#### Workshop on cyberbullying

Professor Edward CHAN & Dr Lu YU
Department of Applied Social Sciences
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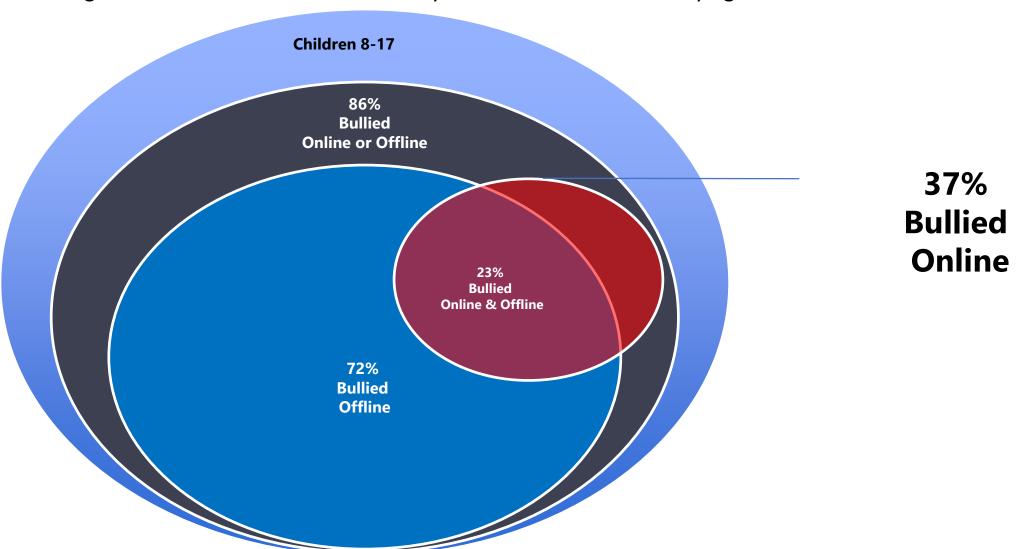
#### Cyber-bullying Facts

- Top 10 Forms of Cyber Bullying
- https://www.youtube.com/watch?v=0Xo8N9qlJtk

#### Microsoft 2012 Report



• 37% (25 country average) of children age 8-17 who responded to the survey say they have been subjected to a range of online activities that some may consider to be online bullying or to have adverse effects.



#### Old Problem in New Disguise?

#### **Bullying**

- 1. making fun of others
- 2. giving them nicknames
- 3. spreading rumours
- 4. giving insulting comments
- 5. shoving or physical assault

#### Cyberbullying

#### (HK Playground Assoc Survey 2016)

- 1. Denigration
- 2. Masquerade
- 3. Impersonation
- 4. Sexting
- 5. Happy slapping
- 6. Outing
- 7. Harassment
- 8. Flaming
- 9. Cyberstalking
- 10. Exclusion



#### Different or no different?

- Grotesque defamation, Internet Polling: rating sites; doctored photos
- Denigration: Send damaging statements about victims to other students
- Cyberstalking: threaten physical or sexual violence; stalking through GPS
- Technological attacks: shut down V's blogs; hack into V's account and send offensive messages in V's name to others
- Happy Slapping: videotaping a physical attack and posting it online



#### Cyber-Bullying

 cyberbullying is an intentional aggressive act to inflict psychological harm on another individual, repeatedly, through digital technologies and online mediums

(Hinduja & Patchin, 2014)

"any aggressive, intentional act carried out by a group or individual, using electronic forms of contact, against a victim who cannot easily defend himself or herself"

UN Special Representative of the Secretary-General on Violence against Children, Annual Report 2016

Distinguished from cyberstalking and cybercrime



#### UN

- CB as a serious manifestation of online violence
- Elements of imbalance of power, use of electronic or digital means
- Anonymity (absolute?)
- Ability to reach a broad audience: fast and wide



#### Cyberbullying - Doxing

Search for and publish private or identifying information about a particular individual on the Internet, typically with malicious intent (Oxford Dictionaries, 2015).



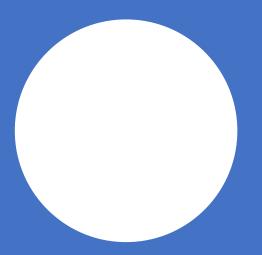
#### Survey Study of Hong Kong High School Students' Attitude



## A representative sample of Hong Kong secondary school students (n = 2,120)

|        | N     | %     |
|--------|-------|-------|
| Male   | 1,123 | 52.97 |
| Female | 997   | 47.03 |
| Total  | 2,120 | 100   |

|             | N     | %      |
|-------------|-------|--------|
| Secondary 2 | 549   | 25.90  |
| Secondary 3 | 560   | 26.40  |
| Secondary 4 | 501   | 23.60  |
| Secondary 5 | 510   | 24.10  |
| Total       | 2,120 | 100.00 |



# Experience of conducting doxing on the Internet

International Journal of Environmental Research and Public Health

Article

### Doxing: What Adolescents Look for and Their Intentions

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**Table 1.** Demographic characteristics of participants.

|  |                       | Sex (%)                |          |         | Have You            | Ever Conducted D    | oxing? (% | )     |
|--|-----------------------|------------------------|----------|---------|---------------------|---------------------|-----------|-------|
| Demographic Characteristics            | Male (n = 1123; 53.0) | Female (n = 997; 47.0) | $\chi^2$ | p       | Yes (n = 259; 12.2) | No (n = 1861; 87.8) | $\chi^2$  | p     |
| Mean age (SD)                          | 15.16<br>(1.44)       | 15.05<br>(1.46)        | 1.46     | 0.144   | 14.94<br>(1.36)     | 15.13<br>(1.46)     | -2.32     | 0.02  |
| Sex                                    |                       |                        |          |         |                     |                     |           |       |
| Male                                   |                       |                        |          |         | 9.8                 | 90.2                | 8.70      | 0.003 |
| Female                                 |                       |                        |          |         | 14.5                | 85.5                |           |       |
| Year of secondary school               |                       |                        |          |         |                     |                     |           |       |
| Secondary 2                            | 24.7                  | 25.2                   | 0.40     | 0.941   | 25.2                | 24.9                | 8.04      | 0.045 |
| Secondary 3                            | 25.0                  | 24.6                   |          |         | 30.1                | 24.1                |           |       |
| Secondary 4                            | 24.8                  | 25.7                   |          |         | 25.9                | 25.1                |           |       |
| Secondary 5                            | 25.5                  | 24.5                   |          |         | 18.9                | 25.8                |           |       |
| Education level of father              |                       |                        |          |         |                     |                     |           |       |
| Don't know                             | 37.2                  | 27.8                   | 26.64    | < 0.001 | 29.0                | 33.2                | 6.75      | 0.24  |
| No schooling/Pre-primary/Primary       | 6.2                   | 5.7                    |          |         | 5.0                 | 6.1                 |           |       |
| Lower Secondary (S.1–S.3)              | 14.5                  | 19.1                   |          |         | 14.3                | 17.0                |           |       |
| Upper Secondary/Sixth Form (S.4–S.7)   | 24.4                  | 28.8                   |          |         | 29.7                | 26.1                |           |       |
| Diploma/Certificate/ Sub-degree course | 5.7                   | 8.0                    |          |         | 8.0                 | 6.6                 |           |       |
| Degree course or above                 | 12.1                  | 10.5                   |          |         | 14.0                | 11.0                |           |       |
| Education level of mother              |                       |                        |          |         |                     |                     |           | _     |
| Don't know                             | 35.4                  | 24.4                   | 35.24    | < 0.001 | 24.3                | 30.9                | 11.07     | 0.05  |
| No schooling/Pre-primary/Primary       | 8.6                   | 7.8                    |          |         | 7.0                 | 8.4                 |           |       |
| Lower Secondary (S.1–S.3)              | 13.7                  | 17.9                   |          |         | 14.6                | 15.9                |           |       |
| Upper Secondary/Sixth Form (S.4–S.7)   | 25.5                  | 31.5                   |          |         | 31.1                | 28.0                |           |       |
| Diploma/Certificate/ Sub-degree course | 7.5                   | 9.1                    |          |         | 10.8                | 7.9                 |           |       |
| Degree course or above                 | 9.3                   | 9.3                    |          |         | 12.2                | 8.9                 |           |       |



Table 2. Doxing as predictor of disclosure of others` personal information

| Doxed others` information           | В     | OR    | 95% CI         | Р      |
|-------------------------------------|-------|-------|----------------|--------|
| Name                                | 1.190 | 3.286 | [2.491, 4.336] | < .001 |
| Social information                  | 1.235 | 3.438 | [2.634, 4.487] | < .001 |
| Personally identifiable information | 1.425 | 4.160 | [2.227, 7.770] | < .001 |
| Current living situation            | 1.237 | 3.445 | [2.338, 5.075] | < .001 |
| Education information               | 1.080 | 2.946 | [2.036, 4.262] | < .001 |
| Private information                 | 0.995 | 2.705 | [2.018, 3.625] | < .001 |
| Sensitive information               | 1.645 | 5.181 | [3.352, 8.007] | < .001 |



|   | Male   | Female | Total    |
|---|--------|--------|----------|
| Ever conducted doxing (searching personal |        |        |          |
| information) on the Internet              | 9.8%   | 14.5%  | 12.1%**  |
| Targets of doxing:                        |        |        |          |
| People whom you like                      | 41.2%  | 62.0%  | 53.2%*** |
| People whom you dislike                   | 57.0%  | 45.9%  | 50.7%    |
| No specific targets                       | 27.6%  | 35.6%  | 32.2%    |
| Others                                    | 9.0%   | 8.4%   | 8.6%     |
| Never conducted doxing on the Internet    | 90.2%  | 85.5%  | 87.9%    |
| Total                                     | 100.0% | 100.0% | 100.0%   |

<sup>\*\*</sup>p<.01, \*\*\*p<.001

Whether the students ever conducted doxing on the Internet



#### Platforms the students conducted doxing

| No. | Platform               | Male  | Female | Total    |
|-----|------------------------|-------|--------|----------|
| 1   | Social networking site | 66.8% | 86.7%  | 78.2%*** |
| 2   | Instant Messenger      | 48.4% | 51.5%  | 50.2%    |
| 3   | Search engine          | 43.0% | 23.8%  | 31.9%**  |
| 4   | Video-sharing website  | 24.3% | 13.3%  | 18.0%*   |
| 5   | Forum                  | 29.4% | 9.5%   | 18.0%*** |
| 6   | Chat-room              | 9.9%  | 11.4%  | 10.7%    |
| 7   | Web-page               | 9.6%  | 11.3%  | 10.6%    |
| 8   | Email                  | 11.4% | 2.4%   | 6.2%*    |
| 9   | Blog                   | 7.2%  | 3.2%   | 4.9%     |
| 10  | Other                  | 0.8%  | 0.4%   | 0.6%     |

<sup>\*</sup>p<.05, \*\*p<.01, \*\*\*p<.001

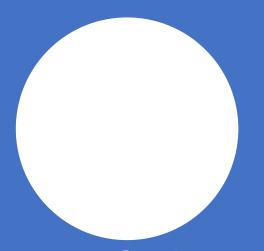
**Table 4.** Personal information on targets obtained through doxing (n = 259).

|                                     |                   | Sex Target of Doxing |                |       |                                       |  |   |   |          |        |       |
|-------------------------------------|-------------------|----------------------|----------------|-------|---------------------------------------|--|---|---|----------|--------|-------|
| Doxed Information                   | Male (n = 110; %) | Female (n = 149; %)  | x <sup>2</sup> | р     | Someone I<br>Like Only<br>(n = 80; %) | Someone I<br>Dislike Only<br>(n = 70; %) | People I Like<br>and Dislike<br>(n = 59; %) | No Special Targets and Others (n = 50; %) | $\chi^2$ | р      | Total |
| Name                                | 92.7              | 95.6                 | 0.52           | 0.473 | 96.3                                  | 90.6                                     | 95.8  | 95.1                                      | 3.32     | 0.357  | 94.4  |
| Social information                  | 88.8              | 96.3                 | 4.79           | 0.029 | 92.7                                  | 91.6                                     | 92.6  | 96.3                                      | 1.09     | 0.779  | 93.1  |
| Personally identifiable information | 14.6              | 6.3                  | 4.31           | 0.038 | 3.1                                   | 22.1                                     | 9.1   | 3.7                                       | 16.25    | <0.001 | 9.8   |
| Current living situation            | 49.9              | 35.5                 | 4.17           | 0.041 | 32.2                                  | 58.1                                     | 46.0  | 27  | 14.27    | 0.003  | 41.6  |
| Education information               | 25.2              | 24.1                 | 0.38           | 0.537 | 22.6                                  | 24.9                                     | 32.1  | 18.2                                      | 4.02     | 0.259  | 24.6  |
| Private information                 | 65.1              | 64.3                 | 0.06           | 0.801 | 50.5                                  | 77.3                                     | 68.9  | 63.4                                      | 10.61    | 0.014  | 64.6  |
| Sensitive information               | 39.5              | 35.2                 | 0.11           | 0.743 | 34.8                                  | 40.4                                     | 45.8  | 25.7                                      | 4.659    | 0.199  | 37.1  |



Table 5. Factors associated with adolescents doxing

|        |                  |        | Targets whom they like |        | Ta     | argets whom they dislil | ке    |
|--------|------------------|--------|------------------------|--------|--------|-------------------------|-------|
|        |                  | В      | OR [95% CI]            | р      | В      | OR [95% CI]             | р     |
| Candar | Male             | -0.874 | 0.417 [0.253, 0.689]   | < .001 | 0.359  | 1.432 [0.875, 2.342]    | .153  |
| Gender | Female           | 1.000  |                        |        | 1.000  |                         |       |
| Age    |                  | -0.017 | 0.983 [0.821, 1.178]   | .856   | 0.008  | 1.008 [0.842, 1.207]    | .931  |
|        | Secondary 2      | -0.087 | 0.917 [0.439, 1.916]   | .817   | -0.254 | 0.776 [0.371, 1.623]    | .500  |
| School | Secondary 3      | 0.288  | 1.333 [0.654, 2.717]   | .428   | -0.215 | 0.807 [0.396, 1.643]    | .554  |
| Year   | Secondary 4      | 0.348  | 1.417 [0.656, 3.060]   | .375   | -0.167 | 0.846 [0.393, 1.821]    | .669  |
|        | Secondary 5      | 1.000  |                        |        | 1.000  |                         |       |
|        | Victim only      | 0.093  | 1.098 [0.478, 2.521]   | .826   | 0.060  | 1.062 [0.459, 2.459]    | .888  |
| Dolo   | Perpetrator only | 0.664  | 1.942 [1.023, 3.685]   | < .05  | 0.217  | 1.243 [0.661, 2.335]    | .499  |
| Role   | Both             | 0.178  | 1.194 [0.637, 2.241]   | .580   | 0.938  | 2.556 [1.336, 4.889]    | < .01 |
|        | Bystander        | 0.289  | 1.335 [0.792, 2.249]   | .278   | 0.558  | 1.746 [1.030, 2.960]    | < .05 |



# Experience of disclosing your personal information by others - victimization

International Journal of Environmental Research and Public Health

Article

## Doxing Victimization and Emotional Problems among Secondary School Students in Hong Kong

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## Whether the personal information ever been disclosed on the Internet without students' consent

|  | Male  | Female | Total    |
|--|-------|--------|----------|
| The personal information ever been disclosed on the Internet without students' consent | 48.8% | 61.2%  | 54.7%*** |



Table 1. Types of information disclosed and associations with DASS scores

|                                       |          | Prev       | alence    |            | DASS Correlation |          |          |  |
|---------------------------------------|----------|------------|-----------|------------|------------------|----------|----------|--|
| Type                                  | Male (%) | Female (%) | Total (%) | Chi-square | Depression       | Anxiety  | Stress   |  |
| Personal photos or videos             | 27.7     | 35.5       | 31.4      | 34.811***  | 0.124***         | 0.108*** | 0.118*** |  |
| Name                                  | 24.4     | 36.0       | 29.9      | 52.886***  | 0.101**          | 0.086**  | 0.074*   |  |
| Birthday                              | 18.8     | 30.0       | 24.2      | 44.818***  | 0.106***         | 0.096**  | 0.100**  |  |
| Mobile phone number                   | 12.4     | 18.1       | 15.1      | 28.667***  | 0.148***         | 0.146*** | 0.125*** |  |
| School name                           | 10.5     | 19.5       | 14.8      | 47.820***  | 0.109***         | 0.117*** | 0.107*** |  |
| Academic performance                  | 7.1      | 12.1       | 9.5       | 30.035***  | 0.089**          | 0.084**  | 0.082**  |  |
| Locations                             | 7.7      | 11.0       | 9.3       | 13.655*    | 0.090**          | 0.097**  | 0.099**  |  |
| Private internet or text conversation | 5.2      | 13.4       | 9.1       | 55.864***  | 0.123***         | 0.119*** | 0.129*** |  |
| Embarrassing photos or videos         | 6.5      | 11.4       | 8.8       | 18.399**   | 0.107***         | 0.111*** | 0.124*** |  |
| Personal email address                | 6.8      | 9.2        | 8.0       | 8.300      | 0.096**          | 0.083**  | 0.089**  |  |
| Relationship status                   | 4.2      | 9.1        | 6.6       | 25.169***  | 0.121***         | 0.115*** | 0.113*** |  |
| Odd habits                            | 3.6      | 7.2        | 5.4       | 18.065     | 0.105***         | 0.090**  | 0.096**  |  |
| Parents` names                        | 4.6      | 4.2        | 4.4       | 3.250      | 0.113***         | 0.085**  | 0.117*** |  |
| Intimate photos or videos             | 3.3      | 5.3        | 4.3       | 7.073      | 0.085**          | 0.085**  | 0.102*** |  |
| Student card                          | 4.2      | 4.1        | 4.2       | 2.829      | 0.108***         | 0.092**  | 0.102**  |  |
| Home telephone number                 | 3.9      | 4.0        | 3.9       | 3.354      | 0.085**          | 0.068*   | 0.081**  |  |
| Home address                          | 4.3      | 2.5        | 3.5       | 7.523      | 0.097**          | 0.080**  | 0.106*** |  |
| Sexual orientation                    | 2.4      | 3.4        | 2.9       | 4.108      | 0.120***         | 0.113*** | 0.115*** |  |

<sup>\*</sup>p<.05, \*\*p<.01, \*\*\*p<.001



Table 2. Doxing perpetrators and associations with DASS scores

|                                  |          | Prev      | /alence   |            | DASS Correlation |          |        |  |
|----------------------------------|----------|-----------|-----------|------------|------------------|----------|--------|--|
| Туре                             | Male (%) | emale (%) | Total (%) | Chi-square | Depression       | Anxiety  | Stress |  |
| Parents/family members           | 20.8     | 28.0      | 24.6      | 7.84**     | 0.038            | 0.033    | -0.006 |  |
| Classmates                       | 46.5     | 54.3      | 50.7      | 6.26*      | 0.045            | 0.058*   | 0.015  |  |
| Other students in the same grade | 28.8     | 31.6      | 30.3      | 0.60       | 0.078**          | 0.067*   | 0.048  |  |
| Other students in your school    | 26.5     | 29.9      | 28.3      | 1.55       | 0.091**          | 0.109*** | 0.059* |  |
| Teacher/Tutor                    | 2.7      | 3.2       | 2.9       | 0.27       | 0.019            | 0.031    | 0.026  |  |
| Friends outside your school      | 20.6     | 30.2      | 25.7      | 13.18***   | 0.028            | 0.037    | 0.038  |  |
| People you personally know       | 21.7     | 30.0      | 26.2      | 10.04**    | 0.086**          | 0.074*   | 0.055  |  |
| Internet friends                 | 3.8      | 6.2       | 5.1       | 3.18       | 0.029            | 0.009    | 0.034  |  |
| Strangers                        | 3.5      | 4.6       | 4.1       | 1.24       | 0.019            | 0.038    | 0.029  |  |

<sup>\*</sup>p<.05, \*\*p<.01, \*\*\*p<.001



Table 3. Doxing platforms and associations with DASS scores

|                        |          | Prev       | /alence   |            | DASS Correlation |         |        |
|------------------------|----------|------------|-----------|------------|------------------|---------|--------|
| Туре                   | Male (%) | Female (%) | Total (%) | Chi-square | Depression       | Anxiety | Stress |
| Instant Messenger      | 53.7     | 67.8       | 61.3      | 21.91***   | 0.083**          | 0.087** | 0.068* |
| Social networking site | 44.7     | 63.7       | 54.9      | 36.94***   | 0.063*           | 0.068*  | 0.066* |
| Chatroom               | 9.7      | 8.8        | 9.2       | 0.05       | 0.049            | 0.050   | 0.018  |
| Email                  | 6.2      | 3.6        | 4.9       | 3.33       | 0.031            | 0.047   | 0.051  |
| Video-sharing website  | 2.9      | 1.7        | 2.2       | 0.18       | 0.030            | 0.059*  | 0.062* |
| Webpage                | 1.5      | 1.5        | 1.5       | 0.00       | 0.022            | 0.029   | 0.016  |
| Forum                  | 0.7      | 0.2        | 0.4       | 2.17       | 0.032            | 0.027   | 0.049  |
| Blog                   | 0.5      | 0.3        | 0.4       | 0.33       | 0.032            | 0.027   | 0.047  |

<sup>\*</sup>p<.05, \*\*p<.01, \*\*\*p<.001



#### Students' understanding of privacy and knowledge of privacy protection

 More than 3/4 of the students agreed the following information is sensitive personal information: usernames and passwords of online accounts, bank account numbers, passport number, ID card number, private internet or text conversation, intimate photos or videos, embarrassing photos or videos, obscene or indecent photos or videos.

- And also more than 3/4 of the students thought name, birthday, school name and were personal information, instead of sensitive information.
- Only 3.5% of students can the name of the Ordinance in Hong Kong that aims to protect the privacy of individuals in relation to personal data.
- Nearly half of the students learn the knowledge about managing and protecting their privacy from the internet.

#### Highlights



Almost all types of information subject to doxing to be significantly associated with such negative emotional states as depression, anxiety, and stress.

Participants doxed by schoolmates reported the most significantly negative emotional feelings.

Significant associations were found in our study between unauthorized disclosure via Instant Messenger, social networking sites and feelings of depression, anxiety, and stress in victims.

Further exploration of integrated cyber violence prevention programs is therefore strongly recommended for schools with regard to preventing doxing victimization.

#### Conclusions and Implications



Adolescents who conducted doxing had greater odds of disclosing others' personal information, students who had conducted doxing had also experienced information disclosure as victims, perpetrators, or bystanders.

Half of the doxing perpetrators target people they like to fulfill their social needs, the others target people they dislike with the malicious intention of harassing or attacking the victims.

Schools and parents need to provide adolescents with guidelines on online behavior that empathy education and training be included in intervention programs.

Improving parenting practices can be a protective factor from doxing behaviors, programs should improve parent-adolescent relationships and parental involvement.

#### Conclusions and Implications (Cont.)

#### Discussion

- Definition of doxing → Legal response
- What is personal data?
- Personal Data (Privacy) Ordinance (Cap.486)
- *personal data* (個人資料) means any data—
  - (a) relating directly or indirectly to a living individual;
  - (b) from which it is practicable for the identity of the individual to be directly or indirectly ascertained; and
  - (c) in a form in which access to or processing of the data is practicable;
- Hard data
- Social data: engaging in social activities, networking
- Hard data: students know the importance of protecting; but hard data is not the major target pf doxing
- Social data: Less cautious to defend doxing or protect personal information; but ready target of doxing

#### Intention of doxing:

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- Mixed with curiosity & hostility
- Curiosity (no intention of causing harm) vs hostility (intent to cause harm)
- Blurred boundary between social doxing and hostile doxing

#### **Acts:**

- Searching, posting, reposting (collective activity, social endorsement)
- Doxing: perpetrator, victim, victim 

  perpetrator, bystander

#### **Legal responses:**

- One-size-fits-all?
  - Personal Data (Privacy) Ordinance (Cap.486)
  - Access to computer with criminal or dishonest intent (Crime Ordinance (S.161, Cap.200)
- Or need more specific law targeting specific crime?





Criminal intimidation (s. 24 Crimes Ord)

Criminal damage (s. 60 Crimes Ord)

Procuring unlawful sexual acts by threats (s. 117(1A) Crimes Ord)

Access to computer with criminal or dishonest intent (s.161 Crimes Ord)

Blackmail (s. 23 Theft Ord)

Possession of child pornography
(s.3(3) Prevention of Child Pornography Ord)

Distribution of indecent and obscene articles (Obscene and Indecent Articles Ord.) Offensive telephone calls and messages

(s. 20 Summary Offences Ord)

intentional infliction of psychological harm

s.64: offence

Unauthorised use/disclosure of personal data (PDPO)

Defamation (tort)

Intimidation and harassment (tort)

#### HK Current legal remedies



- Public education
- Responses to doxing (as victim):
  - Limited choices
  - Helplessness
- What to educate?
- Medium of education?





# 10 Principles Digital communication

New Zealand: *Harmful Digital Communications Act*2015

Should NOT:

- disclose sensitive personal facts about a person;
- be threatening, intimidating, or menacing;
- be grossly offensive;
- be indecent or obscene;
- be used to harass a person;
- make a false allegation;
- breach confidences;
- incite or encourage anyone to send a deliberately harmful message;
- incite or encourage a person to commit suicide; and
- denigrate a person's colour, race, ethnic or national origins, religion, gender, sexual orientation or disability.

A multi-disciplinary collaboration for cyberbullying prevention

#### Legal

Laws against cyberbullying

#### **Organizations**

Anti-bullying programmes, early intervention and support

#### Government

Devote more resources on antibullying programmes

#### Home

Parental guidelines and monitoring

#### **School**

Guidelines or policies to address the issues of cyberbullying

#### Curriculum

Raising students' awareness and existing norms concerning cyberbullying, behavioral control by providing helping strategies for oneself and others, when confronted with cyberbullying, etc.



#### School-based cyberbullying prevention

 Meta-analysis results showed that school-based intervention programs reduced peer victimization between 17 and 20% compared to routine school services, with which presence of parent, classroom disciplinary methods (Farrington & Ttofi, 2009)



#### Framework of prevention

- Whole-school approach
- Multi-levels of intervention:
- Level 1:
  - Victims
  - Perpetrators
  - Bystanders
- Level 2: at-risk students
  - School teachers
  - School social workers and educational psychologists
- Level 3: Parents