

# Cyber-delinquency of Thai Students and Creating Knowledge and Raising Awareness of Cybercrime for Thai Educational Institutions

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## ABSTRACT

The exploratory study aims to find out cyber-delinquency and victimization from Thai youth as well as establishment a model of knowledge and raising of cybercrime prevention. The research carried out with 105 key informants by in-depth interview. The samples were educational personnel, parents, students who study in secondary education, experts who have experience about juvenile cyber-delinquency. The notable finding show that Thai youth currently commit cybercrime in a form of cyberbullying and the severity of crime is low-level. Essentially, culture difference, insufficiency in internet access and lack of digital devices frustrate Thai youth in committing serious cybercrime. Also, the result clearly indicated that poverty associate with cyber victimization like online shopping fraud. It recommends that creating knowledge and raising awareness of cybercrime prevention is not only responsible by school and parent, but also collaboration from all sectors such as private and public sectors, stakeholders, and community

## Keywords

Cybercrime; Thai students, Children and Youth, Cybercrime Prevention, Educational Institutions

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## Introduction

The advancement of technology and the internet contribute to motivating and driving economic, political, and social development (Chienwattanasook & Jermsittiparsert, 2019; Wisedsin, Jermsittiparsert, Thitart, & Aunyawong, 2020). The internet takes part in rapidly driving and developing economy, politics, and society (Sutduean, Sutduean, & Jermsittiparsert, 2019) but at the same time, it is also used to commit crimes in a new form called cybercrime. Cybercrime is a crime using the internet to harm a victim such as hacking, online or e-commerce fraud, extortion, child pornography, money laundering (Chinathiwon, 2019). The offenders and victims of cybercrime are not only adults, but children and youth can also be cybercrime victims and offenders. According to the survey, youth in Europe increasingly involve in cybercrime by starting from cheating on computer games to serious cybercrimes such as hacking, financial crime, and serious crimes (Goldson, 2019). Furthermore, the report of cybercrime from the statistical institution and researches on the crime of Australia stated that cybercrime committed by people under the age of 18 has increased by 26% in the past two years, and 84% in the past three years (Harris, 2015). Especially, youth who have IT-literate are committing more crime from money laundering for criminal gangs to hacking, Remote Access Trojans (RATs), encoding and using those data for blackmail, and kidnapping to financial fraud (Aiken, Davidson & Amann, 2016).

For Thailand, the survey of internet users of the National Statistical Office of Thailand from 2017 to 2018 showed that the youth population of aged 6-24 who use the internet has increased and tended to consistently increase (National Statistical Office, 2019). Additionally, the phenomenon occurring in Thai society shows that most youth still possess-behaviors of misusing the internet or being ignorant (Wonganantnont, 2014). Moreover, youth is also at risk of being victimized by criminals on the online media, for example, being deceived by using the internet or problem of personal information being violated (Electronic Transactions Development Agency, 2020).

According to the aforementioned problem, this is due partly to lacking process to develop an immunity, awareness as well as knowledge to youth for appropriately using technology, and prevention of cybercrime. Besides, most prior studies mainly carried out in cyberbullying and there is no research investigating for causes and types of cybercrime by Thai youth. The researcher, therefore, has realized the importance of cybercrime by youth in Thai schools and results in the development of suggestions and guidelines to prevent cybercrime for Thai youth and educational institution, which are appropriate and consistent with contexts of Thai society. This can encourage Thai youth to potentially grow up in society and to be able to develop the country.

## Literature Review

### Definition and Classification of Cybercrime

Cybercrime refers to criminal acts that intentionally defame or physically or mentally abuse a victim both direct and indirect by using computers or modern telecommunication networks such as the internet (chat room, email, board, and news) and mobile phone (SMS/MMS) (Chinathiwon, 2019). Cybercrime based on criminology and criminal law can be divided into 4 types as follows:

- Cyber trespass – using technology, internet, and computer programs to enter the user's computer without permission such as hacking, defacement, and viruses (Srisawang, 2015).
- Cyber deception and theft – using technology and the internet to illegally acquire data and resources that the offenders will use acquired data and resources to damage the victim such as stealing the data from credit card, copyright infringement, online /e-commerce fraud (Srisawang, 2015).
- Cyber pornography – using technology and the internet in violating laws regarding pornographic media and appropriateness (Srisawang, 2015).
- Cyber violence – using technology and the internet to psychologically harm or cause physical harm to others. Therefore, this is a violation of laws regarding personal protection (Srisawang, 2015).

### Theory Related Juvenile Delinquency in Cybercrime

#### Social bond theory

Hirschi's Social Bonding Theory concludes that a person who has strong bond in attachment, commitment, involvement and belief, tends not to commit a crime (Khantee, 2015). Therefore, youth who have social bond such as school attachment, parental attachment, and involvement of school activities, as well as parental involvement are less likely to possess deviant behaviours leading to commit an offense since attachment, commitment, involvement, and belief are morally right (Back, Soor & LaPrade, 2018; Phuwachaijirapath, Sahapattana & Chotchakornpant, 2018).

#### Self-control theory

The Self-Control Theory of Gottfredson and Hirschi (1990) describes individuals' differences regarding the ability of self-restraint and or self-control not to have deviant behaviors which include every type of crime and every environment (Phuwachaijirapath, Sahapattana & Chotchakornpant, 2018). A person who has high self-control has a relatively low tendency to involve in a crime or being deviant and commit a crime (Gottfredson and Hirschi, 1990). At the same time, a person who has low self-control is more likely to involve or has deviant behaviour and commit a crime (Back, Soor, LaPrade, 2018; Lee & Holt, 2020). Accordingly, self-control is the deterrence of a person from involving in a crime or being deviant, which leads to committing a crime that parents are a key for

building self-control to children (Phuwachaijirapath, Sahapattana & Chotchakornpant, 2018).

### Socialization Theories

Socialization which states that socialization is direct and indirect learning process. Direct learning process is to directly educate or tell; for example, a family educates their children to let them behave under discipline. For indirect learning process, the way that a person has learned through various ways unintentionally or unconsciously but such person has experienced or benefited by observation; for example, learning from friends to develop one's own personality in order to be accepted by society (Supap, 1995). If each person has been well socialized that is family, school, and community instilling discipline as well as the way to behave with decorum to others who are related, such person will grow up to be potential and accepted in society.

### Previous Studies Related Juvenile Delinquency in Cybercrime

According to the survey of the research center regarding cybercrime of the United States that studied on cybercrime, especially in school, most students aged 12-17 years have experienced cybercrime at least 1 time (Hinduja & Patchin, 2016). In addition to hacking, juvenile cybercrimes in the United States begin with minor to serious crime including cyberbullying, digital privacy, pornography, cyber trespass (Shinder, 2012).

For the research in Europe, recently, about one-sixth of youth in the United States and one-fourth of youth in the United Kingdom tried to hack into the data by using the internet (Aiken, Davidson & Amann, 2016). Furthermore, it found that cybercrime committed by people under the age of 18 years in Australia has increased, especially online or electronic commerce fraud, impersonating a victim's personal information (Harris, 2015), illegal download copyright and hacking (Brewer, Cale, Goldsmith & Holt, 2018). Youth are not only cybercrime offenders but also victims. Most youth are victimized by cybercrime in a form of seduction through online media for sexual purposes (Djanggih & Oamar, 2018; Royal Canadian Mounted Police, 2019) such as using the internet for producing and distributing child pornography, and encouraging children to exchange pornography (Huang, Leopard & Brockman, 2009). In addition to being a victim of sexual purposes, more than half of students in Europe and the United States are victimized by cyberbullying (Farrington & Sorrentino, 2016; McQuade & Neel Sampat, 2008 as cited in Lewis; Shinder, 2012).

Not only Europe and the United States, youth in developing countries such as South Asia also have a problem of cybercrimes and being victimized by using social media. Youth in age between 19 – 21 years have experienced the problem of posting inappropriate messages through online media, sharing fake news and being victimized by criminals in the manner of fraud case and sexual case (Kalaivani & Kumar, 2017; Kamruzzaman, Islam, A., Islam, S., Hossain & Hakim, 2016).

In Thailand, there are a few pieces of research on cybercrime and they mainly focus on cyberbullying. Currently, Thailand also ranked the top 5 of the world most cyberbullying (Aroundonline, 2019). The research on cyberbullying indicated that more than one-third of Thai youth used to bully their friends through the internet (Tantatipanit, 2019). The patterns of cyberbullying are to defame a victim through Facebook or Line application, and other social media in order to cause humiliation and damage by spreading videos and short clips (Aroundonline, 2019). The example of inappropriate content may be pornographic videos or videos which contain a picture of a victim being abused, gossiping or insulting, defaming, negative impersonation, exposing others' secret which is personal information, and deleting or blocking others on the cyber world (Aroundonline, 2019; Sittichai & Tudkuea, 2017). Besides, the research also indicated that almost half of Thai youth are victimized by cyberbullying (Boonoon, 2010 as cited in Sittichai & Smith, 2013; Norling, 2016; Sittichai & Smith, 2018; Tanta-hatipanit, 2019).

### Cybercrime Prevention for Youth

Current researches on cybercrime prevention of youth more focus on providing knowledge to raise awareness and the knowledge of illegal internet contents and cybercrime (Aiken, Davidson & Amann, 2016). School is a major factor in establishing integrative learning programs and activities to raise awareness on cybercrime for juveniles, teachers, as well as parents (Aiken, Davidson & Amann, 2016). Moreover, Amosun & Ige (2013) found that the project of cybercrime prevention in school is able to build new values and attitudes to students well. Students will learn about the dangers of cybercrime and not commit crimes. In addition, improving the law of internet users and the development of programs in cybercrime prevention for young generation is another important tool to reduce juvenile cybercrime (Erzin & Alistratova, 2018).

### Methodology

This is qualitative research and data was from two sources. Primarily source was gathered from textbooks, academic documentary, academic articles, journals, dissertation, thesis and internet in order to obtain correct data that cover objectives of the research. Secondary data was collected by in-depth interview and focus group.

About in-depth interview, purposive sampling was employed to select key informants because samples must have experience in cybercrime prevention. The group of in-depth interviews had 90 key informants, which came from three schools in Bangkok Metropolitan. Three schools were School A: Opportunity expansion co-ed public school; School B: Co-ed private school; and School C: Sigel-sex private school. The key informants comprised of school principals, teachers, parents or guardians and students who were in Year 7-12 who used to involve participate activities in cybercrime prevention. Regard with focus groups, collecting data was groups of personnel or groups of experts who had knowledge and experience in cybercrime at least 3 years. These groups were from Technology Crime

Suppression Division under the Royal Thai Police, Ministry of Digital Economy and Society and Ministry of Education. The total number was 15 experts.

In-depth interview was employed to collect data. After gathering data from textbooks, academic documentary, academic articles, journals, dissertation, thesis and internet, the researcher then built questions that cover patterns of cybercrime as well as ways to creating a model of knowledge and raising awareness of cybercrime for Thai juveniles and schools. The questions were a tool to collect data from the key informants through in-depth interview. Data from in-depth interview and focus group was analysed. The data would be then presented in descriptive research as well as comparison the significant finding.

### Result

According to the study of focus group and group discussion of the experts, cybercrime and victimization of cybercrime in Thai schools can be summarized as 4 issues as follows:

#### Committing of Cyber Violence and Cyber Bullying

The study shows that the most common cyber violence is spreading and forwarding inappropriate information through online media, for example, writing insulting messages, recording violent pictures and spreading through social media, capturing pornography pictures and spreading them through social media. There is also bullying through social media by referring or posting to insult a victim with satiric or vulgar messages through Facebook or Line to cause them shame. Male students are more likely to commit cyber violence than female students

#### Cybercrime victimization

According to data collection, the findings indicated that a number of Thai youths has been deceived through social media for pornographic and sexual purposes. The methods are that use psychology to seduce and meet a victim for sexually assaulting and raping as well as taking pictures and videos for negotiating and forcing a victim to meet again. If a victim refuses, they will be intimidated by publicizing recorded pictures or videos through social media. In addition to deception for a sexual purpose, Thai youths have also been impersonated by others on online media. Scammers fake a victim's profile on social media and use it for soliciting.

Thai youths have also been victimized by online shopping fraud. A customer will be persuaded to buy products by getting promotions to discount prices. After ordering and getting products, the products become counterfeit, low quality, and do not meet the standards. Another type of online shopping fraud is that a customer does not receive products after online ordering. Regarding online shopping fraud, female students are found to be a victim more than male students since most women favor buying skincare products or clothes online. In the past, the case of victimization of online shopping fraud was not much found in Thai children and youth. However, it begins to increase from the past that is consistent with the TSCD of the Royal

Thai Police by stating that being victimized by online fraud in Thailand increase significantly (Ngamkham, 2017)

### **Differences in Financial Status, Family and School Context Related Cybercrime**

The findings indicated that differences in financial status, family context, and school context related cybercrime of Thai children and youth. The apparent example is that school A which is an educational opportunity expansion school is more likely to commit cybercrime than school B which is a private school. Since most families of school A's students are poor and earn living as a general employee, parents of the students spend most of their time earning a living to support their family. Consequently, the parents have no time to closely take care of and cultivate their children. Besides, some parents do not have a chance to study or are less educated, therefore the parents have no academic knowledge to educate their children to appropriately and accurately use modern technology. Accordingly, the parents are unable to properly educate their children that cause children and youth to negligently commit offenses under the Computer-related Crime Act. The aforementioned contexts are different from students of school B which is a private school located in an urban area. The parents of this group have a steady job and financial security, and they are also highly educated. For this reason, they have no financial pressure, and therefore, have enough time to closely educate their children and give advice on how to use technology correctly. Additionally, they are able to systemically practice their children's critical thinking. These factors are important to these children and youth to less commit offense and to be victimized less than children and youth whose parents have no time to closely take care of their children.

In addition, the interesting point is that most students of school A which is an educational opportunity expansion school are poor, therefore they focus on supplementing their income by online selling to financially support their family. These students use social media such as Facebook and Line for dealing. Accordingly, these students are deceived by criminals with impersonating a middleman to deceive students who are interested in such products to transfer money for receiving the products to resell, yet the products are not delivered when the money has been transferred. This is different from students of School B which is a private school that does not have much problem of being a victim of online/e-commerce fraud since parents of students of a private school have stable financial status. As a result, students of a private school must not supplement income to support their family such as students of school A which is an educational opportunity expansion school.

### **Process in Creating Knowledge and Awareness in Prevention of Cybercrime for Thai Schools**

For the process in creating knowledge and awareness in the prevention of cybercrime for Thai schools, most schools create knowledge and awareness in the prevention of cybercrime to students through computer courses or information technology courses according to the compulsory

curriculum of the ministry of education by the teachers who play a significant role to convey knowledge. The teaching contents mainly focus on the development of computer skills. Regarding the prevention of cybercrime, this knowledge will be contained as one lesson in a course. This clearly reflects that schools still focus on teaching students to be able to use information technology. The researcher has collected the data of the process in creating knowledge and awareness in the prevention of cybercrime for schools to suit contexts of Thai society and to be effective. The findings show that people who play a key role in creating knowledge and awareness in cybercrime prevention to children and youth are government agencies, schools, educational personnel, and family.

The government agencies which are responsible for creating knowledge and awareness in the prevention of cybercrime for Thai schools are the Office of the Basic Education Commission and the Ministry of Digital Economy and Society. The Office of the Basic Education Commission has a mission to set the system of education, curriculum, and development of personnel which is the teacher to be knowledgeable and prepare for cybercrime prevention knowledge, use of modern information technology tools, and include matters of the Computer-related Crime Act into the curriculum. The Ministry of Digital Economy and Society is also responsible for information technology to help and support the Office of the Basic Education Commission in training to consistently enhance knowledge of the use of modern information technology tools, prevention of cybercrime for schools and personnel in the school, and organization of campaigns and activities in providing knowledge of the use of modern information technology tools, cybercrime, and prevention for children and youth to participate and to obtain knowledge outside the classroom.

In addition to set the policy by the government, the school, school principal, and teachers are major factors in raising awareness and knowledge of the prevention of cybercrime to students in school. The school, executives, and teachers have a mutual mission to search for approaches to include the knowledge through the process of participating in school activities so that students have the opportunity to learn above general textbooks. The methods to create knowledge through school activities can be showing short movies or videos, prize winning game, or radio programs, reading news.

Another important factor of the process in creating knowledge and awareness in the prevention of cybercrime for children and youth is that parents should have knowledge of using modern technology, cybercrime, and cybercrime prevention to be able to provide accurate knowledge and advice for children. Schools and educational personal in such areas have a mission to help and support in providing knowledge to parents by holding parent meeting to publicize knowledge creation and parents' networks to cooperate in monitoring cybercrime problem in school.

## **Discussion**

The result confirms that committing and victimization of cybercrime by Thai youth correlate highly with social bond,



self-control and socialization. The group of Thai youths with strong attachment with parent has low rate in cybercrime and cyber victim. This is because they have received good parenting and supervising, good socialization as well as good advice, as a result, they could have thoughtful thinking and can increase good self-control (Gottfredson and Hirschi, 1990; Phuwachaijirapath, Sahapattana & Chotchakornpant, 2018), that prevent to commit cybercrime or being cyber victim. The aforesaid finding is also consistent with the previous studies that conducted by Western nations. Those researches said that the great of social bond possibly prevent young generation from cybercrime (Back, Soor & LaPrade, 2018; Phuwachaijirapath, Sahapattana & Chotchakornpant, 2018) and high self-control can reduce committing cybercrime and cyber victim (Back, Soor & LaPrade, 2018; Gottfredson and Hirschi, 1990; Lee & Holt, 2020; Supap, 1995). In contrast, the group of Thai youths who is weak attachment has inappropriate behaviours and bullies in cyber world as well as they are victims such as online impersonation, online shopping fraud and cyber pornography. Hence, it can note that weak social bond, low self-control and bad socialization correspond with committing and victimization of cybercrime by Thai youth.

Although the result corresponds with previous works, however, some findings are different from preliminary studies as well. It found that Western nations and Thailand is slightly different in case of cyber victimization. Youths in Western states were mainly victim in cyber bullying (Baldry, Farrington & Sorrentino, 2016; McQuade & Neel Sapat, 2008 as cited in Lewis, Miller, & Buchalter, 2009; Shinder, 2012) and cyber porn (Djanggih & Oamar, 2018; Huang, Leopard & Brockman, 2009; Lewis, Miller & Buchalter, 2009; Royal Canadian Mounted Police, 2019). Unlike Thailand, youths were victim in cyber bullying (Norling, 2016; Sittichai & Smith, 2018; Tanta-atipanit, 2019) cyber porn (Tehrani, 2015) and online shopping fraud. Currently, the victim in online shopping fraud by Thai youth has risen (Ngamkham, 2017). Financial demand to support family is a main reason that lead Thai juvenile to be victim in online shopping fraud. This obviously indicates that poverty is association with cyber victim and reveals that poverty does not only correspond with committing cybercrime (Adesina, 2017; Aiken, Davidson & Amann, 2016) but also connection with cyber victim as well.

The striking difference between Western nations and Thailand is cybercrime classification and crime severity level. Western youth committed various class of cybercrime such hacking, cyber deception and theft, cyber pornography and cyber violence like cyber bullying (Aiken, Davidson & Amann, 2016; Shinder, 2012) and crime severity began from low level to serious crime (Goldson, 2019). Opposingly, cybercrime by Thai youth emerges in a form of cyber violence like cyberbullying and crime severity appears low level (Tehrani, 2015). The important reason that prevents Thai youth to commit serious cybercrime could be culture difference (Bort, 2017; Schwertfeger & Zimring, 2013; Swayne, 2017), insufficiency in internet access and lack of digital devices.

Culture difference may be a main reason that prevent Thai youth in committing serious cybercrime and high level of

crime severity. Thailand is located in area of collectivist culture that society, culture, belief and others involve in thinking, decision-making and action. Parent in oriental culture have power over child's thinking and decision-making. Parent always cultivate that crime and offences in teenage can cause huge damage in future opportunities such as access into high class university and career path (Swayne, 2017) as well as choosing a life partner. Due to respect of parent love, obedience and concern about success in the future, this may be an important factor that frustrate Thai youth to commit cybercrime. As a result, serious cybercrime and high level of crime severity by Thai youth has been unseen. Unlike Western nations, where the most places have individualistic culture (Bort, 2017; Schwertfeger & Zimring, 2013; Swayne, 2017). Individual in westerns make own decision and commit crime to self-benefit (Swayne, 2017).

Another reason could be insufficiency in internet access and lack of digital devices. It reported that internet network is not cover all areas in Thailand (Buathong, 2020), and around 57% of Thais can access into internet (Jalli, 2020), which mostly reside in major cities of Thailand. The obviously evidence to support the aforesaid report when the Thai government remodel to be e-learning during COVID-19 pandemic. It found that most Thai students (88%) are unable to access online learning because they lack of computer, smart cell phonen and do not have internet (Kertbundit, 2020). Consequently, unreadiness in internet access and lack of digital devices may be a factor that obstruct Thai youth to learn several patterns of cybercrime or commit cybercrime. Therefore, Thai youth deem to involve in low-level cybercrime such cyberbullying.

Regard with process in creating a model knowledge and awareness in cybercrime prevention in Thailand, it is slightly different. School and parent in Western world play major role and main responsibility in creating a model knowledge and awareness in cybercrime prevention. Contrarily, creating a model knowledge and awareness in cybercrime prevention in Thailand must not only carry out by school and parent, but also stakeholder. Stake holder like Ministry of Digital Economy and Society is requested to collaborate in setting a model knowledge and awareness in cybercrime prevention for Thai youth. The result indicates obviously that creating a model knowledge and awareness in cybercrime prevention in Thailand require the stake holder, who is an expert in cyber to build a model knowledge and awareness in cybercrime prevention due to suit to effectiveness and suitable for Thai social context.

## Recommendations

As the researchers have experience in the field of juvenile delinquency, we note that duty in creating a model of knowledge and awareness of cybercrime prevention must not only respond by Ministry of Education and Ministry of Digital Economy and Society but also collaboration from all sectors (Noring, 2016). The researchers recommend that other stakeholders such as law enforcement administration, private sector like network provider and community must cooperate as an important role in creating knowledge and awareness of cybercrime prevention for Thai youth.

Law enforcement administration like Technology Crime Suppression Division (TCSD), the Royal Thai Police. TCSD must collaborate with Ministry of Education to educate about cybercrime law and penalty as well as suggest tips of self-protection from cybercrime to educational personnel, parents, and community. When those people comprehend cybercrime law, penalty, self-protection from crime and victim, they can propagate knowledge to their students and their child with correct way.

Another stakeholder in creating knowledge and awareness of cybercrime prevention for Thai youths is private sector, especially network provider. The network providers must play important role to promote safe internet usage to educational personnel, parents, student and community. Electronic learning material must be produced to guide tips for safe internet usage to those people. The material must be easy and free access for educational personnel, parents, student and community when they conduct independent research about safe internet usage.

Finally, community must also involve in creating knowledge and awareness of cybercrime prevention for Thai youth through community activity and build a pathway for cybercrime prevention that is suit to atmosphere and context in each community. Educating knowledge of cybercrime prevention can be a form of painting content on wall, community activity, short play to present damage from cybercrime or booth at community fair that child and youth can spend time with parent and residents in community. Providing activity by community possibly reduce a number of committing or victimization of juvenile cybercrime.

## Conclusion

The aims of study were to find out patterns of cybercrime as well as creating a model knowledge and raising awareness of cybercrime prevention for Thai juvenile. It found that most juvenile commit cyber violence like cyber bullying and Thai juvenile was also victim of cyber bullying, cyber pornography, cyber impersonation and online shopping fraud. The results indicate that in Thailand, pattern of cybercrime is not various and scale of offence is not serious. To deal with serious problem, a model of knowledge and raising awareness of cybercrime prevention must be established to Thai juvenile. The result show that creating a model knowledge and raising awareness of cybercrime prevention require collaboration from Ministry of Education, Ministry of Digital, education personnel and parent. However, the researchers recommend that creating a model knowledge and raising awareness of cybercrime prevention is not only mission and duty by educational sector and digital sector, but also must be carried out from all sectors, which are educational sector, digital sector, law enforcement agency, family and community.

## Limitations and Future Studies

The research was only conducted in Bangkok area. Further research must be carried out in regional and local areas to reach a new result and finding. The new result and finding

can be taken to improve and further development toward cybercrime prevention to juvenile in Thailand.

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