TOWARDS A GLOBAL INDICATOR
ON UNIDENTIFIED VICTIMS IN CHILD SEXUAL EXPLOITATION MATERIAL

Summary Report

ECPAT International
328/1 Phayathai Road,
Ratchatewi, Bangkok 10400
Thailand
Website: www.ecpat.org
Email: info@ecpat.org

For more information:

Introduction

This is a summary of a longer study called *Towards a Global Indicator on Unidentified Victims in Child Sexual Exploitation Material,* published by ECPAT International and INTERPOL in February 2018. The study was financed by the European Union and carried out between 2016 and 2018 under the title International Child Sexual Exploitation (ICSE) Database Connectivity and Awareness Raising Enhancements (I-CARE) Project. It was based on quantitative and qualitative analysis and conducted in two parts:

- The first part of the study was an analysis of information recorded for more than 1 million media files of child sexual exploitation and abuse material in the International Child Sexual Exploitation (ICSE) Database. Almost 47 percent of the files in the database portray child victims that have been identified by law enforcement, while the remainder depict unidentified children. 800 series of videos and images stored in the database were randomly selected for more detailed visual examination.

- The second part of the study involved consultations with law enforcement personnel and experts in child sexual exploitation around the world.

Limitations of the study

While the information contained in the ICSE Database can be used as a proxy indicator of victim profiles and some patterns of offender behaviour, and to give insight into the online sexual exploitation of children, it is important to take into account the limitations of this study, which included:

1. The information contained in the ICSE Database is not collected for the purpose of empirical analysis. The database is a tool designed for investigative purposes only;

2. The data collection and analytic capacities of the ICSE Database's administrators and users are limited by their primary focus on victim identification (as opposed to research);

3. The information contained in the ICSE Database information is entered by multiple countries and users. Inconsistencies and omissions (e.g. through the use of free text fields) were apparent in the entered data analysed for this study, which may have negatively affected the quality of the dataset;

4. As of December 2017, 53 of the 192 member countries of INTERPOL plus specialists from INTERPOL and Europol had direct access to the ICSE Database. And although data uploaded by and on behalf of 88 countries is stored in the database, over 50% of the world's population live in countries that are not connected to the ICSE Database, leaving significant scope for many more countries to contribute data, which will help identify more children; and

---

The International Child Sexual Exploitation (ICSE) Database

Managed by INTERPOL and housed in Lyon, France, the ICSE Database is a specialised tool for use by certified law enforcement officers and other personnel to investigate child sexual abuse material (CSAM) and child sexual exploitation material (CSEM). It contains more than 1 million images, videos and hashes, uploaded by and on behalf of 88 countries as a result of investigations into online child sexual abuse.

The main purposes of the database are to facilitate the process of identification of child victims of sexual abuse and to minimise duplication of efforts by law enforcement agencies.

While some CSEM and CSAM remains ungrouped in the ICSE Database, much of it is grouped into 'series' with a common theme so as to aid investigation and increase the potential for identification of child victims.

'Child sexual abuse material' (CSAM) refers to material depicting acts of sexual abuse and/or focusing on the genitalia of the child.

'Child sexual exploitation material' (CSEM) encompasses all sexualised material depicting children, including 'child sexual abuse material.'

The distinction between CSEM and CSAM is generally one of legal status. Because the ICSE Database contains both CSAM and CSEM, and because a discussion of the broader category of CSEM is relevant to any discussion of CSAM, this study addressed both types of material.

---

5. The data that was extracted for this study from media categorised in the database as 'unidentified' did not constitute a pure sample. Because case records may not have been updated, some cases that were marked as 'unidentified' may in fact have been 'identified'.

There are multiple legal, institutional and ethical considerations involved in the study of largely illegal and extremely sensitive material such as the ones considered by this study. These were addressed using a range of measures, including:

1. A data sharing and handling agreement between INTERPOL and ECPAT International;

2. The appointment of an international Technical Working Group to oversee and validate the study and related activities; and

3. A research protocol, developed by ECPAT International and validated by the Technical Working Group. This included an *ad hoc* ethical review performed by members of the Technical Working Group.

The vast majority of online CSAM is made by those in the victim's circle of trust. So identifying the victim is a priority, because as well as providing an opportunity to remove the child from harm it is often the first step in identifying the offender. There is a pressing need to address the lack of research on unidentified children depicted in online CSAM/CSEM and analyse the quality of the response by law enforcement around the world to this problem.

Through analysis of images, videos and case-related data (metadata) stored in the ICSE Database housed at INTERPOL, this study sought to:

1. Develop a descriptive profile of unidentified children depicted in CSAM/CSEM in the ICSE Database; and

2. Offer insight into the usage and content of the ICSE Database.

By extension, the project also sought to:

3. Contribute to producing indicators on unidentified victims of child sexual abuse material and child sexual exploitation material (CSAM/CSEM);

4. Provide an evidence base to advocate for states to allocate the resources needed to better address the sexual abuse and exploitation of children online, specifically in relation to CSAM/CSEM; and

5. Present recommendations for further research and for the enhancement of international victim identification activities coordinated by INTERPOL through the ICSE Database.

The study was further informed by a broad selection of existing research on the online sexual exploitation of children, including from the National Center for Missing and Exploited Children in the USA.

PART 1- FINDINGS BASED ON ANALYSIS OF THE DATA IN THE ICSE DATABASE

Victims

Gender

- In the 72.5 percent of cases where victim gender was recorded, 64.8 percent of unidentified media files depicted female children, 31.1 percent depicted male children and in 4.1 percent both male and female victims. When boys were depicted in the abuse, it was more likely to be severe or involve paraphilic themes.

- **Why is this important?** It is often considered that most victims of sexual abuse and exploitation are girls. However, the significant proportion of boys depicted in unidentified images and videos in the ICSE Database invites closer attention to this group.

> *According to the USA Diagnostical and Statistical Manual of Mental Disorders V, a person may be diagnosed with a paraphilic disorder if they:*
>
> *'Feel personal distress about their sexual interest, not merely distress resulting from society's disapproval; or*
>
> *They have a sexual desire or behavior that involves another person's psychological distress, injury, or death, or a desire for sexual behaviors involving unwilling persons or persons unable to give legal consent.'*

Where victim gender was recorded for unidentified victims:

64.8% of unidentified victims were girls

31.1% of unidentified victims were boys

Boys and girls were present together in **4.1%** of images and videos recorded as unidentified

35% of the media depicted at least one male victim of abuse/exploitation

When boys were depicted in the abuse, it was more likely to be severe or involve paraphilic themes

Ethnicity

- Victim ethnicity could be determined in 93.9 percent of the analysed series. 76.6 percent of analysed series featured white children, 10.1 percent were Hispanic or Latino children, 9.9 percent Asian children, and 2.1 percent depicted black victims. A small proportion of the categorised series (1.3 percent) depicted children of multiple ethnicities.

- **Why is this important?** In some cases, the ethnicity of victims may be a proxy indicator for the location of the abuse or exploitation. However, the ethnicity of the victims in the database does not necessarily paint an accurate picture of the ethnicity of victims globally, because many countries do not yet contribute images and videos to the ICSE Database. This highlights the need to connect more countries and regions to the database to generate a more nuanced understanding of victims' ethnic profiles.

Ethnicity of unidentified victims in the ICSE Database, based on visual analysis:

ICSE

Less than half the world's population live in countries that are connected to the ICSE Database

Ethnicity of unidentified victims:

2.1% black

1.3% multiple ethnicities

9.9% Asian

10.1% Hispanic-Latin American

76.6% white
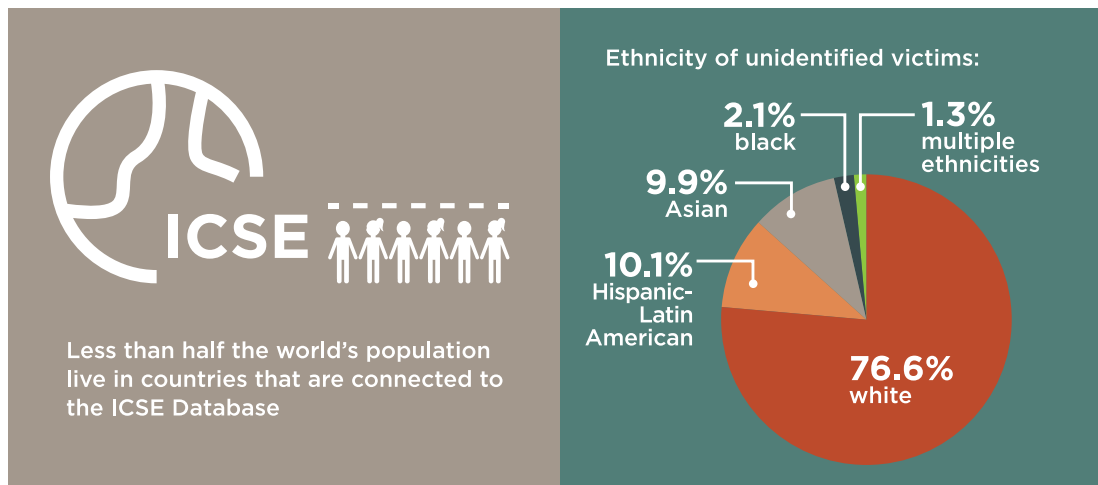
Age and severity of sexual victimisation

- Where the unidentified victim's age could be determined, 56.2 percent of cases depicted prepubescent children, 25.4 percent were pubescent children, and 4.3 percent were very young children (infants and toddlers). 14.1 percent of cases featured children in multiple age categories.

- The study found a link between the age of the victim and the severity of abuse. When victims were younger, the abuse was more likely to be severe. It was also found that very young children were more likely than pubescent victims to be subjected to abuse and exploitation featuring an additional paraphilic theme.

Why is this important?

- It is often assumed that victims of sexual abuse are older children. This may be due in part to increased media attention and public awareness surrounding the risks associated with young people's use of technology and the Internet, including the production of youth-produced material, but it may also be due to the fact that most people find it hard to imagine the extreme sexual assault of an infant. While the victimisation of any child of any age is inexcusable, over 60 percent of unidentified victims in this study were prepubescent, including very young children (infants and toddlers). This finding highlights the need to reflect and potentially prioritise this age group in policy and programming.

> **Combating Paedophile Information Networks in Europe (COPINE)**
>
> *Developed by University College Cork, Ireland, COPINE is a system for classifying the severity of the broad spectrum of victimisation depicted in online child sexual abuse material. 'COPINE level one' images or videos are considered to be at the 'lower' end of the spectrum, with 'COPINE level 10' indicating that the images depict more severe abuse or 'problematic paraphilias,' such as bestiality, sadism, humiliation, or necrophilia.*
>
> *84.2 percent of the analysed sample of images or videos in the database were classified as COPINE level six or above, which means they contained explicit erotic posing, explicit sexual activity, assault, gross assault, sadism or other problem paraphilias.*
>
> *When the victim was younger, or a boy the COPINE rating was more likely to be seven or above.*

Age of unidentified victims:

25.4% pubescent

56.2% prepubescent

4.3% infants or toddlers

14.1% children of multiple ages

More than **60%** of victims were prepubescent

The younger the victim, the more severe the abuse was likely to be

Very young children were more likely to be subjected to abuse and exploitation featuring an additional paraphilic theme

84.2% of videos and images contained severe abuse (COPINE level six or above)

Offenders

Gender

- It was only possible to identify the gender of the offender in under half of all analysed series. Where this was the case, the vast majority (92.7 percent) of offenders were male. Female offenders were most frequently depicted together with a male offender in the sample (in 5.5 percent of valid cases). Where the imagery showed males and females abusing a child together, it was almost always the males who recorded the sexual activity, while the female offenders were actively involved in the abuse of the child(ren). In cases where females abused a child on their own (only two percent of the analysed series), these lone female offenders appeared younger in age (some apparently in late adolescence or young adulthood) than those depicted abusing a child together with a male.

- **Why is this important?** This finding supports the contention that most producers of CSAM/CSEM are male. However, the significantly lower proportion of female offenders depicted in the analysed series does not negate the importance of understanding the role played by adult and young females in the abuse and exploitation of children. Whether females were seen offending alongside males, or where lone female offenders were seen abusing a child, it was difficult to tell from a visual assessment whether the depicted abuse and exploitation was committed at the behest of the male offender, female offender, or as a truly collaborative act. The role played by females in CSAM/CSEM production is apparently complex, particularly in terms of distinguishing females who act as proponents or facilitators of this crime, or both. This area requires further, focused investigation in order to inform improved strategies for the management and prevention of child sexual abuse and exploitation.

Gender of visible offenders:

The gender of offenders could only be determined in less than half of all analysed series

Females offenders were visible in **7.5%** of the analysed series where it was possible to determine gender
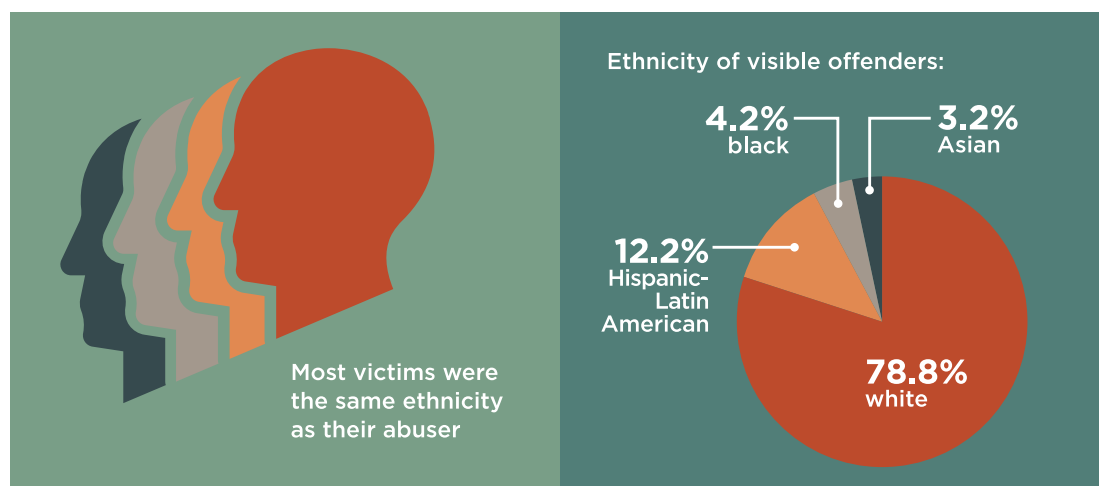
92.7% of visible offenders were male

Ethnicity

- Due to a number of issues, including the fact that offenders may disguise their identity when producing CSAM/CSEM, it was only possible to determine offender ethnicity in less than 25 percent of cases. However, where this determination was possible, 78.8 percent of offenders were white; 12.2 percent were Hispanic-Latino; 4.2 percent were black; and 3.2 percent were Asian.

- **Why is this important?** There were several possible reasons identified for the low proportions of some ethnic groups in CSAM/CSEM producer profiles, including the current geographical scope of countries connected to the ICSE Database. Based on this study, producers of CSAM/CSEM appear to have a preference for victims of the same ethnicity. It should be noted however that this could also be the result of proximity and opportunity when the offender is part of the victim's circle of trust or community, or where travelling sex offenders travel to abuse children within their own country or region. This belies the assumption that sexual exploitation of children is a crime only carried out by white males travelling to developing countries. Possible exceptions are cases of travelling sex offenders who travel outside of their home country or region to abuse children.

Ethnicity of visible offenders:

Most victims were the same ethnicity as their abuser

Ethnicity of visible offenders:

4.2% black
3.2% Asian
12.2% Hispanic-Latin American
78.8% white

Number of victims

- Of the eligible series, 71.6 percent depicted a single victim; 15.7 percent involved two victims; 4.4 percent featured three victims; 2.3 percent featured four victims; and 6 percent featured five or more victims.

- **Why is this important?** Understanding the situation of unidentified children requires insight into the context of their victimisation. For example, the high proportion of single victims may be the result of the secretive nature of child sexual abuse, where silence is enforced by an offender through grooming, manipulation and threats to a child victim. Cases involving multiple victims may indicate intra-familial (e.g. sibling) or peer abuse, or a more opportunistic offending profile (e.g. child abuse by travelling sex offenders).
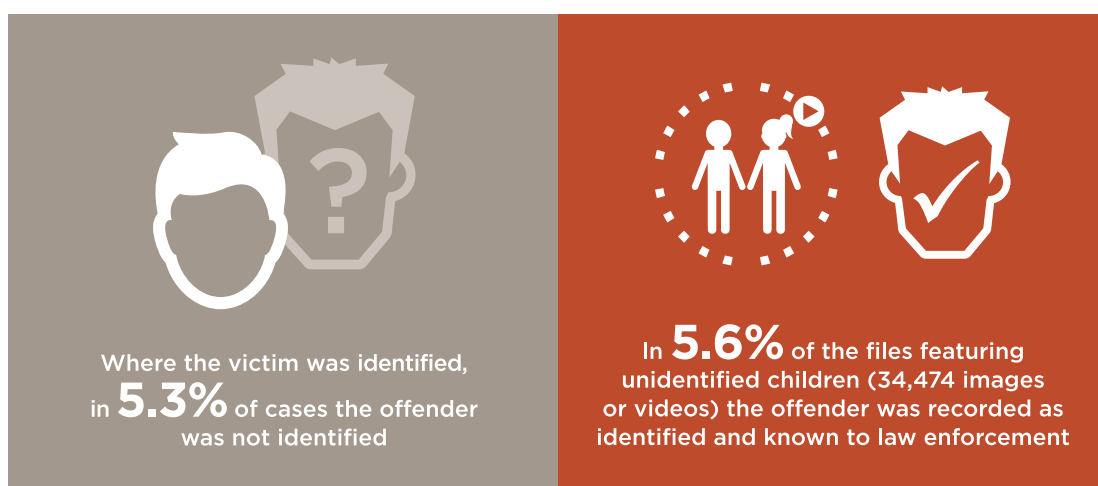
Number of visible victims in analysed series:

Almost one third of images and videos depicted two or more victims

71.6%
of media depicted a single victim

Law enforcement and victim identification

Offender and/or victims' identification status

- In 5.6 percent of the files featuring unidentified children (34,474 images or videos) the offender was recorded as identified and known to law enforcement. Where the victim was identified, in 5.3 percent of cases the offender was not identified.

- **Why is this important?** These results provide insight into the multi-layered challenges of victim identification. For example, when an offender is identified but his/her victim(s) are not, reasons may include the profile and level of cooperation by the offender, the form of the offence, such as production of CSAM/CSEM by travelling offenders or via live online child sexual abuse, or even a delay or breakdown in information sharing between law enforcement agencies. Where a victim is identified but her/his abuser is not, these may be cases of abuse by travelling sex offenders or of live online child sexual abuse. This also demonstrates how the diverse online and offline means available to abuse children complicate efforts to identify them and their abusers even further.

Where the victim was identified, in **5.3%** of cases the offender was not identified

In **5.6%** of the files featuring unidentified children (34,474 images or videos) the offender was recorded as identified and known to law enforcement

Confirmed or suspected location of the abuse

- In 10.7 percent, or 65,606 images and videos categorised by ICSE users as depicting unidentified victims, a 'suspected country of abuse' was recorded, with 72 countries recorded in the database as the suspected location of the child/children's abuse. In almost 45 percent of identified cases, the place of abuse of the identified series was unknown, or unrecorded by the ICSE user.

- **Why is this important?** Countries tagged more frequently as the suspected country of abuse for unidentified cases are not necessarily countries with a higher incidence either of child sexual abuse or of production of CSAM/CSEM. They may be those countries most easily recognisable to victim identification experts, and most commonly associated with a large language group or region. Tags related to suspected countries of abuse, although unconfirmed information, can support victim identification. Law enforcement is dependent on active networks and investigators in the tagged countries to investigate the material, not least to assess whether there is any accuracy in the determination of location. The results regarding 'suspected country of abuse' are particularly useful as a way to identify areas for training and regions or countries that could be prioritised for connection to the ICSE Database.

- In contrast, although the place of abuse for identified cases was established just over half the time, this information is registered by users of the ICSE Database based on confirmed data relating to identified cases (such as that obtained following the identification of a child and/or offender) about the location at which images or videos were recorded and/or the abuse took place. As such, countries recorded more frequently than others as the confirmed location of abuse are in most cases countries with a strong track record in victim identification and a clear policy of uploading information into the ICSE Database.

- Conversely, those countries recorded infrequently or not at all as the place of abuse in identified cases should not be considered to have a lower incidence of child sexual abuse or production of CSAM/CSEM. These may be countries that are not yet connected to the ICSE Database, countries that are not actively uploading and updating their cases in the ICSE Database, and/ or countries without a victim identification programme. An image of a child being abused in one location can be produced, uploaded and shared online all over the world. Faced with this reality, victim identification without a global network of counterparts in other countries can be like searching for a needle in a haystack, and this is exemplified by the high proportion of images and videos not linked to a suspected country of abuse.

Where the victim was unidentified,
there was also no possible or suspected
country of abuse recorded in
90% of cases

Relationship between exploitation and abuse material in series

- 84.2 percent of the analysed series depicted the sexual abuse of children, while 15.2 percent of series comprised materials depicting sexual activity that was exploitative.

- Although not formally coded for the study, more than 61 percent of analysed series were identified as being both 'abusive and exploitative in character', meaning that universally illegal sexual abuse images and potentially legal exploitation images of the same victim were found together.

- **Why is this important?** The significant proportion of series containing both exploitation and abuse images points to the complexity of victimisation where the lines can become blurred between 'acceptable' and therefore 'legal' images and videos, and those depicting an illegal act. For example, a person with a sexual interest in children may produce and collect images/videos that are acceptable according to the law, and therefore legal, as well as images/videos that are categorically illegal.

61%
of analysed series contained both
abusive and exploitative material
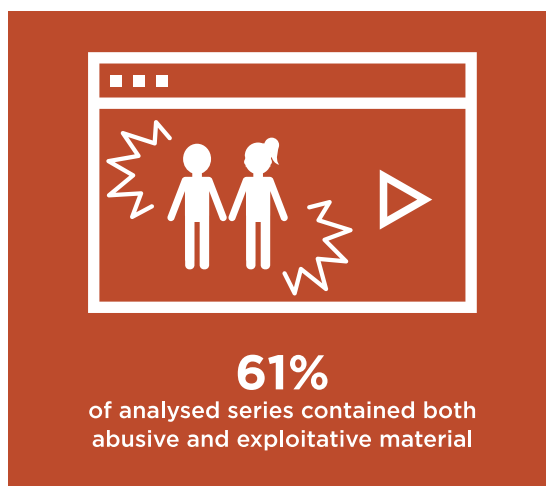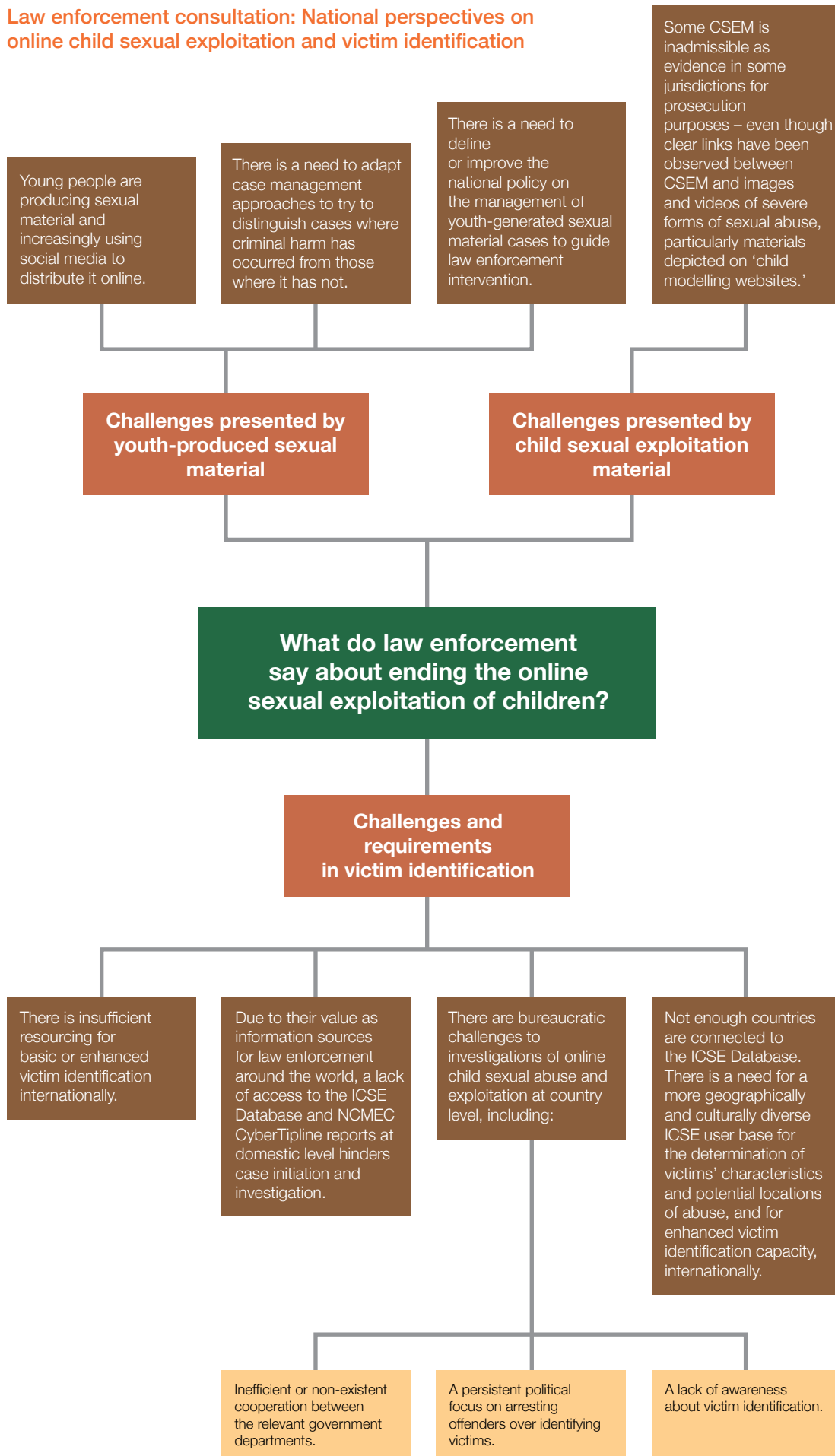
Youth-produced material

- The study did not include 'youth-produced' CSAM/CSEM in the formal analysis, largely because it was almost impossible by looking at images to determine reliably whether they were self-generated, coerced or otherwise solicited by another child or an adult.

- However, from the observations that were made for material appearing to be in this category, there was a wide range of sexual activities depicted. This included more innocuous, nude or semi-nude 'selfies', through to 'self-generated' depictions of extreme sexual activity involving bestiality and sadomasochistic themes.

- While many images were produced in domestic settings, others appeared to have been produced in school settings, and featured uniformed students.

- The levels of CSAM/CSEM production depicted in these cases were quite complex, and challenged the traditional simplistic distinction that has been made between content that is 'youth-produced' and offender-generated.

PART 2: LAW ENFORCEMENT CONSULTATION - NATIONAL PERSPECTIVES ON ONLINE CHILD SEXUAL EXPLOITATION AND VICTIM IDENTIFICATION

Why did we consult with law enforcement?

It was important to discuss some of the findings of the study with law enforcement involved in the investigation of online child sexual exploitation and abuse around the world. This was due in part to limitations on the information that could be extracted from the database for an in-depth analysis of law enforcement perspectives. Furthermore, speaking with investigators who deal with CSAM/CSEM in their work offered a complementary source of data that was very helpful in explaining the results of Part 1 of the study. These insights pointed to a number of challenges faced by law enforcement in the investigation of these crimes.

Law enforcement consultation: National perspectives on online child sexual exploitation and victim identification

Young people are producing sexual material and increasingly using social media to distribute it online.

There is a need to adapt case management approaches to try to distinguish cases where criminal harm has occurred from those where it has not.

There is a need to define or improve the national policy on the management of youth-generated sexual material cases to guide law enforcement intervention.

Some CSEM is inadmissible as evidence in some jurisdictions for prosecution purposes – even though clear links have been observed between CSEM and images and videos of severe forms of sexual abuse, particularly materials depicted on 'child modelling websites.'

Challenges presented by youth-produced sexual material

Challenges presented by child sexual exploitation material

What do law enforcement say about ending the online sexual exploitation of children?

Challenges and requirements in victim identification

There is insufficient resourcing for basic or enhanced victim identification internationally.

Due to their value as information sources for law enforcement around the world, a lack of access to the ICSE Database and NCMEC CyberTipline reports at domestic level hinders case initiation and investigation.

There are bureaucratic challenges to investigations of online child sexual abuse and exploitation at country level, including:

Not enough countries are connected to the ICSE Database. There is a need for a more geographically and culturally diverse ICSE user base for the determination of victims' characteristics and potential locations of abuse, and for enhanced victim identification capacity, internationally.

Inefficient or non-existent cooperation between the relevant government departments.

A persistent political focus on arresting offenders over identifying victims.

A lack of awareness about victim identification.

What we learned from the study

About the ICSE Database and victim identification

1. **It is complex to count the number of unidentified victims both in the ICSE Database, and globally**
   The information contained in the ICSE Database is limited to material depicting identified and unidentified victims that have been seized and uploaded by law enforcement around the world as part of their investigations. The number of identified victims recorded in the ICSE Database had reached 10,000 by January 2017, but for several reasons it remains difficult to accurately determine the number of unidentified victims in the database. More broadly, CSAM/CSEM seized by law enforcement from apprehended offenders and/or online constitutes a very small proportion of the total volume of this material that is online. Many offenders remain undetected and it is widely acknowledged that there are many more unidentified victims in existence than we are currently aware of. Most of these victims will never come to the attention of law enforcement.

2. **The ICSE Database is unique both in nature and potential**
   The study suggests that despite certain limitations and constraints, the ICSE Database remains a unique source of data on CSAM/CSEM worldwide. It is distinctively positioned to support INTERPOL's logical role as coordinator and host of global knowledge on CSAM/CSEM.

   However, in order to develop a more comprehensive, integrated understanding of the situation of the victims of CSAM/CSEM, researchers need access to a much larger data set in addition to that contained today in the ICSE Database. This would include, inter alia, increasing the volume and quality of data in the ICSE Database, as well as having access to data from other large national law enforcement agencies around the world.

3. **Our knowledge of the characteristics and experiences of the victims of CSAM/CSEM is limited by a lack of standardised or comparable categorisation approaches**
   These challenges largely relate to differences in the sampling, case recording and data categorisation approaches between existing studies. This in turn highlights the operational and research challenges presented by different categorisation approaches used by law enforcement operating around the world.

4. **The resourcing of victim identification programmes appears to impact upon rates of identification**
   Through its analysis of the confirmed (identified cases) and suspected (unidentified cases) locations of abuse that are recorded in the ICSE Database by users worldwide, this study strongly suggests that resourcing of law enforcement victim identification programmes increases the chances that victims of CSEM/CSAM will be identified.

About victims and offenders

1. Very young victims were more likely to suffer severe abuse at the hands of an adult;

2. Boys made up a significant proportion of victims and were more likely to feature in extreme imagery;

3. A significant proportion (61 percent) of analysed series contained images and videos that were both abusive and exploitative in character, and in the vast majority of the analysed series from child modelling sites, both abusive and exploitative material was visible;

4. Accurate determination of core characteristics of victims such as age is a challenge, particularly across ethnic groups;

5. Even though most offenders were male, there are females involved in the abuse and exploitation of children and it is apparent that their role is complicated; and

6. The phenomenon of 'youth-produced sexual imagery' appears to present a challenge to international law enforcement, both in terms of the detection and integration of this imagery with international image databases, and the identification and classification of its victims.

The way forward: Using the ICSE Database for the development of a global indicator

As of December 2017, 53 countries plus Europol and INTERPOL were connected to the ICSE Database, with many countries yet unconnected. While this number is far from insignificant, it does mean that the information available on unidentified and indeed identified children is limited to that made accessible by these connected countries and users, or provided to INTERPOL by a Member Country for inclusion in the database. There is significant scope for increasing the number of countries and law enforcement agencies that contribute to the database.

There are clear challenges but also opportunities associated with the effective measurement of CSAM/CSEM globally. It is clear that this goal will require extensive consultation and engagement between the research community and gatekeepers of international repositories of CSAM/CSEM, whether drawn from law enforcement and/or other sectors such as hotlines.

In order to achieve this goal, the study *Towards a Global Indicator on Unidentified Victims in Child Sexual Exploitation Material* offers a framework for the development of insights into the situation of unidentified victims of CSAM/CSEM and beyond. It also offers a categorisation approach that may be further developed and adapted to support the development of descriptive profiles of unidentified victims in future studies, together with a series of mechanisms for anonymised extraction and sharing of standardised data between information gatekeepers.

Selected recommendations for future policy and programming

The findings and conclusions of this study point to a number of recommendations that can be made, not only in relation to improving the foundation for the development of a set of global indicators on CSAM/CSEM, but also in relation to potential areas for further research. These recommendations include:

1. Continue to increase the number of countries connected to the ICSE Database, and encourage regular use and updating and sharing of information submitted to it. This should be done within the bounds of law enforcement's capacity and resourcing, with a focus on the use of technology and other means to support and enhance rather than increase demands on investigators and analysts around the world;

2. Build on existing efforts to harmonise approaches to the categorisation of CSAM and CSEM across countries and between different jurisdictions;

3. Build on existing efforts to harmonise approaches to the sharing of case-related information on child victims of sexual abuse and exploitation within and between countries, and cooperation to identify victims, whether through the ICSE Database, or more broadly through meetings of experts and specialised investigators;

4. Facilitate the consolidation of a dataset based on common data standards that can be recognised across countries and between different jurisdictions, which can be used for analysis of the global situation for unidentified children;

5. Build mechanisms into future iterations of the database that will allow for the ready and regular analysis of trends and to inform future programmes of research on child sexual exploitation and abuse. Also, explore with key technology partners the optimal use of existing and new technology to support victim identification;

6. Acknowledge the relationship between resourcing of victim identification programmes and the identification of child victims. This could be done by advocating for increased focus on child protection and victim identification in national policing plans/priorities;

7. Advocate for further interconnection of law enforcement databases worldwide;

8. Adopt a more holistic approach to the investigation and study of online and "offline" crimes against children, instead of maintaining a separation between these increasingly interlinked online and offline realms of abuse and exploitation;

9. Share more information about general patterns of offending and victimisation with the public – in order to build awareness and advocate for the plight of victims; and

10. Develop comprehensive frameworks for more reliable categorisations of victim and offender characteristics such as ethnicity across regions and countries. This will feed into crimes statistics and other global indicators, such as those used with the Sustainable Development Goals.

Recommendations for further research

1. A study of the shift in balance between images and videos, drawing on existing reports and the implications of increasing use of video for victimisation and victim identification;

2. Further development and validation of a series of data standards and an accompanying coding framework to facilitate the collection, collation and analysis of case data from CSAM/CSEM series from international CSAM/CSEM databases;

3. A study of the relationship between CSAM and CSEM in light of the finding that in over 61 percent of analysed image series contained both CSAM and CSEM

4. A study of young people and youth-involved sexual imagery to address key questions, such as the complexity of determining the status of the victims portrayed and more generally, the appropriate legal responses to this phenomena;

5. Comparisons of the identification rates of victims and offenders;

6. Comparisons of the identification rate among different age groups of victims;

7. Broader examination of the distribution of different COPINE rating levels within series, and any correlation with number of images in a series;

8. Comparative research on various types of online and 'offline' cases and the characteristics and experiences of the victims;

9. A study on the situation and context of male child victims depicted in CSAM and the possible underestimation of their numbers; and

10. Law enforcement-led research into successful techniques in victim identification and their implementation as a way to develop guidelines and ground rules to start investigating new cases and potentially to review cold cases.

INTERPOL

ECPAT