Understanding the Motivations behind Cyber Vigilantism and Public Attitudes towards it in Singapore Supplementary Slides

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Understanding the Motivations behind Cyber Vigilantism and Public Attitudes towards it in Singapore

Supplementary Slides

By Xingyu Ken Chen & Jing Yi Lee

Scope

These set of slides are intended to serve as supplementary information for the poster on "Understanding the Motivations behind Cyber Vigilantism and Public Attitudes towards it in Singapore"

Content covers the following:

- Introduction
- Literature Review
- Case studies
  - Background
  - Mapping of motivational factors behind CV
- Results from the doxing and shaming surveys
- Discussion

Introduction

Cyber vigilantism (CV) is a prominent phenomenon that has emerged in recent years with the development of the Internet.

- CV is performed by online individuals or communities in response to perceived injustices or violation of societal norms .
- Illegitimate acts of punishments are meted out to perceived perpetrators, usually using doxing and online shaming, with the goal to achieve justice and cybersecurity.
- Social media not only provides a platform for individuals to create interesting content online, it also empowers them to enact morality and justice online.

Purpose of research

Relevance to Singapore

- Increasingly, netizens in Singapore are taking justice into their own hands by engaging in CV behaviours.
  - In response to cases of injustice, they mete out their own brand of social punishment through tactics such as doxing or shaming those they identify as perpetrators of injustice. In some cases, innocent people have been wrongly identified as perpetrators and were wrongly harassed as a result
- CV is a cause of concern as it (i) signals the public lack of confidence in law enforcement, (ii) interferes with law enforcement operations, (iii) results in psychological consequences for its victims, as well as, (iv) risks the spread of fake news

Research Contribution

- There are few psychological studies examining the motivations behind as well as attitudes towards cyber vigilantism → Most current research focus on the computer science or legal aspects.
- Current study examines public attitudes to CV and motivations driving the act of CV in Singapore's context

Literature Review

<u>What is Cyber Vigilantism (CV)?</u> <u>(see Smallridge et al, 2016; Trottier, 2017)</u>

Working definition

- a planned act carried out by private, autonomous individuals, or online communities formed in response to a perceived violation of societal norms
- To bring to light perceived transgressions identified by netizens online
- To carry out illegitimate acts of punishment against the perceived perpetrator with the purported aim of providing assurances of safety for the online community.

Smallridge, J., Wagner, P., & Crowl, J. N. (2016). Understanding Cyber-Vigilantism: A Conceptual Framework. *Journal of Theoretical & Philosophical Criminology; Indianapolis*, *8*(1), 57–70.
Trottier, D. (2017). Digital vigilantism as weaponisation of visibility. Philosophy & Technology, 30(1), 55-72.

Literature Review

<u>Commonly reported forms of CV: Doxing and Online Shaming</u>

Doxing

- Doxing, short for 'dropping docs', involves the sharing of personal details (e.g., home address, phone number) of the targeted individual with the public, by publishing them on a public website (see Douglas, 2016)

Online Shaming

- Publicly drawing attention to and humiliating people who are perceived to have behaved badly or done something wrong (see Hou et al., 2017; Kahan & Posner,1999)

Douglas, D. M. (2016). Doxing: a conceptual analysis. *Ethics and Information Technology, 18*(3), 199–210. https://doi.org/10.1007/s10676-016-9406-0

Hou, Y., Jiang, T., & Wang, Q. (2017). Socioeconomic status and online shaming: The mediating role of belief in a just world. *Computers in Human Behavior, 76*, 19-25.

Kahan, D. M., & Posner, E. A. (1999). Shaming white-collar criminals: A proposal for reform of the federal sentencing guidelines. *The Journal of Law and Economics, 42*(S1), 365-392.

Literature Review

Some socio-psychological factors identified in current research which is relevant for understanding CV motivations and public attitudes towards it

- Just-world beliefs (Hou et al., 2017)
- Social Identification with the group commenting on the CV behaviour (Neubaum et al., 2018)
- Acceptability of naming and shaming in response to severity of crime (Dunsby & Howes, 2019)
- Perception of the criminal justice system as ineffective (Chang & Poon, 2017)

According to Hou et al. (2017), there is **a need for more psychological studies** to understand such phenomenon in terms of its causes, processes and consequences

Hou, Y., Jiang, T., & Wang, Q. (2017). Socioeconomic status and online shaming: The mediating role of belief in a just world. *Computers in Human Behavior, 76*, 19-25.

Neubaum, G., Rösner, L., Ganster, T., Hambach, K., & Krämer, N. C. (2018). United in the name of justice: How conformity processes in social media may influence online vigilantism. *Psychology of Popular Media Culture, 7*(2), 185–199. https://doi.org/10.1037/ppm0000112

Dunsby, R. M., & Howes, L. M. (2019). The NEW adventures of the digital vigilante! Facebook users' views on online naming and shaming. *Australian & New Zealand Journal of Criminology, 52*(1), 41-59.
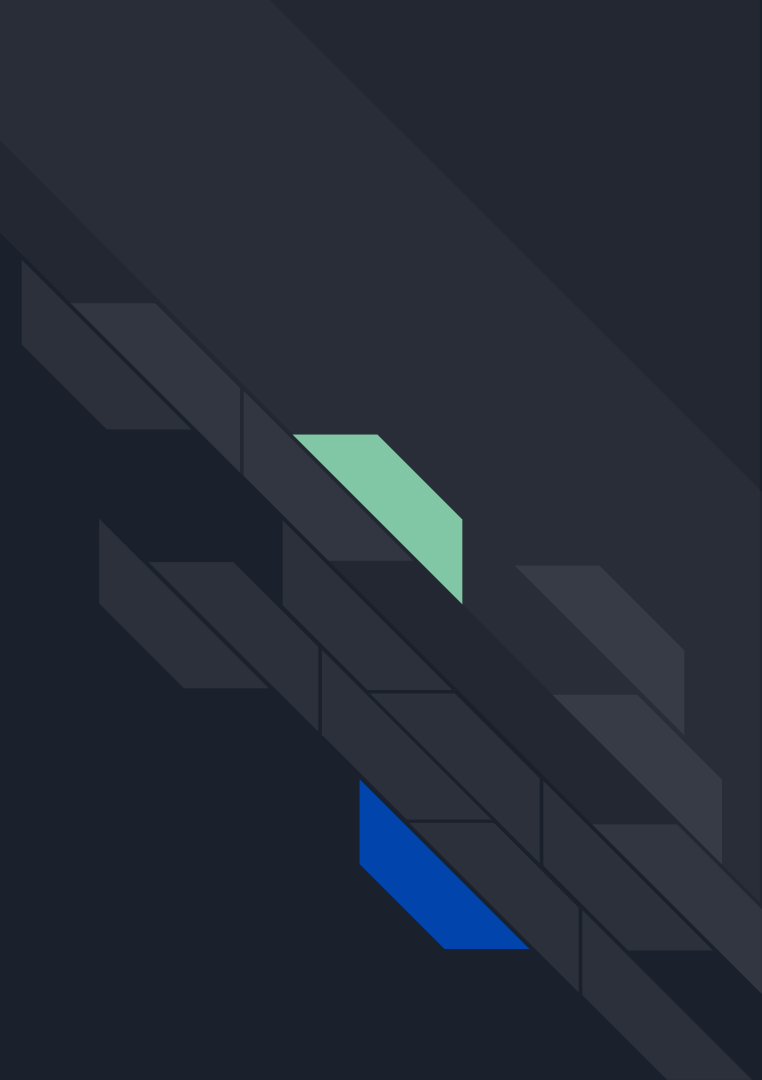
Chang, L. Y., & Poon, R. (2017). Internet vigilantism: Attitudes and experiences of university students toward cyber crowdsourcing in Hong Kong. *International journal of offender therapy and comparative criminology, 61*(16), 1912-1932.

Methodology

- Mixed methods approach to understanding CV in Singapore

- Five case studies between 2014-2019 were selected and analysed
    - Identify motivations behind CV cases in Singapore
    - Findings used to inform survey construction

- Two surveys were carried out on 161 Singaporean participants to explore their attitudes towards doxing (n=79) and online shaming (n=82)
    - The survey targets a range of CV behaviours and incorporates a 'perceptions' study with a 'motivations' study

Case Studies Analyses

Case studies Background

Case 1: Sim Lim Square incident (2014)

Background to the case	• Mobile Air was directed by the Small Claims Tribunal to refund a Chinese female tourist for misleading her into paying an exorbitant price for a mobile phone. ○ Jover Chew, the owner of the mobile shop deliberately refunded the said amount in coins and humiliated the Chinese tourist by scattering the coins on the floor. ○ Chew uploaded a video of her trying to pick the coins up while he was verbally abusing and taunting her. • A week later, Chew uploaded another video depicting a Vietnamese tourist kneeling and begging him for a refund of a mobile phone (see bottom right image).
How is cyber vigilantism conducted	• Cyber vigilantes posted Chew's home address, mobile number, NRIC number, and private photos online in an online movement they named "Operation Air Kangkang".
Consequences suffered by victim of cyber vigilantism	• The mobile shop owner was shamed and harassed online. • Chew was unable to sell his shop as cyber vigilantes exposed anyone who tried to take over the business from him.

Case studies Background

Case 2: Toa Payoh Hawker Centre Incident (2017)

Background to the case	• A video of a couple quarrelling with an elderly man in a public hawker centre went viral online • The couple was seen hurling vulgarities at the elderly, and the male perpetrator deliberately knocked into the elderly man.
How is cyber vigilantism conducted	• Netizens shamed the couple online. • Netizens carried out doxing and wrongly identified the female perpetrator as "Cherry Tan" and posted the name of her workplace online. • Netizens harassed a "Cherry Tan", even taking to United Overseas Bank (UOB)'s (her alleged employer) Facebook page to shame her.
Consequences suffered by victim of cyber vigilantism	• Tan, the misidentified person, faced emotional distress from the harassment by netizens. In response, UOB posted a clarification on their Facebook page. • After the actual couple was charged and fined in court, the female perpetrator, experienced anxiety and had to seek psychiatric help following public harassment.

Case studies Background

Background to the case	● A video showing a cyclist being knocked over by a lorry after deliberately hitting the lorry's side mirror, was uploaded on the Roads.sg Facebook page.

How is cyber vigilantism conducted	● A Facebook post made by user "Tye Linson" wrongly misidentified the cyclist as Peter Cheung
	● Netizens found out that Peter Cheung worked at DDB Group Singapore and went on the company's Facebook page to leave negative reviews.
	   ○ Cheung clarified in a Facebook post that he was not the culprit in question and that he made a harassment report with the police.
	   ○ DDB Group Singapore also stepped forward to clarify that Cheung was not the cyclist in the video.
	● Eventually, the police identified and detained the lorry driver, Teo Seng Tiong, and the cyclist, Eric Cheung Hoyu.

Consequences suffered by victim of cyber vigilantism	● Cheung was harassed and shamed online and on his company's Facebook page.

Case studies Background

Background to the case	- A video captured by Gojek driver Kamaruzzaman Abdul Latiff went viral online. - It captured a heated exchange between him and his passenger, Jovina Choi, who was upset that she could not avoid the Electronic Road Pricing (ERP) gantries on the trip, blaming Kamaruzzaman for that. - After the vehicle came to a stop, Choi tried to leave the car but could not. She claimed that Kamaruzzaman had locked the car on purpose in an attempt to kidnap her, even though he explained that the car lock is automatic. She was heard exclaiming "is it because I'm Chinese?", suggesting she was put through the ordeal because of her race.
How is cyber vigilantism conducted	- Netizens did their own research and identified the passenger as Jovina Choi - Information on her age, her pickup location, as well as pictures from her Facebook profile were posted online
Consequences suffered by victim of cyber vigilantism	Choi was harassed and shamed online

Case studies Background

Case 5: Monica Baey Case (2019)

Background to the case	- Monica Baey, a National University of Singapore (NUS) student noticed someone filming her while she was showering in the school's student accommodations. She immediately notified campus security and the student representative body. - The perpetrator was identified and given a 12-month conditional warning from the police following a 2-month investigation. NUS mandated the perpetrator to (i) write an apology letter to Baey, (ii) undergo counselling, (iii) be banned from entering student accommodations, and (iv) to be suspended for a semester.
How is cyber vigilantism conducted	- Baey took to Instagram to express her dissatisfaction with the way in which her case was handled by NUS and the police. She revealed the identity of the perpetrator, Nicholas Lim, by posting a screenshot of his Instagram profile - Netizens also found more pictures of Lim from his social media accounts and posted them online. - Netizens allegedly doxed Lim and his family, speculating that his parents were influential, thereby resulting in his lighter sentence. These allegations were later proven to be false
Consequences suffered by victim of cyber vigilantism	- Lim was harassed and shamed online. - Lim, who was a Great Eastern financial representative, was suspended by his company, and eventually resigned.

Identified motivational factors behind CV

- ## Desire to uphold justice for the perceived weak (see Darley et al., 2000; Hou et. al 2017)
    - Not all social norms (e.g., respect for elderly, caring for the less fortunate) are covered under the rule of law → netizens who see an injustice done against a perceived weak member of society may take it upon themselves to police the perceived transgressions
    - E.g., contrasting the victim's background as a blue-collared worker against the perpetrator's wealth or focusing on the victim as an elderly person being bullied

- ## Perceived threats to in-group identity (see Marques and Paez, 1994; Neubaum et al., 2018)
    - Members of the out-group are deserving of punishment and somehow inferior to the in-group members
    - E.g., focusing on the non-Singaporean identity of the perpetrator when doxing/shaming them

Hou, Y., Jiang, T., & Wang, Q. (2017). Socioeconomic status and online shaming: The mediating role of belief in a just world. *Computers in Human Behavior*, *76*, 19-25.

Darley, J. M., Carlsmith, K. M., & Robinson, P. H. (2000). Incapacitation and just deserts as motives for punishment. *Law and human behavior*, *24*(6), 659-683.

Marques, J. M., & Paez, D. (1994). The 'Black Sheep Effect': Social Categorization, Rejection of Ingroup Deviates, and Perception of Group Variability. *European Review of Social Psychology*, *5*(1)*, 37–68. https://doi.org/10.1080/14792779543000011

Neubaum, G., Rösner, L., Ganster, T., Hambach, K., & Krämer, N. C. (2018). United in the name of justice: How conformity processes in social media may influence online vigilantism. *Psychology of Popular Media Culture, 7*(2), 185–199. https://doi.org/10.1037/ppm0000112

Identified motivational factors behind CV

- ## Perceived normalisation of cyber vigilante behaviours (see Dunsby and Howes, 2017; Neubaum et al., 2018)
  - Due to the sociality of social media individuals who carry out acts of cyber vigilantism are often praised. The anti-sociality of CV actions is more normalised by others who support or uncritically accept such actions
  - E.g., receiving many social media likes, making memes to ridicule the perpetrator

- ## Perceived inadequacy of law enforcement (see Chang and Poon, 2017; e Silva, 2018)
  - Perceived inaction or leniency by the authorities create a 'vacuum' for the public to police such actions
  - E.g., being outraged at the perceived leniency of the sentence or being outraged at the speed in which law enforcement is acting

Dunsby, R. M., & Howes, L. M. (2019). The NEW adventures of the digital vigilante! Facebook users' views on online naming and shaming. Australian & New Zealand Journal of Criminology, 52(1), 41-59.

Neubaum, G., Rösner, L., Ganster, T., Hambach, K., & Krämer, N. C. (2018). United in the name of justice: How conformity processes in social media may influence online vigilantism. Psychology of Popular Media Culture, 7(2), 185–199. https://doi.org/10.1037/ppm0000112

Chang, L. Y., & Poon, R. (2017). Internet vigilantism: Attitudes and experiences of university students toward cyber crowdsourcing in Hong Kong. International journal of offender therapy and comparative criminology, 61(16), 1912-1932.

e Silva, K. K. (2018). Vigilantism and cooperative criminal justice: is there a place for cybersecurity vigilantes in cybercrime fighting?. International Review of Law, Computers & Technology, 32(1), 21-36.

Factor 1: Desire to uphold justice for the perceived weak

Case Study	Type of social norm defended when upholding justice
Sim Lim Square Incident (case study 1)	**Protection of the perceived weak** Netizens sympathised with the plight of the Vietnamese tourist, referring to his financial status, and what he had to go through to save up for the iPhone purchase.
Toa Payoh Hawker Centre Incident (case study 2)	**Respect for the elderly** Netizens cited the lack of respect shown by the couple to the elderly man and rallied in defence of the elderly man. This reflects the netizens' desire to defend the social norm of showing respect for elders – as emphasised in Asian culture (see Han, 2007).
	Protection of the perceived weak The netizens' defence of the elderly man can also take the stance of protecting the vulnerable from a perpetrator that is perceived to be of a more powerful social standing.
Cyclist-Lorry Altercation (case study 3)	**Respect for blue-collared worker** Narratives focused on the lorry driver's blue-collar background, and his reliance on his lorry for his livelihood.
Gojek "kidnapping" Incident (case study 4)	**Respect for blue-collared worker** Narratives focused on the blue-collar nature of private hire work, and the hard work that drivers had to put in to earn a living
Monica Baey Incident (case study 5)	**Intolerance for sexual harrassment** Netizens were appalled by the perceived leniency of the punishment dealt to Lim. The incident also sparked debate surrounding other potential cases of sexual harassment and sexual assault in Singapore.

Factor 2: Perceived threats to in-group identity

Case Study	Type of social identity defended when upholding justice
Sim Lim Square Incident (case study 1)	**<u>Protection of Singaporean identity against in-group deviance</u>** Netizens shared the sentiment that Chew was a disgrace to Singapore for scamming tourists.
Cyclist-Lorry Altercation (case study 3)	**<u>Othering of a non-Singaporean</u>** Netizens focused on Cheung's non-Singaporean identity when shaming him, expressing bitterness at the perceived leniency of his sentence.
Gojek "kidnapping" Incident (case study 4)	**<u>Protection of Singaporean identity against in-group deviance</u>** Singaporean Chinese netizens said that Choi was behaving in a manner that was unrepresentative of the Chinese community when she attributed. Netizens found Choi's use of her race as justification for her "mistreatment" as an insult to multiculturalism values in Singapore.

Factor 3: Perceived normalisation of cyber vigilante behaviours

Case Study	Type of memes that perpetuate the virality of the situation
Sim Lim Square Incident (case study 1)	Memes of depicting Jover Chew as a swindler was being circulated
Toa Payoh Hawker Centre Incident (case study 2)	Parody video was uploaded to mock the couple's apology video
Cyclist-Lorry Altercation (case study 3)	Images lifted from Eric Cheng's work profile was used to create memes to mock him
Gojek "kidnapping" Incident (case study 4)	Memes repurposing Choi's "is it because I'm Chinese?" statement and her picture was used to mock her
Monica Baey Incident (case study 5)	Memes were created to mock the authorities for giving the perpetrator a light punishment for his actions

Factor 4: Perceived inadequacy of law enforcement

Case Study	Type of law enforcement inadequacy that was being perceived
Sim Lim Square Incident (case study 1)	**Perceived police inaction** Although the police were at the scene, they were perceived to be doing nothing as they did not apprehend Chew. Thus, netizens took matters into their own hands. Unbeknownst to the netizens, the police had been actively gathering evidence to apprehend Chew but due to an ongoing investigations, the police were unable to give the public an update. After police action was taken, some netizens still recognised the efforts of the cyber vigilantes as being more effective than traditional law enforcement.
Cyclist-Lorry Altercation (case study 3)	**Perceived unfairness of outcome (post-verdict)** Netizens discussed the perceived unfairness of the verdict of the case, suggesting that Singapore's legal system protects the perceived elites at the expense of hardworking Singaporeans.
Monica Baey Incident (case study 5)	**Perceived inadequacy of law enforcement processes** There were debates on the perceived inadequacy of existing legal and law enforcement processes in upholding the rights of sexual assault victims, citing overt leniency when dealing with perpetrators. **Perceived corruption of law enforcement processes** Netizens speculated that Lim was from an influential family, which sparked accusations that he got off with a lenient sentence because of his family's connections. However this is found to be untrue and it can undermine public trust in the impartiality of Singapore's law enforcement agencies.

	Desire to uphold justice for the perceived weak	Perceived threats to in-group identity	Perceived normalisation of CV behaviours	Perceived inadequacy of law enforcement processes
Sim Lim Square incident (2014)	✗	✗	✗	✗
Toa Payoh Hawker Centre incident (2017)	✗		✗	
Cyclist-Lorry altercation (2018)	✗	✗	✗	✗
Gojek "kidnapping" incident (2019)	✗	✗	✗	
Monica Baey case (2019)	✗		✗	✗

The four identified motivations driving CV are mapped onto the various cases. Two main motivations common in all five cases are the desire to uphold justice for the perceived weak and perceived normalization of CV behaviours

Case study findings and literature review were used to inform survey questions formulation on doxing

Case studies
- Desire to uphold justice for the perceived weak
- Perceived threats to in-group identity
- Perceived normalisation of CV behaviours
- Perceived inadequacy of law enforcement processes

Literature review

Survey questions

- Engaging in doxing/shaming behaviours
- Perceived motivations and psychological processes behind doxing/shaming
- Acceptance of doxing and shaming
- Acceptance of doxing and shaming based on the type of cases, perpetrator's characteristics, victim characteristics
- Support for various solutions for doxing and online shaming

Methodology (Survey)

Two surveys were carried out on 161 Singaporean participants to investigate about their attitudes towards doxing and online shaming. The questionnaires measured the following:

- Individual's sense of injustice **(adapted from the moral outrage scale by Montada et al., 1986)**
- Engaging in doxing/shaming behaviours
- Perceived motivations and psychological processes behind doxing/shaming
- Acceptance of doxing and shaming
- Acceptance of doxing and shaming based on the type of cases, perpetrator's characteristics, victim characteristics
- Support for various solutions for doxing and online shaming

Montada, L., Schmitt, M., & Dalbert, C. (1986). Thinking about justice and dealing with one's own privileges. In *Justice in social relations* (pp. 125-143). Springer, Boston, MA.

Demographics of Participants

2 groups of participants

- Doxing (n = 79)
    - M_{age} = 29.24 (SD = 13.68)
    - n_{female} = 41, n_{male} = 37

- Online Shaming (n = 82)
    - M_{age} = 23.92 (SD = 5.43)
    - n_{female} = 43, n_{male} = 37, $n_{agender}$ = 1

Main Analyses

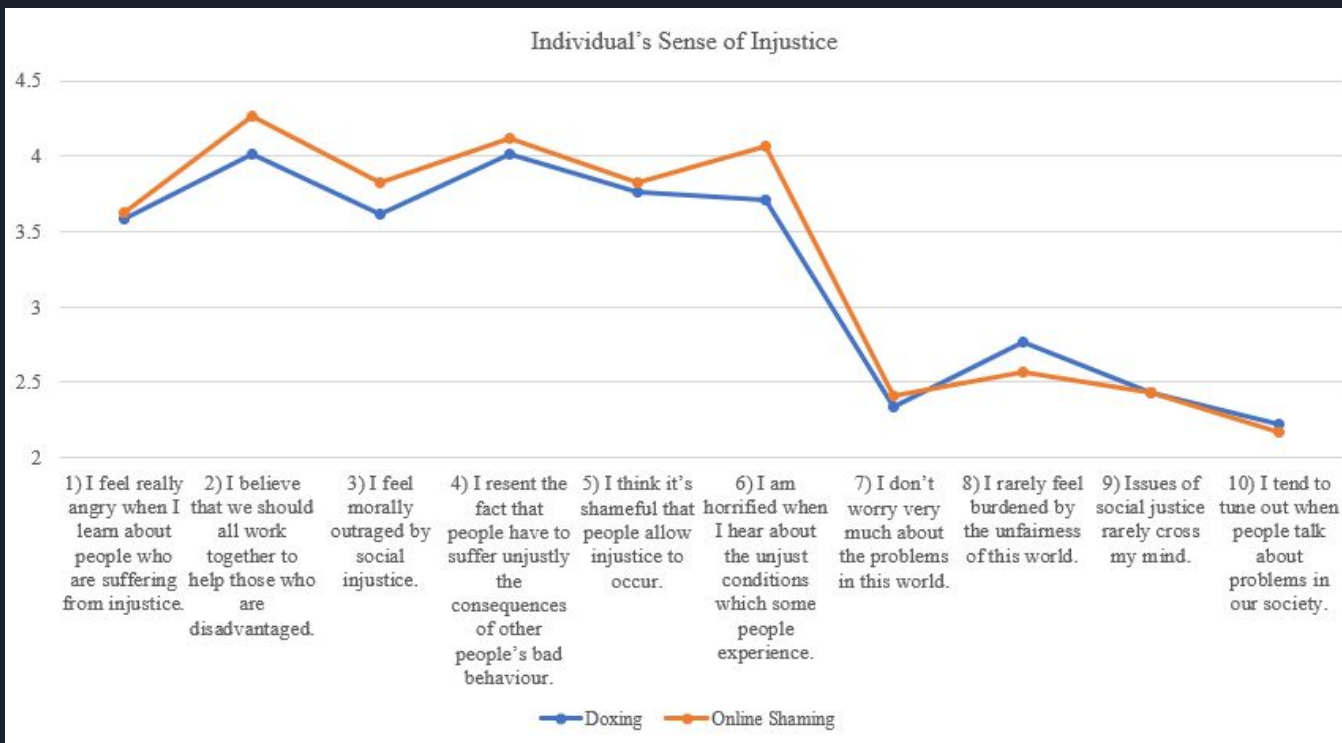Likert-scaled items were coded before running the analyses

- Strongly disagree → 1
- Disagree → 2
- Neither agree nor disagree → 3
- Agree → 4
- Strongly agree → 5

- Never → 1
- Hardly ever → 2
- Sometimes → 3
- Often → 4
- All the time → 5

Individual's Sense of Injustice

- 10 items in total (Cronbach's α = .80)
- Participants from both doxing and online shaming groups were more likely to feel a sense of resentment towards injustice
- In general, the correlations between individual's sense of injustice and other measures of the survey (i.e., engagement in doxing/online shaming, and acceptability of doxing/online shaming) were weak (r < .40)
- Overall, online shaming group has more agreement to the statements compared to doxing group
- Only 2 out of 10 items show significant between-group differences in responses
    - Suggests that the resentment towards injustice did not differ significantly between participants from the doxing group and the online shaming group

Individual's Sense of Injustice

Individual's Sense of Injustice

Chart showing two lines (Doxing in blue, Online Shaming in orange) across questions 1–10, with y-axis from 2 to 4.5.

Questions:
1) I feel really angry when I learn about people who are suffering from injustice.
2) I believe that we should all work together to help those who are disadvantaged.
3) I feel morally outraged by social injustice.
4) I resent the fact that people have to suffer unjustly the consequences of other people's bad behaviour.
5) I think it's shameful that people allow injustice to occur.
6) I am horrified when I hear about the unjust conditions which some people experience.
7) I don't worry very much about the problems in this world.
8) I rarely feel burdened by the unfairness of this world.
9) Issues of social justice rarely cross my mind.
10) I tend to tune out when people talk about problems in our society.
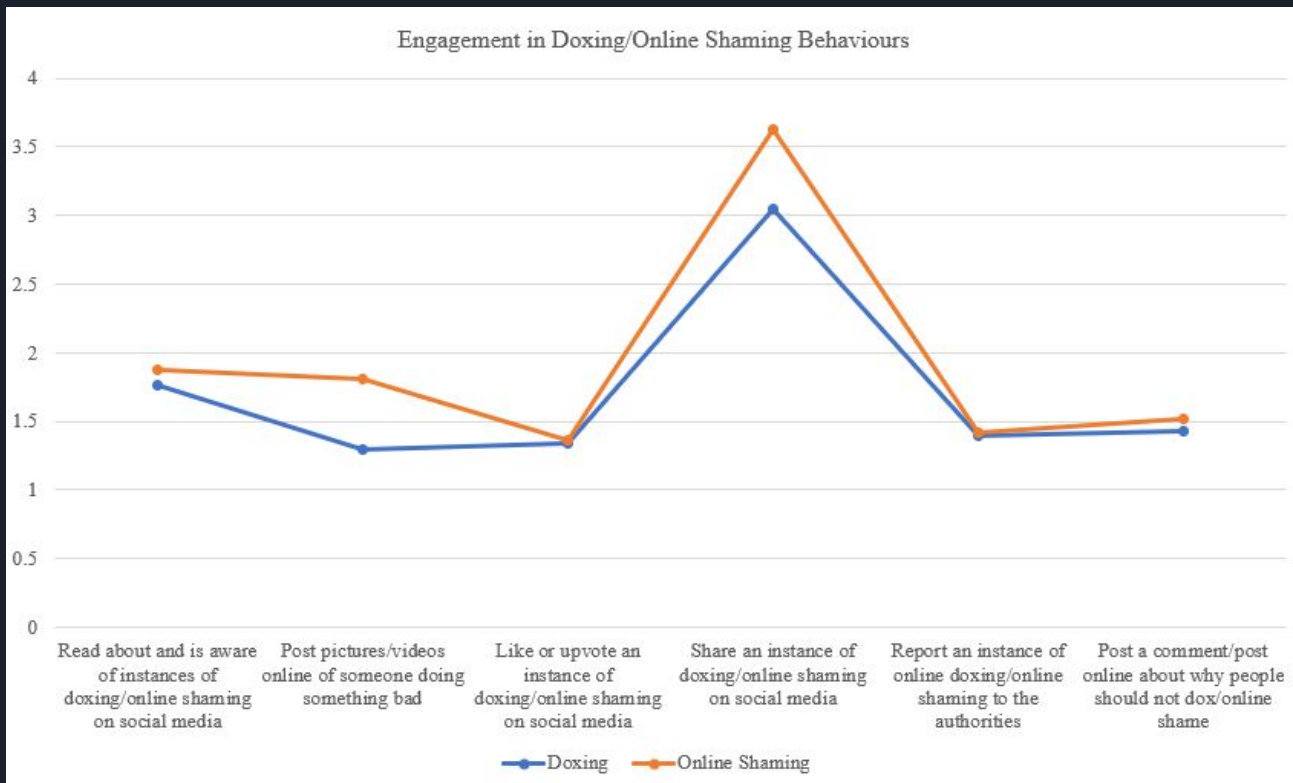
Legend: Doxing, Online Shaming

Engagement in Doxing/Online Shaming Behaviours

- Doxing (9 different behaviours);
- Online shaming (7 different behaviours).
- Generally, participants responded that they *rarely* and/or *hardly ever* engaged in any forms of doxing and online shaming
  - Except for "sharing an instance of doxing/online shaming on social media" which was leaning towards *Sometimes* and *Often*
- Across the 6 behaviours, participants were more likely to engage in online shaming as compared to doxing

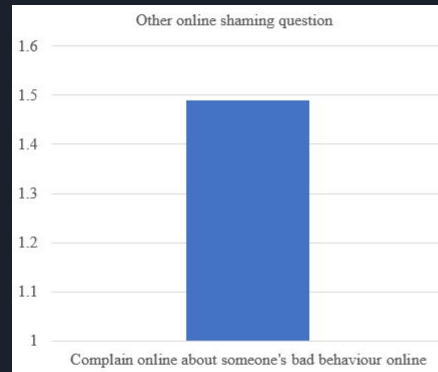# Engagement in Doxing/Online Shaming Behaviours

Engagement in Doxing/Online Shaming Behaviours

doxing questions
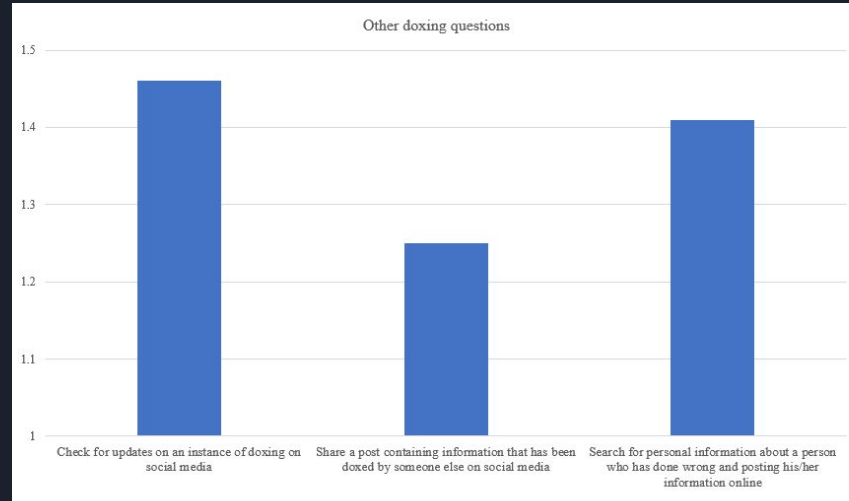
online shaming question

Perceived Motivations and Psychological Processes behind Doxing/Shaming

- 10 stated motivations and psychological processes
- Participants were more likely to agree that the stated motivations and psychological processes might be the factors that drive individuals to engage in doxing and online shaming
- Only 2 out of 10 show between-group differences in response between the doxing and online shaming groups
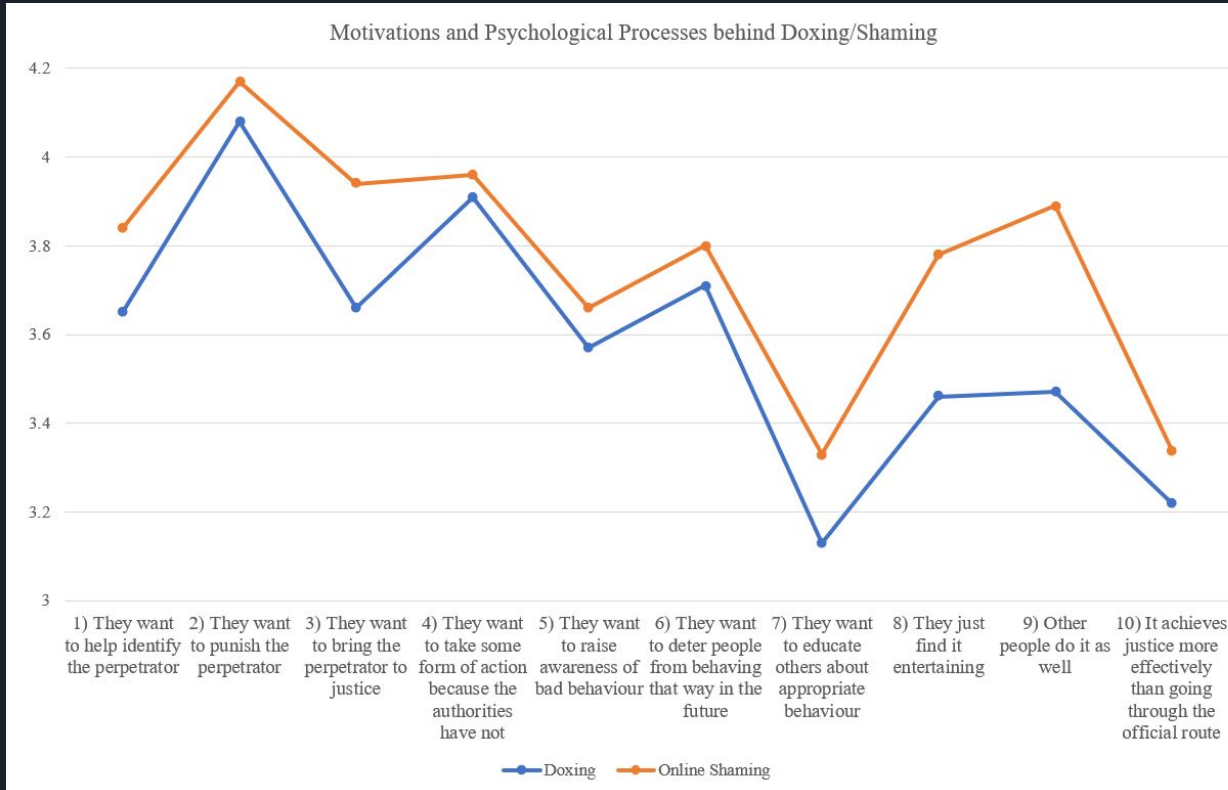 - Suggests that doxing and online shaming were generally perceived to be driven by similar motivations and psychological processes

Perceived Motivations and Psychological Processes behind Doxing/Shaming

Motivations and Psychological Processes behind Doxing/Shaming

Perceived Motivations and Psychological Processes behind Doxing/Shaming

Open-ended question → Reasons people engage in doxing/online shaming:

- Common themes
  - Wanting to feel a sense of power
    - Doxing (2 statements; e.g. "They want to feel powerful")
    - Online shaming (2 statement; e.g. "They feel a sense of power putting others down")
  - Wanting to bring justice
    - Doxing (3 statements; e.g. "To claim the moral high ground")
    - Online shaming (2 statements; e.g. "Feeling some form of injustice and "joins" in the engagement")

Perceived Motivations and Psychological Processes behind Doxing/Shaming

Open-ended question → Reasons people engage in doxing/online shaming:

- Common themes
  - Acting out of revenge/frustration
    - Doxing (1 statement: "They are out for vengeance")
    - Online shaming (2 statements; e.g. "Venting out their frustration")
  - Garner attention on the issue
    - Doxing (1 statement: "To garner attention and clout")
    - Online shaming (2 statements; e.g. "Garner sufficient attention towards the issue to allow a conversation on the issue")
  - Acting out of boredom
    - Doxing (2 statements; e.g. "Too free, nothing better to do")
    - Online shaming (1 statement: "They are immature and bored")

Perceived Motivations and Psychological Processes behind Doxing/Shaming

Open-ended question → Themes emerged **only** for online shaming:

- Fame/popularity
    - "To gain popularity or recognition whether shortlived or otherwise"
    - "Gaining fame"
- Distrust in government's efforts to bring justice
    - "Lack of faith in gov systems to administer sufficient justice"
    - "Some may feel genuinely outraged and distrust the authorities to act appropriately"

Acceptance of Doxing and Online Shaming

- Participants were more likely to perceive doxing and online shaming **unacceptable** regardless of the 3 reasons stated:
    1. It does not cause any physical harm to others
    2. The person being doxed did something bad in the first place
    3. Ultimately, it achieves justice

Acceptance of Doxing and Online Shaming
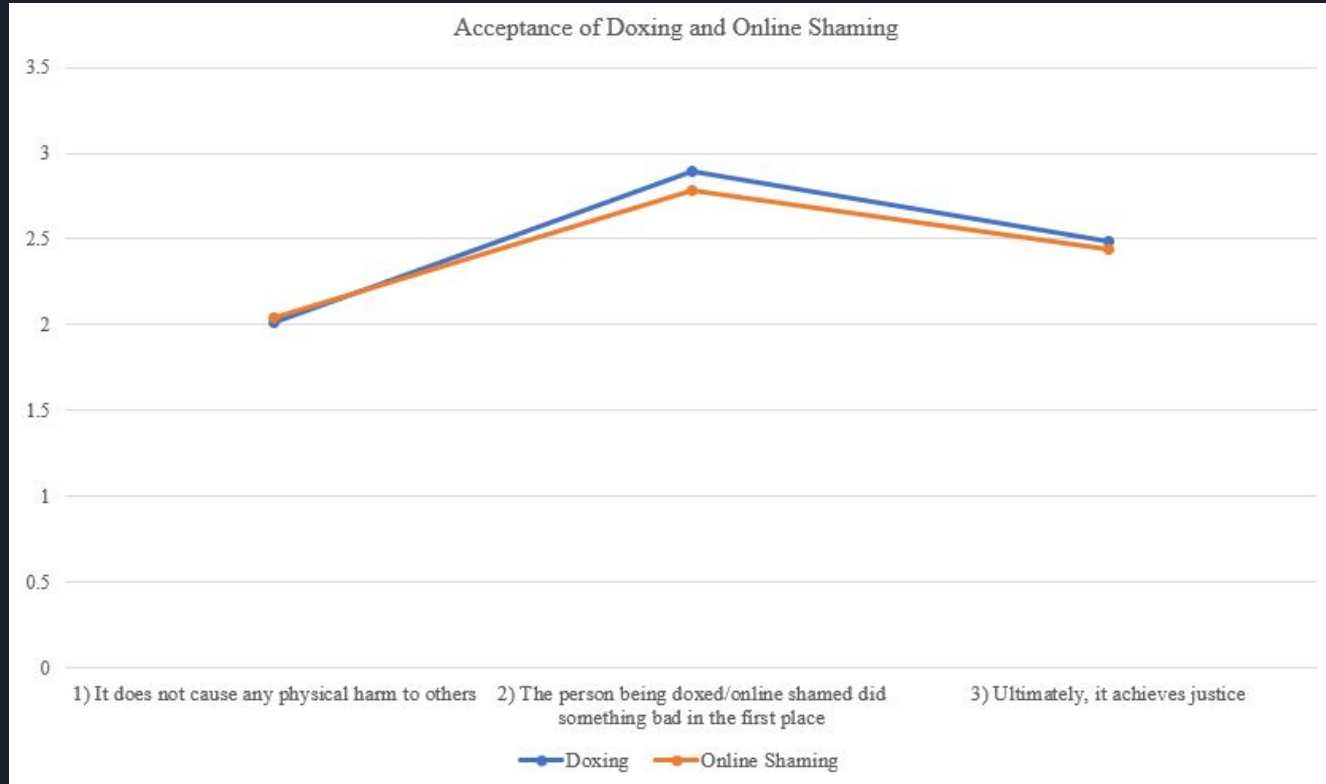
Types of Case which make Doxing and Online Shaming Acceptable

- 14 different cases
- 9 out of 14 shows significant between-group differences in responses
  - Suggests that certain types of cases may determine whether the participants think it is acceptable to engage in doxing or online shaming
- Across the type of cases:
  - Doxing is generally seen as more unacceptable compared to online shaming regardless of the type of case
  - Online shaming is generally seen as more acceptable for certain type of cases
    - Sexual harassment
    - Sexual assault
    - Racism
    - Animal abuse
    - Disrespect for the disabled
    - Illegal acts in public that inconvenience others
    - When authorities do not take action
    - When the official punishment is insufficient *(see the next slide)*

Types of Case which make Doxing/Shaming Acceptable
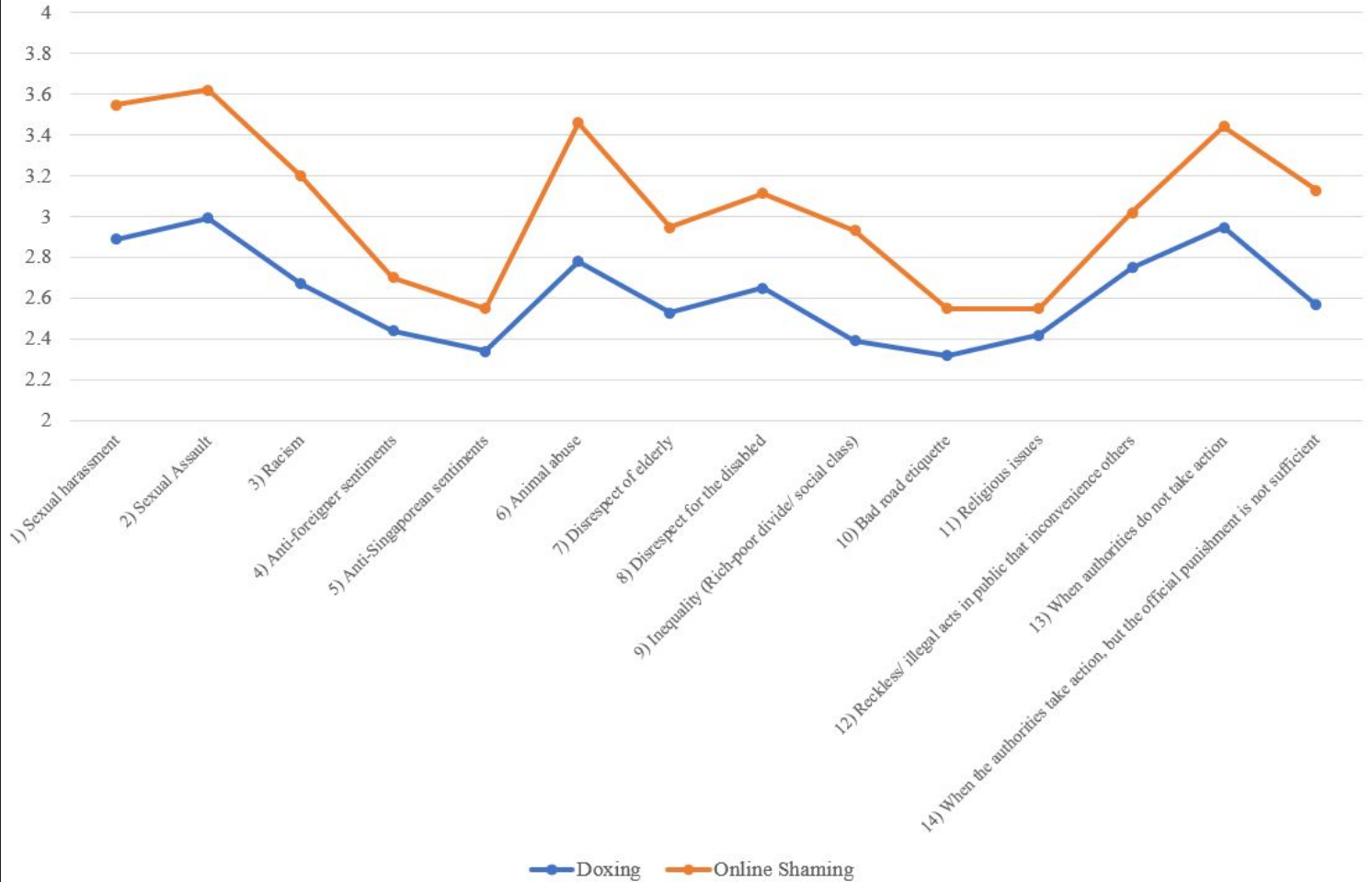
Types of Case which make Doxing and Online Shaming Acceptable

Open-ended question

- Other cases that make doxing ACCEPTABLE is/ are:
  - "Child predator"

- Other cases that make online shaming ACCEPTABLE is/ are:
  - "Murder"
  - "When the police refuse to take action"/ "The characteristics of the event where shaming occurs is irrelevant. What matters is the sufficiency of actions taken by the society's governance to administer justice"
  - "Individual arrogant"
  - "Extramarital affair"
  - "Domestic abuse"/"Child or spousal abuse"
  - "Physical violence"
  - "Plagiarism, artwork stealing or the like"
  - "Insulting the LGBTQIA community"
  - "When public awareness is crucial for the safety of others"

Types of Case which make Doxing and Online Shaming Acceptable

Results from the surveys mapped well with three of the themes derived from the case studies:

- **Desire to uphold justice for the perceived weak**
  - Sexual harassment
  - Sexual assault
  - Animal abuse
  - Disrespect for the disabled
- **Perceived threats to in-group identity**
  - Racism
- **Perceived inadequacy of law enforcement**
  - When authorities do not take action
  - When the official punishment is insufficient

Types of Victim which make Doxing and Online Shaming Acceptable

- 9 victim types

- Doxing and online shaming were more likely to be perceived to be unacceptable regardless of the type of victims

- Doxing is generally perceived to be more unacceptable than online shaming, but there is no significant between-group difference in response across all items
  - Suggests that the types of victim do not determine whether participants think it is acceptable to more acceptable to engage in online shaming over doxing

Types of Victim which make Doxing and Online Shaming Acceptable
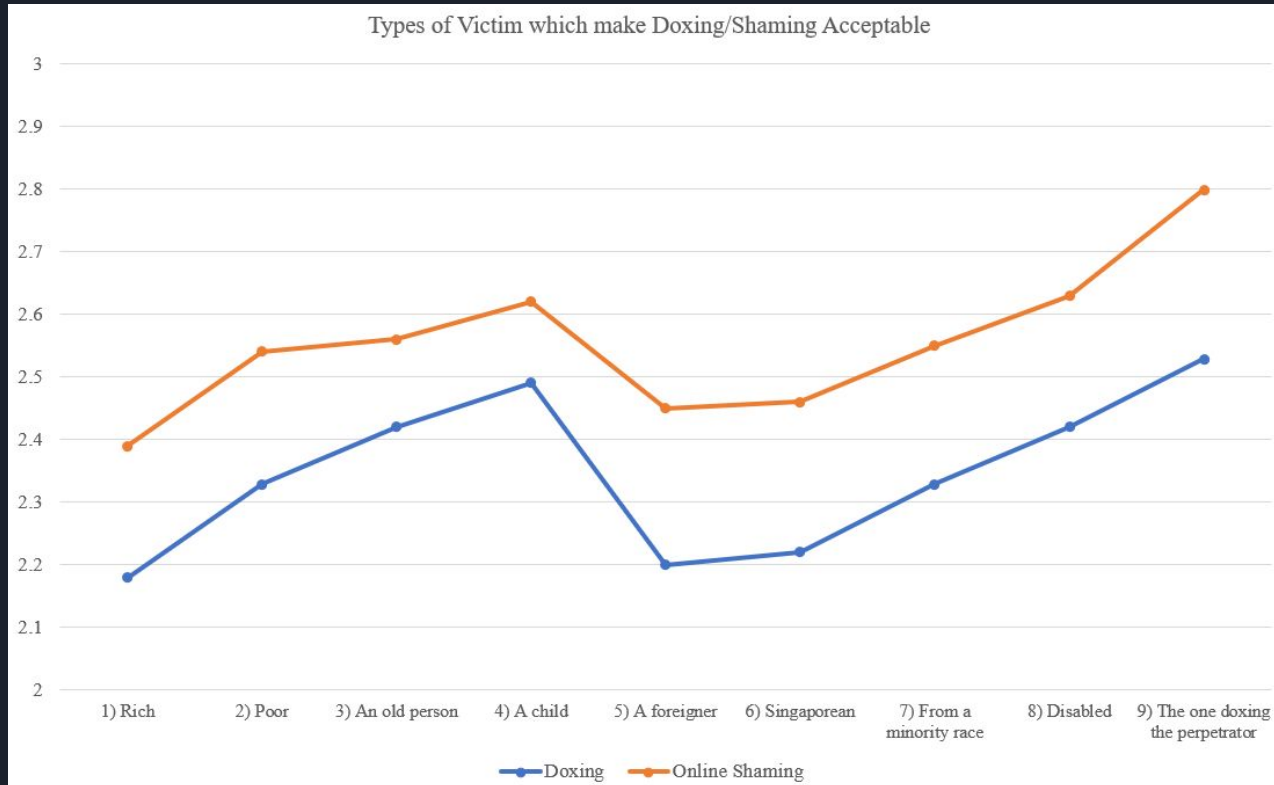
Types of Victim which make Doxing and Online Shaming Acceptable

Open-Ended question

- Other types of victims that make doxing ACCEPTABLE is/ are:
  - "Sexually assaulted"

- Other types of victims that make online shaming ACCEPTABLE is/ are:
  - "Animal"
  - "[Victim of] extramarital affairs"
  - "Abused victim eg: like those of domestic abuse"
  - "Someone is who might be mentally challenged or does not have the cognitive ability"
  - "Doesn't matter about the victim, it's about justice."/ "I don't think the type of victim matters"/ "A victim is a victim, there shouldn't be a difference"
  - "None. Victims are a vulnerable group although people might say they are taking a victim mentality, it is important to look at context or situation. People can just be nice but are still shamed for being pretentious or playing the victim when they are totally innocent."

Types of Perpetrator which make Doxing/Shaming Acceptable

- 8 perpetrator types

- Doxing and online shaming were perceived to be unacceptable regardless of the type of perpetrator
    - Generally, doxing was seen to be more unacceptable than online shaming

- 5 out of 8 items show between-group differences in responses
    - Suggests that certain types of perpetrator may determine whether participants think it is more acceptable to engage in online shaming as compared to doxing

Types of Perpetrator which make Doxing/Shaming Acceptable
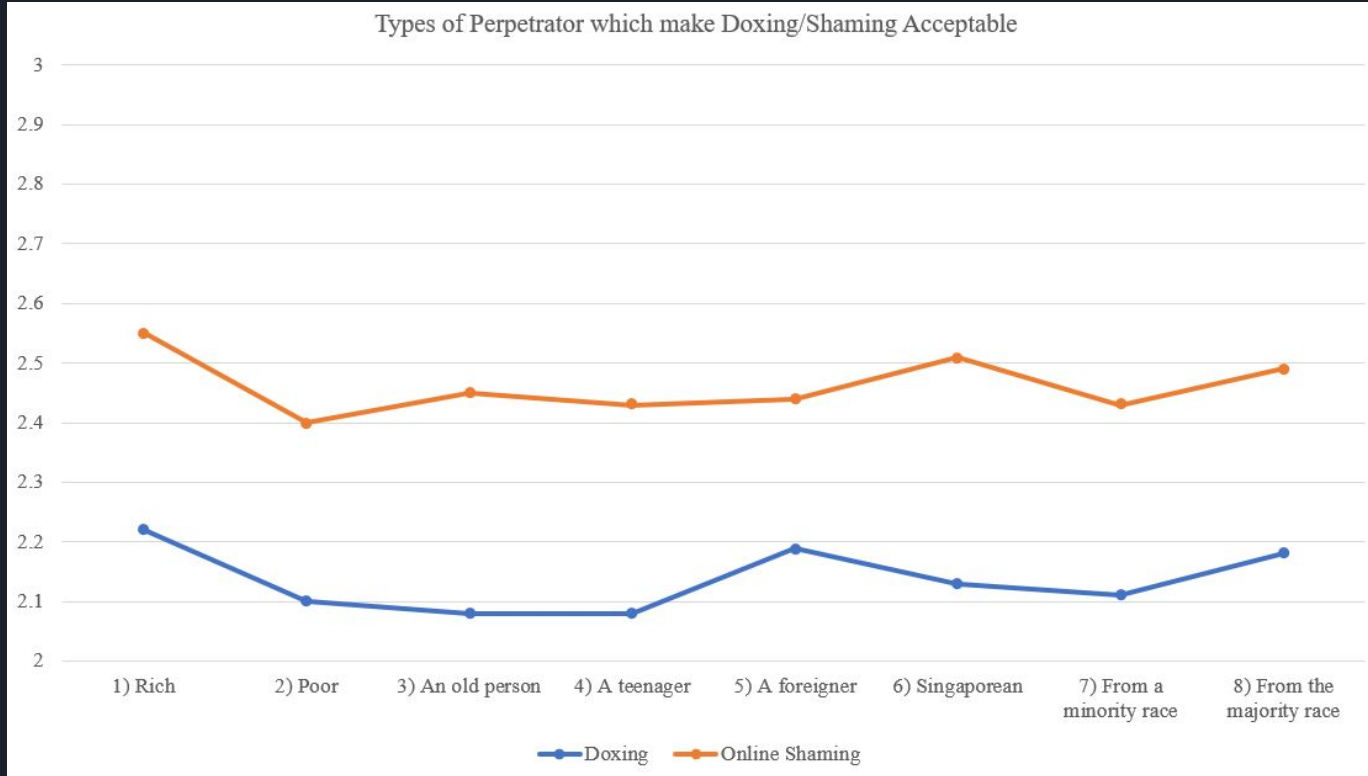
Types of Perpetrator which make Doxing/Shaming Acceptable

Open-Ended question

- Other types of perpetrators that make doxing ACCEPTABLE is/ are:
    - "When perpetrator is causing problem to others repeatedly"

- Other types of perpetrators that make online shaming ACCEPTABLE is/ are:
    - "Repeat and unrepentant offenders"
    - "An online bully"
    - "Type of perpetrator does not matter as well. Depends on the crime committed, not who the person is" / "A perpetrator is a perpetrator!! Doesn't matter"
    - "None. Online shaming should be action directed and not person directed unless the person really has issues such as the Olympic rapist"
    - "I think it doesn't matter who the perpetrator/victim is if the accusation holds ground"

Support for Solutions for Doxing and Online Shaming

- Participants were more likely to agree on having tougher laws (items 1 and 2) and formal law enforcement and platforms (items 4 and 5) to minimise instances of doxing and online shaming
- Participants were more likely to disagree to let the authorities step back while the community regulate their own behaviours through practices like doxing and online shaming

Solutions

1) If laws and the sentences were tougher on crimes, there would be less need for people to dox/shame the perpetrator and punish him/her.	2) If laws against doxing/online shaming were tougher, people would be less likely to dox.	3) The authorities should step back and let the community regulate their own behaviours through practices like online doxing/shaming.	4) There should be ways in which the police and the general public can work together to combat bad behaviour in Singapore.	5) There should be more platforms to report bad behaviour online so people don't have to dox/online shame perpetrators.

Doxing   Online Shaming

Support for Solutions for Doxing and Online Shaming

Open-ended question

Common themes under other solutions for both Doxing and Online Shaming

- **Public education on the appropriate ways/avenues to report bad behaviours**
  - Doxing (11 statements; e.g. "Raise awareness of other avenues to report bad behaviour")
  - Online shaming (10 statements; e.g. "Educate people on other more acceptable ways to bring justice")
- **Tougher punishments for doxing/online shaming**
  - Doxing (2 statements; e.g. "Straight to jail" / "Harsh punishment or fine")
  - Online shaming (4 statements; e.g. "Have tougher consequences of online shaming and those who joined in as well so that keyboard warriors would not be anonymous and so self-righteous")

Support for Solutions for Doxing and Online Shaming

Common themes under other solutions for both Doxing and Online Shaming

- **Regulating online behaviours**
  - Doxing (4 statements; e.g. "Stricter rules in social media sharing")
  - Online shaming (2 statements; e.g. "A clear list of how to behave? ... Or allow debates (online) to occur so people can iron things out on what is acceptable and what is not acceptable. Through clear boundaries, we know when and what to shame?")
- **Transparency of police investigation**
  - Doxing (3 statements; e.g. "More transparent investigating procedures")
  - Online shaming (1 statement: "... I think that the authorities must be transparent about their processes and give the public reassurance that they are able to rely on the justice system...")

Discussion

Authorities should be aware that some cases are more likely to draw attention than others

- Authorities should be prepared to respond to these cases in a quick and timely fashion to avoid public perception of being biased to a party or slow to act. → creating a reason for people to engage in CV to respond to such injustice

- Authorities should reiterate to netizens that they should share information of bad behaviours to the relevant authorities on certain online authorised platforms (e.g. iWitness platform by the Singapore Police Force)

Discussion

People who engage in CV are likely to be seen as doing it for noble reasons

- People who engage in CV are likely to be supported for their actions.
- There could be public backlash if the authorities are seen to be heavy-handed against well-meaning cyber-vigilantes

Discussion

Building partnerships and digital norms to mitigate the negative effects of CV

- Acts of cyber-vigilantism is more likely to be accepted for certain cases (e.g., sexual assault) → Building digital norms where netizens let due process run its course is preferred over engaging in CV
- Authorities can work with social media companies to flag any potential doxing information and strongly worded hate content that poses a threat to anyone involved
- Importance of providing psychological care for victims of CV (some may be misidentified as a perpetrator)

Limitation and Future Research

- Current study was done in a period where there was no public cases of CV (May – July 2020)
- Future research can examine how public attitudes can shift during a time when there is a major case of CV
  - As of 1 Jan 2020, amendments made to the Protection from Harassment Act made doxing an offence → More work can be done to track how laws shape the way people engage in CV

THANK YOU

Participants' Internet Use

➢ Majority use the internet constantly for both groups.

Doxing
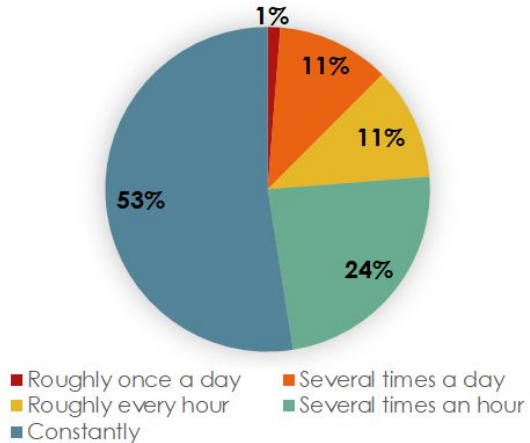
Online Shaming
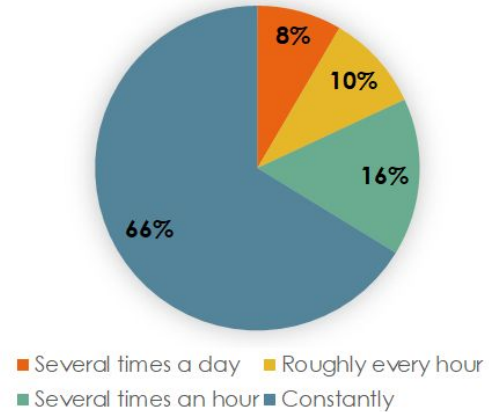
Types of Social Media Platforms Participants Use

➢ Both groups were similar in the types of social media platforms they used.

Doxing
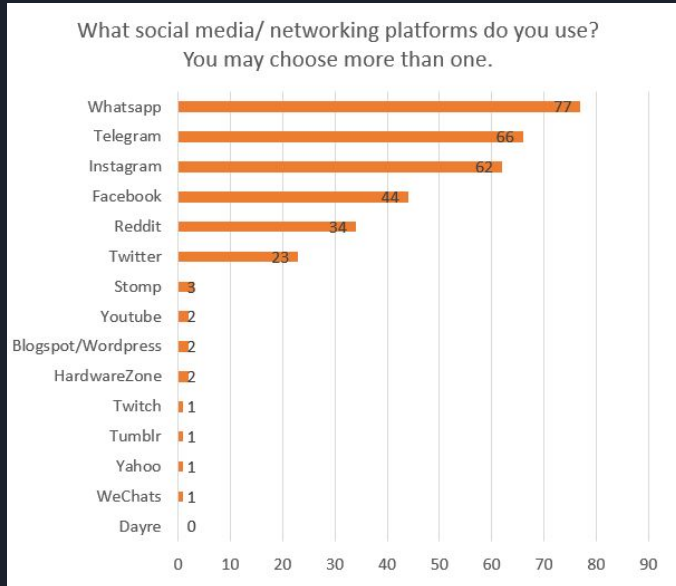
Online Shaming
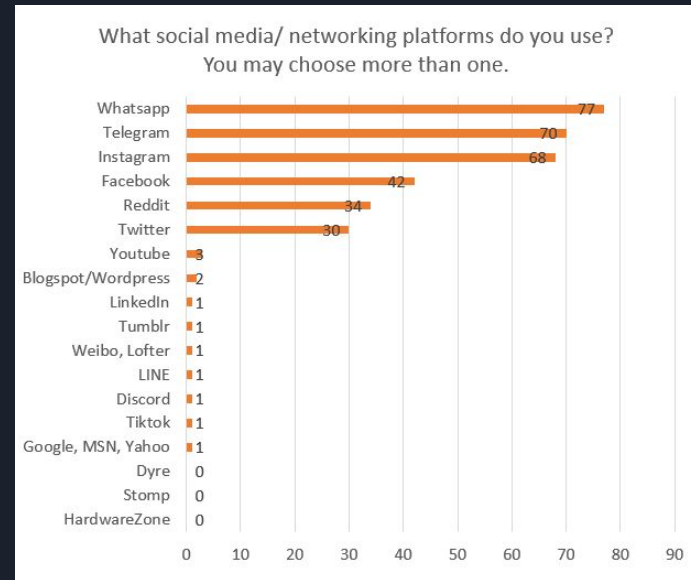
Types of Social Media Platforms Participants Followed

➢ Both groups were similar in the types of social media groups they followed.

Doxing

Online Shaming

Which of the following social media groups/ pages do you participate in? You may choose more than one.

NUSWhispers	19
SMRT Feedback by the Vigilante	12
All Singapore Stuff	8
None	7
SG Vigilante	5
Fabrications about Singapore	4
Temasek Review	4
Must see Singapura News	2
Roads.sg	2
BBC News	1
NTU Confessions	1
None of the above	1
Tumblr	1
Hardware Zone	1
Straits Times	1
SGs watching Pinoy	0
Yishun 326	0

Which of the following social media groups/ pages do you participate in? You may choose more than one.

NUSWhispers	17
All Singapore Stuff	11
SMRT Feedback by the Vigilante	7
None	5
Fabrications about Singapore	3
Temasek Review	2
SG Road Vigilante	2
9gag	1
Wake Up Singapore	1
Mothership	1
Yeolo	1
Memedef	1
Other finance pages	1
NTUConfessions	1
Facebook meme pages	1
Must see Singapura News	1
SGs watching Pinoy	1
Yishun 326	0
Roads.sg	0

Acceptance of Doxing and Online Shaming

	Item	1) It does not cause any physical harm to others	2) The person being doxed did something bad in the first place	3) Ultimately, it achieves justice
Doxing	Mean	2.01	2.89	2.49
	Std.Dev	0.76	.96	0.81
Online Shaming	Mean	2.04	2.78	2.44
	Std.Dev	1.00	1.09	1.03
Effect Size (Cohen's *d*)		.02	.11	.10

Types of Victim which make Doxing and Online Shaming Acceptable

	Item	1) Rich	2) Poor	3) An old person	4) A child	5) A foreigner
Doxing	Mean	2.18	2.33	2.42	2.49	2.2
	Std.Dev	0.9	1.02	1.03	1.14	0.91
Online Shaming	Mean	2.39	2.54	2.56	2.62	2.45
	Std.Dev	1.11	1.17	1.25	1.31	1.13
Effect Size (Cohen's *d*)		.21	.21	.14	.13	.25

(yellow highlights → significant differences between means)

Types of Victim which make Doxing and Online Shaming Acceptable

	Item	6) Singaporean	7) From a minority race	8) Disabled	9) The one doxing the perpetrator
Doxing	Mean	2.22	2.33	2.42	2.53
	Std.Dev	0.87	1.05	1.06	1.08
Online Shaming	Mean	2.46	2.55	2.63	2.8
	Std.Dev	1.14	1.2	1.27	1.15
Effect Size (Cohen's *d*)		.25	.22	.25	.27

(yellow highlights → significant differences between means)

Individual's Sense of Injustice

	Item	1) I feel really angry when I learn about people who are suffering from injustice.	2) I believe that we should all work together to help those who are disadvantaged.	3) I feel morally outraged by social injustice.
Doxing	Mean	3.58	4.01	3.62
	Std.Dev	.83	0.76	.72
Online Shaming	Mean	3.63	4.26	3.83
	Std.Dev	.94	0.7	.80
Effect Size (Cohen's *d*)		.05	.24	.21

(yellow highlights → significant differences between means)

Individual's Sense of Injustice

	Item	4) I resent the fact that people have to suffer unjustly the consequences of other people's bad behaviour.	5) I think it's shameful that people allow injustice to occur.	6) I am horrified when I hear about the unjust conditions which some people experience.
Doxing	Mean	4.01	3.76	3.71
	Std.Dev	.82	.74	.75
Online Shaming	Mean	4.12	3.82	4.07
	Std.Dev	.85	.85	.87
Effect Size (Cohen's *d*)		.11	.06	.36

(yellow highlights → significant differences between means)

Individual's Sense of Injustice

	Item	7) I don't worry very much about the problems in this world.	8) I rarely feel burdened by the unfairness of this world.	9) Issues of social justice rarely cross my mind.	10) I tend to tune out when people talk about problems in our society.
Doxing	Mean	2.34	2.77	2.43	2.22
	Std.Dev	.88	1.00	.76	.83
Online Shaming	Mean	2.41	2.57	2.43	2.17
	Std.Dev	0.89	.98	0.9	1.0
Effect Size (Cohen's *d*)		.07	.20	.00	.04

(yellow highlights → significant differences between means)

Engagement in Doxing/Online Shaming Behaviours

	Item	Read about and is aware of instances of doxing/online shaming on social media	Post pictures/videos online of someone doing something bad	Like or upvote an instance of doxing/online shaming on social media
Doxing	Mean	1.76	1.30	1.34
	Std.Dev	.92	.68	.71
Online Shaming	Mean	1.87	1.81	1.36
	Std.Dev	.98	.94	.62
Effect Size (Cohen's *d*)		.11	.61	.04

(yellow highlights → significant differences between means)

Engagement in Doxing/Online Shaming Behaviours

	Item	Share an instance of doxing/online shaming on social media	Report an instance of online doxing/online shaming to the authorities	Post a comment/post online about why people should not dox/online shame
Doxing	Mean	3.05	1.39	1.43
	Std.Dev	.94	.67	.78
Online Shaming	Mean	3.63	1.42	1.52
	Std.Dev	.95	.83	.83
Effect Size (Cohen's *d*)		.61	.05	.12

(yellow highlights → significant differences between means)

Engagement in Doxing/Online Shaming Behaviours

Doxing	Item	Check for updates on an instance of doxing on social media	Share a post containing information that has been doxed by someone else on social media	Search for personal information about a person who has done wrong and posting his/her information online
	Mean	1.46	1.25	1.41
	Std.Dev	.69	.61	.85

Online Shaming	Item	Complain online about someone's bad behaviour online
	Mean	1.49
	Std.Dev	.85

Items that cannot be compared with each other

Perceived Motivations and Psychological Processes behind Doxing/Shaming

- 10 items in total
- Participants were more likely to agree that the stated motivations and psychological processes might be the factors that drive individuals to engage in doxing and online shaming
- Only 2 out of 10 show between-group differences in response between the doxing and shaming groups
  - Suggests that doxing and online shaming were perceived to be driven by similar motivations and psychological processes
- Across the items, online shaming group was more likely to agree to the statements compared to doxing group although the differences were not significant

Perceived Motivations and Psychological Processes behind Doxing/Shaming

	Item	1) They want to help identify the perpetrator	2) They want to punish the perpetrator	3) They want to bring the perpetrator to justice
Doxing	Mean	3.65	4.08	3.66
	Std.Dev	0.88	.73	0.85
Online Shaming	Mean	3.84	4.17	3.94
	Std.Dev	0.85	0.7	0.73
Effect Size (Cohen's *d*)		.20	.09	. 28

(yellow highlights → significant differences between means)

Perceived Motivations and Psychological Processes behind Doxing/Shaming

	Item	4) They want to take some form of action because the authorities have not	5) They want to raise awareness of bad behaviour	6) They want to deter people from behaving that way in the future
Doxing	Mean	3.91	3.57	3.71
	Std.Dev	.83	0.87	.77
Online Shaming	Mean	3.96	3.66	3.8
	Std.Dev	.79	1.00	.84
Effect Size (Cohen's *d*)		.05	.09	.10

(yellow highlights → significant differences between means)

Perceived Motivations and Psychological Processes behind Doxing/Shaming

	Item	7) They want to educate others about appropriate behaviour	8) They just find it entertaining	9) Other people do it as well	10) It achieves justice more effectively than going through the official route
Doxing	Mean	3.13	3.46	3.47	3.22
	Std.Dev	.95	1.06	.97	1.11
Online Shaming	Mean	3.33	3.78	3.89	3.34
	Std.Dev	.98	.98	.97	1.10
Effect Size (Cohen's *d*)		.20	.32	.42	.13

(yellow highlights → significant differences between means)

Types of Case which make Doxing and Online Shaming Acceptable

	Item	1) Sexual harassment	2) Sexual Assault	3) Racism	4) Anti-foreigner sentiments	5) Anti-Singaporean sentiments	6) Animal abuse	7) Disrespect of elderly	8) Disrespect for the disabled
Doxing	Mean	2.89	2.99	2.67	2.44	2.34	2.78	2.53	2.65
	Std.Dev	1.20	1.26	1.12	1.05	1.00	1.15	1.04	1.05
Online Shaming	Mean	3.55	3.62	3.20	2.7	2.55	3.46	2.95	3.11
	Std.Dev	1.24	1.29	1.27	1.16	1.06	1.32	1.25	1.28
Effect Size (Cohen's *d*)		. 66	.63	.52	.25	.21	.68	.42	.46

(yellow highlights → significant differences between means)

Types of Case which make Doxing and Online Shaming Acceptable

	Item	9) Inequality (Rich-poor divide/ social class)	10) Bad road etiquette	11) Religious issues	12) Reckless/ illegal acts in public that inconvenience others	13) When authorities (e.g., police, courts...) do not take action	14) When the authorities take action, but the official punishment is not sufficient
Doxing	Mean	2.39	2.32	2.42	2.75	2.95	2.57
	Std.Dev	1.08	0.99	1.01	1.21	1.13	1.06
Online Shaming	Mean	2.93	2.55	2.55	3.02	3.44	3.13
	Std.Dev	1.1	1.06	1.29	1.13	1.3	1.21
Effect Size (Cohen's *d*)		.53	.23	.48	0.13	.49	.56

(yellow highlights → significant differences between means)

Types of Perpetrator which make Doxing/Shaming Acceptable

	Item	1) Rich	2) Poor	3) An old person	4) A teenager	5) A foreigner	6) Singaporean	7) From a minority race	8) From the majority race
Doxing	Mean	2.22	2.1	2.08	2.08	2.19	2.13	2.11	2.18
	Std.Dev	.93	0.79	0.89	0.78	.82	.81	.78	.81
Online Shaming	Mean	2.55	2.4	2.45	2.43	2.44	2.51	2.43	2.49
	Std.Dev	1.18	1.11	1.13	1.11	1.16	1.17	1.14	1.18
Effect Size (Cohen's d)		.33	0.3	0.38	.35	.25	.39	.31	.31

(yellow highlights → significant differences between means)

Support for Solutions for Doxing and Online Shaming

- No between-subject difference in responses for all 5 items
  - Suggests that in both instances of doxing and online shaming, participants responded similarly to the stated solutions

	Item	1) If laws and the sentences were tougher on crimes, there would be less need for people to dox/shame the perpetrator and punish him/her.	2) If laws against doxing/online shaming were tougher, people would be less likely to dox.	3) The authorities should step back and let the community regulate their own behaviours through practices like online doxing/shaming.	4) There should be ways in which the police and the general public can work together to combat bad behaviour in Singapore.	5) There should be more platforms to report bad behaviour online so people don't have to dox/online shame perpetrators.
Doxing	Mean	3.3	3.72	1.9	3.75	4.04
	Std.Dev	1.10	1.11	.91	.91	.76
Online Shaming	Mean	3.28	3.66	2.07	3.67	4.13
	Std.Dev	1.18	1.15	1.05	1.12	.78
Effect Size (Cohen's *d*)		.02	.06	.17	.07	.10

(yellow highlights → significant differences between means)