VICTIM IMPACT FROM AND SELF-PROTECTIVE BEHAVIOURS AGAINST DIFFERENT TYPES OF CYBER ABUSE

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VICTIM IMPACT FROM TRADITIONAL CRIMES

Crime can have significant effect on victims:

▪ Psychological, economic, health/well-being, social, etc.
▪ Can take a form of adopting self-protective behaviours.

Victim impact varies:

▪ Offence type
▪ Victim characteristics
  ▪ Gender and offender-victim relationship are known predictors of victim impact.
NEW TECHNOLOGICAL CRIMES

Cyber abuse:

- Stalking and/or harassing someone using technology.
- Could take forms of: name-calling, trolling, doxing, open and escalating threats, vicious sexist, racist and homophobic rants, attempts to shame others and direct efforts to humiliate people.
- Direct (e.g. harassing emails, messages on social media, etc.)
- Indirect (e.g. “revenge porn”)
- Mixed (at least 1 direct + 1 indirect method in one incident)
BACKGROUND

- Gap:
  - Victim impact and adoption of self-protective behaviours in the context of different types of cyberabuse.

A 38-Year-Old Woman Is Facing Felony Charges for Posting Nudes Photos of Her Best Friend Online
RESEARCH QUESTIONS

RQ1: Does the type of cyber abuse victimisation explain victim impact?

RQ2: Does the type of cyber abuse victimisation explain the adoption of self-protective behaviours?
METHOD

Online survey using Qualtrics.

Independent variables:
- Socio-demographic characteristics: Age, Gender, Race, Employment
- Offender-victim relationship
- Method of cyber abuse (3-level factor: direct, indirect or mixed)
DATA

- Non-probability sample drawn from Amazon’s Mechanical Turk (online labour platform).
- Target population: American adults (18+).
- Total N of participants = 1,463.
- N of victims = 746.

Types of cyber abuse

- Direct, 41%
- Indirect, 23%
- Mixed, 36%

Mean age – 31 years.

- Female: 54%
- White: 70%
- Employed: 80%
- Prior relationship: 78%
- Adopted SPBs: 40%
ANALYTICAL STRATEGY

RQ1: Does the type of cyber abuse victimisation explain victim impact?
• The outcome measurement Impact is continuous (0-20).
• Linear regression.

RQ2: Does the type of cyber abuse victimisation explain the adoption of self-protective behaviours?
• The outcome variable Self-protective Behaviours is binary, either adopted self-protective behaviours or not.
• Binary logistic regression.

• New area of research → Limited theoretical guidance on model specification.
• Employed Bayesian variable selection for dimensionality reduction, and then averaged over probable models.
• This allowed to estimate not only parameter uncertainty, but also model uncertainty.

• The stochastic search algorithm was used to determine the posterior probability of each model*.

G-PRIOR SPIKE-SLAB ALGORITHM

- We estimate the most probable models using a G-prior spike-slab algorithm.
- The "spike" is the probability of a particular coefficient in the model to be zero. The "slab" is the prior distribution for the regression coefficient values.
- The g-prior for our $\beta$ parameters is given by:

$$p(\beta | y) \sim \text{MVN}(0, g\sigma^2(X^TX)^{-1})$$

- as $g$ increases, the prior becomes less vague around zero (0).
- We set $g = \text{sample size}$ (the default value in AutoStat®).
Software

RESULTS – VICTIM IMPACT

Average perceived impact: 11.3 (out of 20.0).
Cumulative model probability of the five best models – 83%.
EXPLAINING VICTIM IMPACT

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<th>Variable</th>
<th>Mean</th>
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<th>HPD 2.5%</th>
<th>HPD 97.5%</th>
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EXPLAINING VICTIM IMPACT

Indirect cyber abuse

Mixed cyber abuse
EXPLAINING SELF-PROTECTIVE BEHAVIOURS
# EXPLAINING ADOPTION OF SPBs

Cumulative model probability for the five best models – 74%.

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EXPLAINING ADOPTION OF SPBs

Binary Logit Model Output

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<tr>
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<th>Mean</th>
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![Binary Logit Model Output Chart]
SPIKE SLAB

- Employment
- Indirect cyber abuse
- Mixed cyber abuse
- Victim impact
KEY FINDINGS

- Controlling for socio-demographic characteristics and offender-victim relationship, the type of cyber abuse experienced by the victim is related to both the impact and the adoption of self-protective behaviours.

- Average impact reported by the victims of mixed abuse was 12.1 compared with average impact reported by the victims of direct abuse – 10.6.

- Nearly 50% of those who experienced mixed abuse adopted SPBs compared with only 32% of those who experienced indirect abuse.

- This suggests the need to account for the type of cyber abuse in developing both crime prevention strategies and in tailoring victim services to the needs to specific groups of victims.
LIMITATIONS

- Non-probability sample $\rightarrow$ cannot generalise to target population.
- Self-reports $\rightarrow$ potential biases, recall issues, etc.
- Cross-sectional design $\rightarrow$ cannot establish whether the adoption of self-protective behaviours had any effect on preventing future victimisation.
THANK YOU!

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