IJM

SCALE OF HARM
PROJECT SUMMARY

Measuring prevalence as a critical step to protect children from online sexual exploitation

BACKGROUND

Online sexual exploitation of children, including trafficking for the purpose of creating child sexual exploitation material (CSEM), is a growing, borderless crime.

In the Philippines and other countries, sex offenders communicate online with traffickers (often family members or close relatives of the victims)[1], paying them to livestream sexual abuse and exploitation of children directed by the remote offender in real time.

And the threat to children is growing. EUROPOL warns that "livestreaming of child sexual abuse increased and became even more popular during the COVID-19 pandemic."[2] This echoes evidence from INTERPOL that livestreaming for payment is increasing as demand surged during the pandemic as an alternative to 'in-person' abuse.[3]

In 2021, 85 million images, videos, and other files related to child sexual exploitation were reported to the U.S. National Center for Missing and Exploited Children's (NCMEC) CyberTipline.[4] Most of these illegal images and videos were found by technology designed to detect previously identified CSEM in the form of photos and videos. Yet these tools fail to detect a significant form of CSEM — livestreaming video.

The complexity of identifying livestreamed child sexual exploitation incidents requires an advanced method of measuring the scale of these crimes.

This document outlines Scale of Harm, a project led by IJM together with the University of Nottingham Rights Lab to develop a methodology estimating the prevalence of **trafficking of children to produce child sexual exploitation materials** (referred to as "TCSEM"). This methodology is meant to estimate the prevalence of TCSEM in the Philippines and later to be contextualized for other countries.

The Scale of Harm project is solving for a massive data gap by creating a way to measure this specific form of online exploitation that typically involves private livestreaming of child sexual exploitation on encrypted platforms. Having an accurate estimate of this crime's prevalence is key to designing, implementing, and evaluating interventions and their impact. Successful child protection interventions should lead to less children being harmed in the first place.

Following the development of a methodology from March 2021 through April 2022, IJM is finalizing the design, testing the viability of each component more comprehensively, including ethical consideration, before implementing the method in the second half of 2022.

WHAT IS SCALE OF HARM?

Building on IJM's [previous study](#), IJM's Center to End Online Sexual Exploitation of Children launched Scale of Harm in March 2021 to develop a method for measuring the prevalence of TCSEM.

In April 2022, in close partnership with the University of Nottingham Rights Lab and an External Advisory Council, IJM developed a mixed-method research approach for determining the prevalence of TCSEM in the Philippines. The approach will combine national household surveys using the Network Scale-up Method (NSUM), with data science analysis of a range of secondary datasets.

Scale of Harm convened and greatly benefited from in-depth collaboration with an External Advisory Council made up of 24 world-class experts, researchers, and field practitioners from organizations across the technology, financial, government, and non-government/child protection sectors.[5]

Scale of Harm is built on the following key components:

- **A project planning and structure** engaging with research, industry and IJM's advisors: A core element of Scale of Harm is the triangular partnership approach between research, civil society, and the private sector required to steer the project towards its objective. Scale of Harm convened external multi-sector stakeholders to validate the methodology developed and understand the opportunities for further partnership.

- **A world-leading research institution** advising on methodology development: The University of Nottingham, Rights Lab provided human trafficking research expertise and experience.

- **An adaptive project framework** accommodating continuous learning and an evolving knowledge base throughout the project: as the method development relied on a diverse network of multi-sector stakeholders.

IJM developed an infrastructure to facilitate research development, establishing a model focused on method creation separately from implementation.

NETWORK SCALE-UP METHOD

A PRIMARY METHOD TO MEASURE TCSEM

Scale of Harm identified the Network Scale-Up Method (NSUM) as a promising primary method to estimate the prevalence of TCSEM.

NSUM enables researchers to understand behaviors by asking an individual about their social network size and the number of people in that circle who they know are involved in a phenomenon. The researcher can then divide the average number of involved people or victims known by the individual and their average social network size to produce a percentage estimate, giving the prevalence of that phenomenon across a region or country by scaling up.
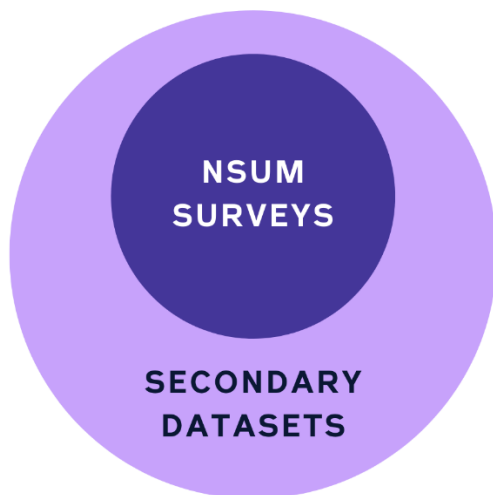
NSUM is widely used in other fields, including public health, HIV, assessing homeless populations, and measuring death rates in communities without administrative data.[6] As an accepted and valid research method, NSUM allows researchers to measure hidden or hard-to-reach populations such as victims of human trafficking and modern slavery and is a promoted method by the Global Fund to End Modern Slavery. Other organizations and institutions such as NORC at the University of Chicago[7] and Kantar in India[8] have also used NSUM for their work on Modern Slavery.

The Scale of Harm project determined that the NSUM survey approach can yield prevalence results with higher accuracy than traditional surveys for two key reasons.

- **First:** it avoids asking about the personal experiences of respondents.
- **Second:** the NSUM survey does not ask respondents for identifying information about the specific people and locations in question.

The NSUM survey results from the sampled households will then be extrapolated to allow for a projection of prevalence estimates in non-surveyed municipalities. One indication of NSUM's potential is the significant local knowledge held by community members. Furthermore, household surveys have been conducted in the Philippines by other research institutions such as the University of the Philippines. This study into online sexual exploitation of children was published in an international peer-reviewed journal in 2019.[9]

Another benefit to using household survey data is that it is standardized, reliable and replicable, thus conducive to later prevalence studies allowing TCSEM to be measured over time. While NSUM surveys alone are sufficient to measure prevalence, to increase the accuracy of estimates of TCSEM prevalence in the Philippines, the Scale of Harm methodology proposes using a data science approach to bolster research findings using secondary datasets.

Scale of Harm Proposed Methodology
NSUM Surveys as the primary method; Secondary datasets to bolster research findings

SECONDARY DATASETS
WILL STRENGTHEN CONFIDENCE AND INCREASE ACCURACY

The Scale of Harm project identified secondary datasets to develop further insights and indicators of TCSEM in the Philippines.

The secondary datasets are envisioned to be anonymous, multi-sector, non-customer identifying data that will be linked to the NSUM survey data to give a clearer picture of TCSEM. These secondary datasets present an opportunity to strengthen confidence in the NSUM survey results, while also providing operational insights for relevant stakeholders and the risks and vulnerability factors for children.

The data will be at the municipality-level to show correlation with municipality-level survey results identifying relationships between the secondary data and survey results. Machine learning data science will be used to statistically estimate the relative predictive value of each category of secondary data to assess the strength of each type of data for predicting prevalence. However, the secondary datasets require further investigation and assessment to robustly understand the viability for measuring TCSEM.

NEXT STAGES

As of August 2022, IJM is finalizing the design, testing the viability of each component more comprehensively, including ethical consideration, before implementing the method.

Study implementation will have different layers of partnerships with research experts, academic institutions, and multi-sector partners from the private sector. Implementation will enable IJM and partnering organizations to develop estimates of national and municipality-level TCSEM prevalence. In terms of secondary datasets, efforts are underway to establish multi-year engagements with key project partners to ensure replicability of supporting methods to the surveys at future points in time.

IJM looks forward to implementing the Scale of Harm method with data partners and other relevant research partners. Organizations interested in this project implementation may contact IJM via endosec@ijm.org.

END NOTES

[1] International Justice Mission Philippines. (May 2020). *Online Sexual Exploitation of Children in the Philippines: Analysis and Recommendations for Governments, Industry, and Civil Society*. **Retrieved from** https://ijmstoragelive.blob.core.windows.net/ijmna/documents/Final-Public-Full-Report-5_20_2020.pdf?mtime=20200819024644&focal=none

[2] Europol. (2020) *Internet Organized Crime Threat Assessment*. **Retrieved from** https://www.europol.europa.eu/cms/sites/default/files/documents/internet_organised_crime_threat_assessment_iocta_2020.pdf

[3] Interpol. (2020). *INTERPOL report highlights impact of COVID-19 on child sexual abuse*. **Retrieved from** https://www.interpol.int/en/News-and-Events/News/2020/INTERPOL-report-highlights-impact-of-COVID-19-on-child-sexual-abuse

[4] National Center for Missing & Exploited Children. (2021). *By the Numbers*. **Retrieved from** https://www.missingkids.org/gethelpnow/cybertipline

[5] See list of partners under the External Advisory Council via IJM's recent statement on Scale of Harm: https://osec.ijm.org/news-and-insights/news-updates/ijm-scale-of-harm-project-develops-method-to-estimate-prevalence-trafficking-to-produce-child-sexual-exploitation-materials/

[6] Global Fund to End Modern Slavery (GFEMS). (2021). *Prevalence Estimation Methods Brief*. **Retrieved from** https://www.gfems.org/reports/prevalence-estimation-methods-brief/

[7] Ibid, 21. Cited as Chapters 3 – 5 from NORC at the University of Chicago's unpublished deliverable funded by the Prevalence Estimation Research Program of the Global Fund to End Modern Slavery.

[8] IST Research, University of California, Los Angeles, and the Global Fund to End Modern Slavery. (2020). *Estimating the Prevalence of Child Sex Trafficking in Maharashtra, India*. **Retrieved from** https://respect.international/wp-content/uploads/2020/08/Estimating-the-Prevalence-of-Child-Sex-Trafficking-in-Maharashtra-India-IST-Research-2020-Full-Report.pdf

[9] Ramiro, et al. (2019). Online child sexual exploitation and abuse: A community diagnosis using the social norms theory. *Child Abuse & Neglect*. 96(2):104080. DOI: https://doi.org/10.1016/j.chiabu.2019.104080

ABOUT INTERNATIONAL JUSTICE MISSION

International Justice Mission is a global organization that protects people in poverty from violence. IJM partners with local authorities in 27 program offices in 15 countries to combat slavery, violence against women and children, and police abuse of power against people who are poor.

IJM works with the Philippine government, international law enforcement, and relevant stakeholders to combat the trafficking of Filipino children for livestreamed sexual abuse. IJM Philippines seeks to protect children from online sexual exploitation by strengthening the capacity of the Philippine criminal justice system to enforce the law, increasing local and global collaboration, building trauma-informed networks of care, and empowering survivor and government leadership. Learn more at osec.ijm.org.

IJM's Center to End Online Sexual Exploitation of Children partners with governments, industry, NGOs, and other stakeholders to protect children from online sexual exploitation around the world. Leveraging effective practices from IJM Philippine program, the Center (1) supports effective justice system responses in source and demand-side countries and (2) improves technology and financial sector detection and reporting of livestreamed child sexual exploitation, all resulting in sustainable protection for children and accountability for perpetrators. Learn more about the Center's work at osec.ijm.org/our-solution/endosec-center/ and on LinkedIn.