National experiences in cybercrime surveys: Finland

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The state of Cybersecurity in Finland

"Suomessa kyberturvallisuus pahasti hunningolla" – kenraalin ... - Tivi
https://www.tivi.fi/.../suomessa-kyberturvallisuus-pahasti-hunningolla-kenraalin-muka... ▼
9.8.2018 - Kenraali Mikko Heiskanen johtaa pääesikunnan johtamisjärjestelmäosastoa, joka puolestaan suunnittelee Suomen kyberpuolustuksen ...

Kyberturvallisuus Suomen valtti maailmalla - esillä myös EU:n ... - Yle
https://yle.fi/uutiset/3-9855517 ▼
28.9.2017 - Kyberturvallisuuden professori korostaa tutkimuksen merkitystä. ... Kyberturvallisuus Suomen valtti maailmalla - esillä myös EU:n .... Pariisissa rajuja mielenosoituksia – protestoijat vastustivat polttoaineiden hinnan nousua.

- = "Cybersecurity in Finland in really bad state"
  - - General Mikko Heiskanen

- = "Cybersecurity is Finland's strength in international context"
  - - Professor of practice Jarno Limnéll

- So, the glass is either half-full or half-empty when it comes to the state of cybersecurity in Finland.

The state of Cybercrime in Finland

- The state of things from a criminological perspective not very well established either.

- Despite Finland being very tech-savvy country for decades, there is still relatively little existing research from a (cyber)criminological perspective.

- This means that there is a lot of assumptions, but less concrete information.

- Thus, great need for good old basic research.

Statistics and cybercrime victimization in Finland

- Official (police)statistics tell us relatively little.

- Private sector statistics even less.

- Very few survey studies. One of the only population level studies is the *Public Safety Survey* in 2009. In it cybercrime victimization was measured asking whether respondent "had been victim of a crime via the Internet". Very general question.

- Detailed population level information regarding cyber-victimization lacking prior to 2018.

- Hacking cases in police statistics 2010-2019 (number of cases per year)
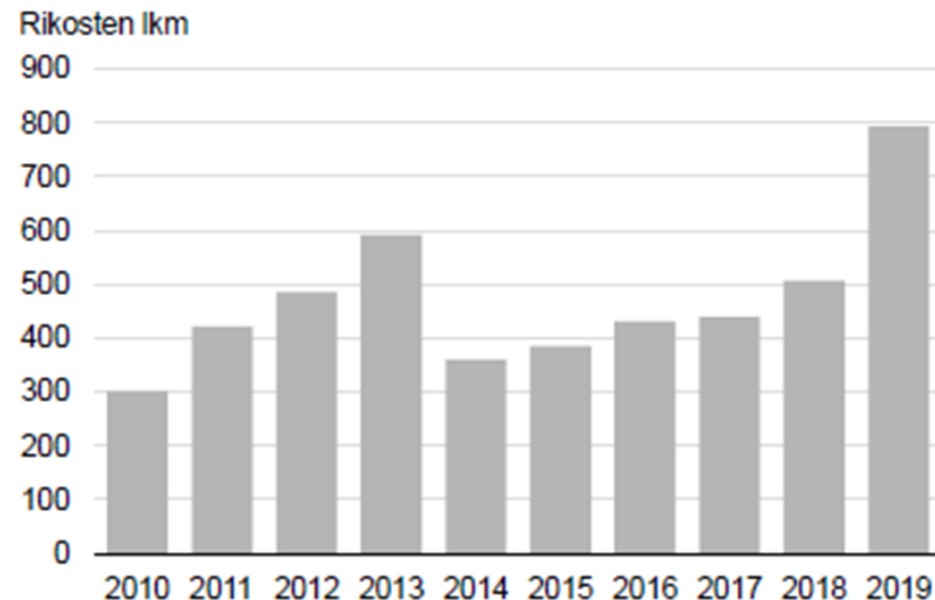
The Finnish National Crime Victim Survey

- We aimed to address the information void regarding cybercrime by including cyber-module in the 2018 survey.

- In its current form FNCVS collected annually since 2012. However, prior version on the survey collected since 1980.

- Focus on traditional crime victimization, mainly property and violence

- However, in the future the aim is to include the "cyber-module" every four years

Data description

- The cyber-module included items on online behavior and activities, online skills, and user protection…

- …And victimization experiences regarding 10 different types of cyber-offences

- In the 2018 survey the original sample was 14,000 and final number of respondents was 5,455 (response rate 39 %). The participants were aged 15 to 74 -years old.

- The respondents were selected through random sampling from the Population Information System of Finland.

Cybercrime victimization (%)

Lifetime and past 12 months
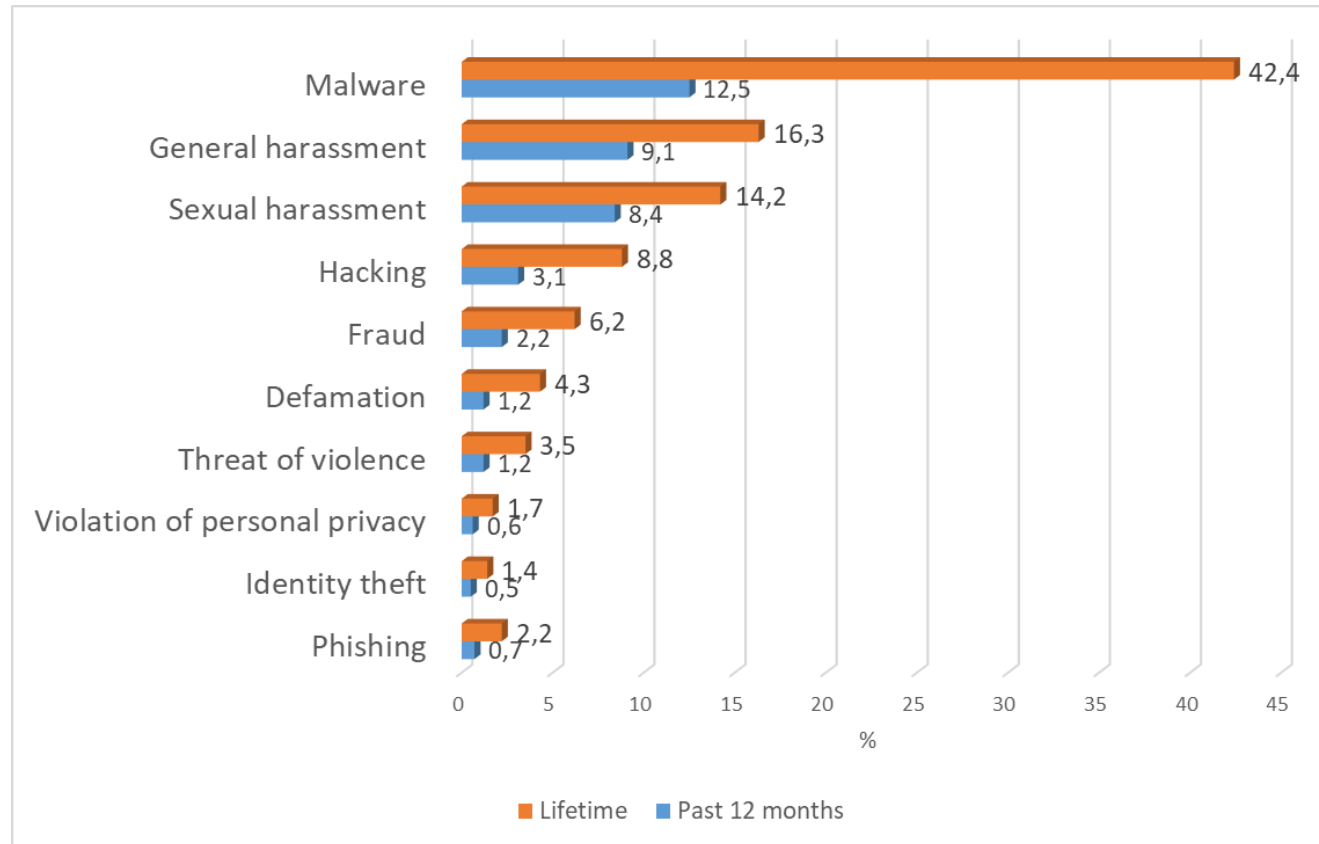
- In the 2009 Public Safety Survey 2,5% of the respondents reported some form of cybercrime victimization in the past 3 years

- In the 2018 survey 55% of the respondents reported some form of cybervictimization during lifetime and 25% of the respondents reported some form of cybervictimization in the past 12 months

Key challenges in survey planning and design

- To begin with, much easier to collect information regarding victims than offenders.

- This dictates the type of information we tend to collect, making cybercrime research often more one-dimensional compared to traditional crime.

- Cybercrime an umbrella term. What forms of victimization to focus at?

- Who is actually the intended target? Has the respondent been a victim "personally" or whether it is a case of "collateral damage" via work, or via service they use (such as online banking).

Key challenges in survey planning and design

- Cybercrime can be very abstract thing, how to get the most relevant information? How do you set up the questions? There is lack of existing established measures/questions(sets)…

- Questions regarding other background variables, such as online behavior or user protection even less established. We could use with better survey items.

- Many of the most cited studies that use experimental or advanced study designs rely on specific small samples, most often college samples. Particularly in the U.S. Not always easy to replicate in population level surveys. They cost a lot of money, so systematic and extensive data collection not easy.

- Biggest challenge is the declining response rate in surveys. If the current trend and rate of decline continues, by 2030 we have no respondents.

Few lessons learned from the survey

- Cybercrime victimization en route to surpassing traditional crime victimization

- More people also report being afraid of cybercrime victimization than traditional crime victimization

- We therefore need more basic, population level research

- International collaboration in developing study designs and key measures/items for more detailed and advanced research.

Thank you!

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