

# A COMPARATIVE ANALYSIS OF PRE-SERVICE AND IN-SERVICE TEACHERS' INTERNET SAFETY LEVEL, CYBERBULLYING ENCOUNTERED EXPERIENCES, AND CYBERBULLYING PERCEPTIONS; THAILAND PERSPECTIVE

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## Abstract

The focus of this study was to compare the difference of pre-service and in-service teachers' internet safety level, cyberbullying encountered experiences, and cyberbullying perceptions in terms of various variables. The survey collected from 102 pre-service teachers and 133 in-service teachers in Thailand by online questionnaires. The result showed pre-service and in-service teachers' internet safety level, cyberbullying encountered experiences, and cyberbullying perceptions didn't have any differences in term of gender, age, internet usage time and teaching experience. Only in-service teachers had significant different internet safety level in terms of ICT-related field of teaching. Moreover, they had significant different cyberbullying encountered experiences in terms of internet safety too. In addition, both of pre-service and in-service teachers had significant different cyberbullying perceptions in term of internet safety level and cyberbullying encountered experiences. Compared between pre-service and in-service teachers' internet safety level, cyberbullying encountered experiences, and cyberbullying perceptions, they show no significant difference. The majority of pre-service and in-service teachers thought they can deal with cyberbullying in school but they want some development. Furthermore, they thought cyberbullying topic should be extra-curricular activities in teacher's curriculum.

**Keyword :** Internet safety, Cyberbullying, Pre-service teacher, In-service teacher

## Introduction

“Cyberbullying is bullying that takes place using electronic technology. Electronic technology includes devices and equipment such as cell phones, computers, and tablets as well as communication tools including social media sites, text messages,

chat, and websites.” (stopbullying.gov) “Cyberbullying is the use of technology to bully the person or group with the intent to hurt them socially, psychologically or even physically” (esafety.gov.au)

Cyberbullying is another form of bullying by using communication technology and electronic

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device. From the various type of communication technology, it make cyberbullying to have many form, many ways, and can do it from anywhere anytime more than traditional bullying. The growth of technology at present allows children to easily access to many communication devices but the coin have two sides, the problem come together with their using too. Children have less life experience and are unaware about the risk from using it less than adult. When their information shows to public on internet, they can't control it anymore. People can share and comment with both positive and negative feedback and sometime the situation can come worst more than they thought. School is the place that bullying commonly happened and with the growth of technology in present, those bullying can transform to cyberbullying easily than the past.

When researcher reviewed about cyberbullying, there are a few researches about cyberbullying in Thailand and most of study is in mental health field. It's rarely to find this research topic from education field. The researches in other country have a lot of studies about pre-service and in-service teachers' perception in cyberbullying such as Li (2008) who study about pre-service teachers' perception in Canada, Yilmaz (2010) who study in Turkey, Ayas and Horzum (2011) and etc. Most of them found similar result, pre-service have high perception about cyberbullying but they still have confidence in handling cyberbullying. These information is very useful for develop training program for preparing pre-service and in-service teachers to deal with cyberbullying in school. For clearly about Thailand pre-service and in-service teachers' perception in cyberbullying situation, researchers interested to

study about the difference of pre-service and in-service teachers' internet safety level, cyberbullying encountered experiences, and cyberbullying perceptions in terms of various variables. The information from this study can help to support the development of curriculum or training program for enhance pre-service and in-service teachers' readiness to dealing with cyberbullying in future study.

### Characteristics of Cyberbullying

Cyberbullying behaviors have various pattern and characteristics. Some are similar and some behaviors can occur together in cyberbullying but all of it aimed for social or psychological damage in any form. Kowalski (2012) describe most cyberbullying falls in to one or more the following:

1. Flaming – Increasing the heat of the conversation between two people or over in public areas such as forums or chat rooms. The action usually begins by teasing between them. However, when someone is acting out violent acts surpass the limits and make the balance out of teasing becoming serious dialogue war. Moreover, the observers might be in support of each people to fire up conversation more aggressive.

2. Harassment - Repeatedly sending nasty, mean, and insulting messages. When talking about harassment, these things happen repeatedly, and it is difficult for the student being harassed to defend himself or herself. We also call it harassment, when a student is teased repeatedly in a mean and hurtful way. But we do not call it harassment when the teasing is done in a friendly and playful way. Also, it is not harassment when two students of about equal strength or power argue or fight.

3. Denigration– Providing information about others that are not true via email and social networks. This includes sending misrepresentation digital media such as photo editing that meaningful sexual or disrespectful, the song or video that composed to mock others person.

4. Impersonation - Creating a false identity and harasses another while pretending to be someone else. Impersonation can include theft of another person's login information to broadcast harassing or humiliating information about the target online. Pretending to be someone else and sending or posting material to get that person in trouble or danger or to damage that person's reputation or friendships.

5. Outing and trickery - Individual disclosing private information online to friends that is then disseminated over the web through social web sites and/or mobile phones. That person is "outed," with devastating effects. It is often these situations that have led to the teen suicides of late, as these targets do not know how to regain control of their lives after such broad public humiliation.

6. Exclusion/Ostracism –Expelling someone from the group and blocking them to join other group, no any online space for victim even they move to other community or change identity. This lead to the condition called "Social death

7. Cyberstalking - Sending abusive messages repeatedly through the Internet or by using a mobile phone. The messages are often threatening in nature, and instill fear that the stalking might move offline and into the target's real life, even becoming physically threatening

8. Video recording of assault/happy slapping and hopping – Recording physical violence and sharing it to the public for fun. When videos are sharing on internet, it can't completely delete it. Instead of physical violence, victim will suffer from mental distress from strange people. This can lead victim to suicide.

9. Sexting – Sending sexually explicit messages, pictures and/or video via digital device or instant messenger. The victim didn't know or didn't intend to see in private group. When that media spread out to the public and get negative feedback. It will make victim shame and lose confidence

#### **Purpose of study**

1) To compare internet safety level, cyber bullying encountered experiences, and cyber bullying perceptions of pre-service teacher groups that have different gender, age, ICT-related field of study, and internet usage time as well as cyberbullying perceptions that have different internet safety level, and cyber bullying encountered experiences.

2) To compare internet safety level, cyber bullying encountered experiences, and cyber bullying perceptions of in-service teacher groups that have different gender, age, ICT-related field of teaching, teaching experience, and internet usage time as well as cyber bullying perceptions that have different internet safety level, and cyber bullying encountered experiences.

3) To compare the difference of pre-service and in-service teachers' internet safety level, cyberbullying encountered experiences, and cyberbullying perceptions.

4) To examine pre-service and in-service teachers' opinion about their readiness to dealing

with cyberbullying and the value of teaching cyberbullying in teacher curriculum.

## Methods and Procedures

### Sampling

The sample of this study selected by convenience sampling method was 102 pre-service teachers who still study in faculty of education in Thailand and 133 in-service teachers who teaching in Thailand school. When researcher calculated sample size for t-test independent analysis by G\*Power software, the sample size are large enough for analysis ( $d = 0.5$   $\alpha = 0.05$   $\text{power} = 0.95$   $\text{sample size} = 88$ )

### Research Instruments

The online questionnaire used for gathering information was developed by the researchers. There are 3 parts in questionnaire. The first part is general information about answerer such as gender, age, field of study/teaching, teaching experience, and internet usage time. The second part is 5 points rating scale about internet safety that developed from

researcher's review. There were a total of 15 items in internet safety's scale. The third part is 5 points rating scale about cyber bullying encountered experiences and cyber bullying perception that adapted from questionnaire in the study of Siwaporn Pokpong and Wimontip Musikapan (2010) with Cyber bullying behavior from Kowalski (2012). The last part is the question about their readiness for dealing with cyberbullying and the value of teaching cyberbullying in teacher curriculum. After editing the scale and text on the advice of experts, researcher tested the questionnaire with small group of sample for analyze reliability. The Cronbach's Alpha coefficient for internet safety, cyberbullying encountered experiences, and cyberbullying perceptions' scales were 0.917, 0.963, and 0.945 as order. The results show that the scale is qualified enough to be used. The online questionnaire developed and delivered to sample group by using Google Form (Picture 1).

**3.2 How often do you met or knew about these behavior when using internet?**

Criterion

1 = Never  
2 = Rarely  
3 = Sometimes  
4 = Often  
5 = Very Often

\*

	(1) Never	(2) Rarely	(3) Sometimes	(4) Often	(5) Very Often
1) Harassment by using rough language when chatting with no reason	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2) Gossip other people in any private or public space on internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3) Provoke people to fighting each other on public online community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4) Spam annoying message through various device	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Picture 1 an example of online questionnaire by google form

## Findings

From the gathering data, majority pre-service teachers have internet safety in medium level (Means = 3.02, S.D = 0.80) There are no significant differences in term of gender, age, ICT-related field of study, internet usage time, and cyberbullying encountered experiences at the 0.05 level. The top three internet safety behaviors that they did most often are

1) Carefully considering before added unknown person to be friend on social networking (Means = 3.67, S.D = 1.18)

2) Considering and checking before accepted invitation to join in groups, activities, or fan page on social networking (Means = 3.64, S.D = 1.19)

3) Carefully considering before clicked the link or news that sharing on social networking (Means = 3.28, S.D = 1.09)

On the other hand, the top three internet safety behaviors that they did less are

1) Changing password of website and program often (Means = 2.16, S.D = 0.93)

2) Installed anti-malware/ adware software to block unwanted adverting and pop-ups (Means = 2.23, S.D = 1.13)

3) Using different password for important website and general website (Means = 2.50, S.D = 1.02)

For cyberbullying encountered experiences, majority pre-service teachers have experience quite often (Means = 2.63, S.D = 0.91) There are no significant differences in term of gender, age, ICT-related field of study, internet usage time, and internet safety level at the 0.05 level. The top three cyberbullying that they often encountered are

1) Harassment by using rough language when chatting with no reason ( Means = 3.29, S.D = 1.00)

2) Gossip other people in any private or public space on internet (Means = 2.96, S.D = 1.00)

3) Modify or editing personal picture and published it to make that person shame (Means = 2.79, S.D = 1.13)

On the other hand, the top three internet safety behaviors that they did less are

1) Changing password of website and program often (Means = 2.17, S.D = 0.90)

2) Using different password for important website and general website (Means = 2.46, S.D = 1.16)

3) Installed anti-malware/ adware software to block unwanted adverting and pop-ups (Means = 2.54, S.D = 1.21)

For cyberbullying encountered experiences, majority in-service teachers have experience sometimes (Means = 2.56, S.D = 0.98) There are no significant differences in term of gender, age, ICT-related field of teaching, and internet usage time at the 0.05 level. The top three cyberbullying that they often encountered are

1) Harassment by using rough language when chatting with no reason (Means = 3.26, S.D = 1.15)

2) Gossip other people in any private or public space on internet (Means = 2.91, S.D = 1.08)

3) Modify or editing personal picture and published it to make that person shame (Means = 2.77, S.D = 1.17), and fake false rumors to cause backlash against other person. ( Means = 2.77, S.D = 1.34)

In addition, majority pre-service teachers have high perception for cyberbullying behavior (Means = 4.30, S.D = 0.65) There is no significant difference in term of gender, age, ICT-related field of teaching, internet usage time at the 0.05 level. But in term of internet safety level and cyberbullying encountered experiences, there is significant difference at the 0.05 level between high group and low group. The most serious cyberbullying behaviors that in-service teachers concern are

1) Steal other people username and password and log in to that website for persecute them (Means = 4.71, S.D = 0.72)

2) Impersonating other people identity to bullying or scamming other person (Means = 4.70, S.D = 0.73)

3) Spread information or media that make person shame or disgrace (Means = 4.65, S.D = 0.76), modify or editing personal picture and publish it to make that person make person shame (Means = 4.65, S.D = 0.76), and publishing other person information or secret through electronic device or internet (Means = 4.65, S.D = 0.74)

Conversely, they less concern about

1) Harassment by using rough language when chatting with no reason (Means = 2.96, S.D = 0.97)

2) Gossip other people in any private or public space (Means = 3.47, S.D = 0.99)

3) Conspiring to discourage people from discussion groups or community voluntarily (Means = 3.89, S.D = 1.05)

The comparing of pre-service and in-service teachers' internet safety level, cyberbullying encountered experiences, and cyberbullying

perceptions show no any significant difference between those two groups in all three variables at the 0.05 level.

When researcher asked pre-service teachers about their readiness to dealing with cyberbullying in school, 73 (70.9% ) think they can deal with cyberbullying in school but they want some development. 20 (19.4%) think they still aren't ready for it, and 10 (9.7% ) think they can dealing with it without any problem. When in-service teachers, 86 (64.7% ) think they can deal with cyberbullying in school but they want some development. 23 (17.3% ) think they still aren't ready for it and 24 (18% ) think they can dealing with it without any problem.

For what pre-service teachers think about cyberbullying topic in teacher curriculum, 56 (54.4%) think cyberbullying topic should be extra-curricular activities in teacher curriculum too and 43(41.7% ) think this topic should add in main teacher curriculum. Only 4(3.9% ) think this topic is not necessary in teacher curriculum. This result is same with in-service teachers, 88 (66.2% ) think cyberbullying topic should be extra-curricular activities in teacher curriculum too and 37 (27.8% ) think this topic should add in main teacher curriculum. Only 8 (6%) think this topic is not necessary in teacher curriculum.

The popular topic that they want to learn is the guideline or practical for dealing with cyberbullying in school. The second is the type and sign of cyberbullying behaviors for helping to manage cyberbullying problem.

Furthermore, majority pre-service teachers have high perception for cyberbullying behavior (Means = 4.19, S.D = 0.65) There are no significant differences in term of gender, age, ICT-related field of study, internet usage time at the 0.05 level. But in term of internet safety level and cyberbullying encountered experiences, there are significant differences at the 0.05 level between high group and low group. The most serious cyberbullying behaviors that pre-service teachers concern are

1) Spread information or media that make person disgrace (Means = 4.57, S.D = 0.71)

2) Impersonating other people identity to bullying or scamming other person (Means = 4.53, S.D = 0.87)

3) Publishing other person information or secret through electronic device or internet (Means = 4.51, S.D = 0.80)

4) Modify or editing personal picture and publish it to make that person make person shame (Means = 4.50, S.D = 0.83)

In opposite, they less concern about

1) Harassment by using rough language when chatting with no reason (Means = 2.93, S.D = 0.84)

2) Gossip other people in any private or public space (Means = 3.52, S.D = 0.89)

3) Conspiring to discourage people from discussion groups or community voluntarily (Means = 3.86, S.D = 0.97)

When researcher analysis in-service teachers internet safety, the data found majority of them have behavior in medium level (Means = 3.22, S.D = 0.81) There are no significant differences in term of gender, age, internet usage time, and cyberbullying

encountered experiences at the 0.05 level. The top three internet safety behaviors that they did most often are

1) Carefully considering before added unknown person to be friend on social networking (Means = 3.67, S.D = 1.19)

2) Considering and checking before accepted invitation to join in groups, activities, or fan page on social networking (Means = 3.64, S.D = 1.17)

3) Carefully considering before clicked the link or news that sharing on social networking (Means = 3.28, S.D = 1.18)

### Discussion

The result of analysis showed pre-service and in-service teachers' internet safety level, cyberbullying encountered experiences, and cyberbullying perceptions are likeness. They show no significant different. The most and less often internet safety behavior that they did, the most cyberbullying that they often encountered, and even cyberbullying behaviors that they concerned the most are similarity. They don't have differences in term of in term of gender, age, internet usage time and teaching experience. This finding consistent with the one presented by Ayas and Horzum (2011) who study teacher's measurement of cyberbullying perception of the teachers in turkey and found no any differences in terms of gender, rank, age, field and the ability to use tools same as this study.

However, there are some minor different in in-service teachers group about internet safety level. There is significant difference in term of ICT-related field of teaching. Teachers who teach ICT in school have higher internet safety level than other major

teacher. According to the study of Anastasiades, P.S., & Vitalaki, E. (2011), their present data showed that teachers who tended to incorporate technology in their every-day personal or professional habits were found to be more effective in promoting Internet safety issues in class such as discussions with students or teaching children moral behaviors when navigating the net than their less technology enthusiastic colleagues. This is compatible with researcher review about computer teaching in Thailand basic education and found some topic about internet safety and internet etiquette. This study help to explain the higher of ICT-related field teachers' internet safety level because they have experience and often concern about internet safety more than non-related teacher while this difference don't show in pre-service teacher group. This finding found the same result in Pusey and Sadera (2011) study that found pre-service teacher in Mid-Atlantic University College of Education were not prepared to model or teach cyberethics, cybersafety, and cybersecurity.

All of this information is very useful for support in the development of cyberbullying preparing program for pre-service and in-service teachers. It can use for support the development of cyberbullying training program for both pre-service and in-service teachers when they can use same program without major different. Another interested thing in this finding is ICT-related field in-service teacher have different internet safety level with non-related teacher when pre-service have not. This finding shows some problem about ICT-related field in teacher development curriculum and should concern in next research. Why ICT-related field pre-

service teacher don't have higher internet safety more than non-related pre-service who study about computer using and ICT less than them.

For significant different cyber bullying perceptions in term of internet safety level and cyberbullying encountered experiences in both pre-service and in-service teachers, it show that their past experience affect their perception. The more encountered experience and internet safety knowledge make them have more perception in cyberbullying behaviors. From this finding, researcher have in-depth interview with some pre-service and in-service teachers to explain this issue. One of pre-service teacher used to be victim from her friend teasing, her friend steal her Facebook account when her forget logged out and impersonate her identity. They posted something weird on social networking for fun but it makes people don't like. She was angry and shame when she found out. After that, she have more awareness when using internet and feel against cyberbullying behavior. In another case, one of interviewed in-service teacher used to be harassed when he discussed some topic on social networking and some people encouraged flaming during discussion. The little topic from start became big thread that many people harassed and used aggressive verbal with each other. After he realized about that, he quitted the discussion. He aware about this experience and always instruct student to aware about word using when he see them use aggressive communication on social networking or even in normal classroom. Those two cases show interested about the relations between past experienced in cyber bullying encountered, internet safety awareness, and cyber



bullying that should in-depth study more in later research.

About their readiness to dealing with cyber bullying in school, both majorities of pre-service and in-service teachers feel they still want some development, a little of them think they can deal with it without any problem. The study about pre-service teachers' perception in Canada found the same finding; a vast majority of their pre-service teacher has little confidence in handling cyber bullying, even though the level of concern is high same as researcher's result (Li, 2008) This result show even pre-service and in-service teachers have high perception about cyberbullying behavior but they still not prepare for it and this feeling reflect to their opinion about adding cyberbullying topic in teacher curriculum. Both majorities of pre-service and in-service teachers see the value of it. However, most of them think the topic should be extra-curricular more than adding in main teacher curriculum. This is same as the study in other country such as pre-service teachers in Canada and Turkey believed they should use an anti-cyberbully infused curriculum which had activities and current resources felt unprepared to deal with cyberbullying (Yilmaz, 2010; Ryan, Kariuki, & Yilmaz, 2011) From this result, it can help considering about the model of cyberbullying program and the topic that should focusing on. The most teachers want guidelines or practical for dealing with cyberbullying in school and want to know about sign and pattern of cyberbullying behaviors for helping to manage cyberbullying problem.

### Implications

The study show Thailand pre-service and in-service teachers have high concern about cyber bullying behavior. However, the most of them think they aren't prepared for dealing with cyberbullying in school enough and they want more development about cyberbullying management. Hence, related organization such as academic or government should value cyberbullying management in school because teacher is the front gate who can notice bullying in school. They are closed with student and often see student behavior. If they can aware and identify cyberbullying sign before it causes critical problem, it can alleviate the future loss. So, this finding points at the urgency of stepping up cyber bullying management programs for both pre-service and in-service teachers in Thailand. The information about pre-service and in-service teachers thinking in cyberbullying can be useful for future research about cyberbullying in education field such as analysis the factor that affects cyber bullying perceptions of pre-service and in-service teachers for explain deeply about the process of their cyberbullying perceptions or using the finding to development extra-curricular activities or teacher development plan for enhance pre-service and in-service teachers' cyberbullying management in future.

### Limitation

From the limitation about the number of ICT-related field pre-service and in-service teachers from sample group, researcher can't compare the difference between those two groups about their internet safety in this study because the sample isn't enough to analyze significant finding. This

question should extend results in later research when researcher can collect data from more samples.

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