer group benefit was assessed with four items, emotional release was measured with two items, defending yourself after being bullied was measure with one item and low chance of being caught was assessed with two items. On the other hand, dealing with moral feelings and being disliked by peers were measured as possible negative outcomes of cyberbullying. Moral feelings such as making victim feel bad, feeling regret and feeling bad for the victim were measured by three items and being disliked by peers was measure by one item. All the subscales demonstrated Cronbach's alpha ranged from 0.40 to 0.64.

Subjective norm. Subjective norms towards cyberbullying scales consist of 10 items which consist of three subscales: injunctive norm, descriptive norm and social pressure (Pabian & Vandebosh, 2014). Five items were used to assess injunctive norm (α=.51, *M*= 10.56, *SD*=3.41). An example of injunctive norm item is "My friends would find it ok if I would bully someone via the internet or mobile phone". In order to measured descriptive norm, two items were assessed (α=.66, *M*= 5.25, *SD*=2.13). Three items were assessed in social pressure subscale (α=.57, *M*= 6.13, *SD*=2.45), e.g., "It is hard not to bully via the internet or mobile phone if others do it too".

Perceived behavioural control. The seven items Perceived Behavioural Control scale was used to measure perceived behavioural control to cyberbully others (Pabian & Vandebosh, 2014). The scale consists of two subscales: Features of the ICT environment (five items) and ICT knowledge (two items). This scale has good reliability, with Cronbach's alpha 0.82 for the entire scale and 0.83 for the features of the ICT environment and 0.64 for the ICT knowledge subscales (Pabian & Vandebosch, 2014).

Data Analysis
Inferential analysis was performed for the inferential purpose. An inferential analysis is the data analysis technique for determining how likely the result obtained from the sample are similar to result that would have been obtained for the entire population (Fraenkel, Wallen, & Hyun, 2012). Inferential analysis was used to answer the research hypotheses. Inferential statistics such as correlation analysis was used to investigate the relationship between the variables studied in this research. The collected data were analyzed using SPSS 22.

Results and Discussion
Tables 1, 2 and 3 presents the correlations between the main study variables. The study hypothesized that there will be a significant relationship between beliefs underlying the attitude (positive and negative outcomes) and cyberbullying intention among secondary school students in Selangor, Malaysia. As shown in Table 1, positive outcome belief underlies adolescents' attitude towards cyberbullying indicated a significant weak positive relationship between cyberbullying intention: peer group benefit (*r*= .398, p<0.01), emotional release (*r*=.435, p<0.01), defending yourself (*r*=.189, p<0.01), and low chance of being caught (*r*=.153, p<0.01). The positive correlation means as positive outcome belief increase, adolescents'

positive attitude towards cyberbullying intention increases which in turn increase the cyberbullying behaviour. Emotional release is among the variables that showed the strongest positive significant relationship between cyberbullying intentions. This finding indicated that positive attitude towards cyberbullying intention is influenced by the adolescent's perception of cyberbullying as one of the methods to vent their negative feelings. Previous studies have found that the motive of youth cyberbully others is to revenge (König, Gollwitzer & Steffgen, 2010; Hinduja & Patchin, 2009). According to Fiske & Morling (1996), the more power someone perceived in the interaction with a powerful other, the more anxiety is experienced and lost some form of control. The sense of powerlessness facing by a bully could therefore restore the sense of control by engaging in cyberbullying (König, Gollwitzer & Steffgen, 2010). The venting of anger and restoring a sense of control can be realized by cyberbullying anyone might become relevant, especially among adolescents with poor emotion regulation coping skills which in turn contribute to positive attitude towards cyberbullying. Furthermore, Moral feeling (r=-.285, p<0.01) and being disliked by peers (r=-.301, p<0.01) are significant negatively related to the cyberbullying intention. These results are congruent with the findings demonstrating the protective effect such as feeling of guilt and knowing the victim is hurt on perpetration (Perren & Gutzwiller- Helfenfinger, 2012). Therefore, the more negative outcomes belief, the more negative attitude towards cyberbullying intention.

Table 1: Correlation coefficient between belief underlying attitudes and cyberbullying intention.

Variables	Correlation coefficient Cyberbullying Intention	Significance
Peer group benefits	.398**	0.01
Emotional release	.435**	0.01
Defending yourself	.189**	0.01
Low chance of being caught	.153**	0.01
Moral Feeling	-.285**	0.01
Being disliked by peers	-.301**	0.01

Notes: **Correlation is significant at the 0.01 level (2- tailed).

Advantages and disadvantages related to peers (i.e., peer group benefit and being disliked by peers), also have a weak significant relationship with cyberbullying intention. However, the importance of peers becomes clearer when considering the belief underline subjective norm. The study hypothesized that there will be a significant relationship between beliefs underlying the subjective norm (injunctive norm, descriptive norm and social pressure) and cyberbullying intention. As shown in table 2, the result indicated that there is positively weak correlation between injunctive norm (r=.411, p<0.01), descriptive norm (r= .343, p<0.01) and social pressure (r=.370, p<0.01). The relationship occurs between injunctive norm and descriptive norm with cyberbullying intention influenced by the perception approval of cyberbullying by peers (injunctive norm) and knowing peers cyberbullying other (descriptive norm point to the fact that peers are influential reference group towards the adolescent. The peer's approval and bystander (peers) behaviour encouraging others to engage in bullying behaviour and believing the behaviour is morally acceptable (William & Guerra, 2007). Peers playing an important role in bringing impact on behaviour of adolescences (Prinstein, Brechwald & Choen, 2011). Presumably because adolescence years is the period when a youth spends a

substantial amount of their time with friends and also the time when most youth interactions occur in groups (Steinberg & Monahan, 2007).

Table 2: Correlation coefficient between belief underlying subjective norm and cyberbullying intention.

Variables	Correlation coefficient Cyberbullying Intention	Significance
Injunctive norm	.411**	0.01
Descriptive norm	.343**	0.01
Social Pressure	.370**	0.01

Notes: **Correlation is significant at the 0.01 level (2- tailed).

In addition, the study also hypothesized that there is a significant relationship between beliefs underlying the perceived behavioral control (ICT features and ICT knowledge) and cyberbullying intention. Results revealed that there is a significant positive relationship between features of the ICT environment (r=.313, $p<0.01$) and cyberbullying intention. ICT features is positively related to the intention to perform cyberbullying, suggests that students think it is easy to perform cyberbullying and due to the anonymity, that they are invisible, which remove the concerns of being caught and punished (Heirman & Walrave, 2012; Law et al., 2012). Nevertheless, result demonstrated that ICT knowledge is not significant correlated with cyberbullying intention as shown in table 3. This result contradicts the study by Savage and Tokunaga (2017) argued that high levels of internet efficacy necessary to enact cyberbullying perpetration and to have experience with deviant internet and mobile phone activities. As compared to novice or inexperienced internet users, cyberbully perpetrators feel confident in their internet skills to produce the desired outcome of eliciting hurt or embarrassment through electronic or digital technologies (Savage & Tokunaga, 2017). Cyberbully perpetrator using their online expertise to conceal their identities, and remove digital footprints of their negative online behavior (Musharraf et al., 2019).

Table 3: Correlation coefficient between belief underlying perceived behavioral control and cyberbullying intention.

Variables	Correlation coefficient Cyberbullying Intention	Significance
ICT Features	.313**	0.01
ICT Knowledge	.0.35	0.01

Notes: **Correlation is significant at the 0.01 level (2- tailed).

Implication and Recommendations of the Study
The present study provides several implications. Firstly, this study further enhanced the understanding of adolescent's cyberbullying behaviour in Malaysia, a non- western context. This study also provides insights on how attitudes towards cyberbullying, subjective norms, and perceived behavioural control contributed to cyberbullying intention among adolescents in a single study.

As the rapid growth of the ICT world and online environment provide benefits to human life, it also creates a new stimulus that influences adolescents' behaviour. Therefore, it reasonably to target TPB constructs in cyberbullying intervention programs in an effort to reduce cyberbullying behaviour. By referring to the results obtained in this study, a comprehensive intervention programs can be carried out in schools and communities with the aim of educating the high- risk group of cyberbullying: adolescents to enhance well- being of adolescents in Selangor. School counselors, psychologists, and social workers should lunch and carry out intervention programs to create awareness among school- going adolescents. For intervention programs, it is important to teach adolescents emotional coping skills, teaching adolescents' ways to resist negative peer pressure, and use positive peers as role models or educators in anti- cyberbullying campaigns in school. In addition, intervention programs could be extended via the help of non- government organizations to maximize the impact of the programs.

The current study also has its shortcoming which might open opportunities for future research. The current study only adopted TPB constructs in assessed cyberbullying intention. Given that it seems there would be other variables that predict the cyberbullying behaviour. Future study can be expended nationwide and combined with qualitative studies to obtain more in-depth knowledge on cyberbullying among adolescents in Malaysia.

Conclusion

This study using the theory of planned behavior (TPB) to investigate the linkages amongst beliefs underlying attitude, subjective norm, perceived behavioral control and cyberbullying intention. In conclusion, understandings of the relationship among the TPB constructs, respectively, attitude, subjective norm and perceived behavioural and cyberbullying intention among adolescents in Malaysia were successfully gained through this present study. Results suggested that attitude, subjective norm, and perceived behavioural control might play a role in determining the cyberbullying behaviour.

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