



Trends in Arrests and Investigative Techniques of Technology-Facilitated Child Sexual Exploitation Crimes: The 4th National Juvenile Online Victimization Study

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INTRODUCTION

Statement of the Problem

Technology-facilitated child sexual exploitation crimes are characterized by rapid growth and changing dynamics. For example, in 2000 there were an estimated 2,577 arrests for technology-facilitated child sexual exploitation crimes of all types (Wolak et al., 2012b). By 2006, the number of arrests had almost tripled to 7,010, and increased to 8,144 in 2009 (Wolak et al., 2012b). The characteristics of arrests for child pornography production changed significantly during that time, with large increases in teenage victims and cases involving youth-produced sexual images. Police increasingly used proactive tactics to combat child pornography possession and distribution, and close to 10% of such cases in 2009 identified offline child molesters who likely would not have otherwise been detected. Such changes over a relatively short period of time are unusual in criminal justice and social science research, supporting the need for tracking a volatile environment and law enforcement efforts to respond. As technology continues to evolve, research is needed to help the criminal justice system deal with an environment whose dynamics are not always conspicuous or captured by other criminal justice data collection systems.

Investigating Technology-Facilitated Child Sexual Exploitation

Since the mid-1990s, developing technologies have posed challenges for law enforcement agencies (LEAs) requiring them to confront situations not anticipated in existing criminal statutes, master new technical capabilities, and develop new investigative techniques.

To assist, legislators created new statutes that encompass technology-facilitated offenses including enhanced penalties and chartered a national clearinghouse for reports about technology-facilitated crimes against children -- the CyberTipline operated by the National Center for Missing & Exploited Children. The Internet Crimes Against Children (ICAC) Task Forces, developed to identify, investigate and prosecute online offenders, grew from 30 to

Key Definitions

Arrest

Includes cases where an arrest was made, a warrant issued but no arrest made, or an offender was arraigned without arrest.

Sexual exploitation

Any kind of sex crime or offense involving sexual acts or sexual material, including statutory rape and misdemeanors like contributing to the delinquency of a minor.

Child sexual abuse material (CSAM)

Pictures, videos, or other visual material that shows a person who is under the age of 18 engaged in explicit sexual activity or represented in a sexual context.

Commercial sexual exploitation of children

A commercial sex act that is induced by force, fraud or coercion, or in which the person induced to perform such act has not attained 18 years of age.

Grooming

A preparatory process in which a perpetrator gradually gains a person's or organization's trust with the intent to be sexually abusive.

61 agencies between 2000 and 2015, with over 4,500 affiliated federal, state, and local law enforcement and prosecutorial agencies to date (Harrington, 2015; Office of Juvenile Justice and Delinquency Prevention, 2025). ICAC Task Forces are now present in all 50 states. Increasing numbers of law enforcement personnel have received training to investigate technology-facilitated child sexual exploitation crimes.

Yet, rapidly changing technology and the growth in cases continue to challenge investigators. As noted at the April 2019 ICAC Task Force Commanders Meeting (Internet Crimes Against Children Task Forces Commanders Meeting, April 24-25, 2019), key challenges included an increase in cases coming into the CyberTipline, manpower and staffing limitations, volume of forensic evidence, training personnel and turnover, and children sending images to other children. The shifting nature of online child exploitation cases and the challenge they pose to investigative resources make it particularly important to monitor trends and developments in the nature of offenses being investigated and methods used by offenders.

Youth-Produced Sexual Images

Youth-produced sexual images (sometimes called “sexting”) has been a complex concern for police in recent years. Law enforcement can become involved because the creation and distribution of sexting images meets definitions of child pornography under criminal statutes (Leary, 2008). These statutes can carry potentially severe penalties and may not exempt actions by minors. Unfortunately, law enforcement, school authorities, and policy-makers are being forced to respond to these incidents with little research-based knowledge about standards of practice. This was also a top investigative challenge highlighted at the April 2019 ICAC Task Force Commander Meeting, as much time is spent on cases where children are sending sexual images of themselves to other children, yet charges are rarely filed (Internet Crimes Against Children Task Forces Commanders Meeting, April 24-25, 2019).

The Third National Juvenile Online Victimization (N-JOV3) Study provided what may be the first and only detailed, representative information about the law enforcement response to cases of youth-produced sexual images (Wolak et al., 2012a). Our findings, which pertained to reports to LEAs in 2008 and 2009, included data from investigators about the characteristics of and strategies for handling such cases. Tracking current practice with regard to these images is important to public policy discussions about what kinds of education and legislation may be needed.

SUMMARY OF PROJECT

Major Goals and Objectives

The Fourth National Juvenile Online Victimization (N-JOV4) Study collected information from a national sample of law enforcement agencies about the characteristics of crimes involving technology-facilitated sex crimes against minors investigated during the 1-year period of 2019. This year was chosen to focus on a time before the COVID-19 pandemic which had a strong influence on these types of crimes and their investigation. (Laufs & Waseem, 2020) The overall goal of N-JOV4 was to protect children against online dangers by developing a better understanding of new threats, problems, and concerns encountered by law enforcement in its effort to protect children in the changing technological environment; track and monitor new and continuing threats; and identify which investigative strategies are associated with more favorable outcomes in protecting children. This study was conducted with the approval of the University of New Hampshire's Institutional Review Board.

Original Research Objectives

1. Develop a sampling plan and pilot test a proposed N-JOV4 methodology;
2. Implement a national agency-level survey to produce accurate and reliable national estimates of the prevalence of arrests for technology-facilitated sex crimes against minors and investigations involving youth-produced sexual images;
3. Conduct in-depth case-level interviews with investigators to understand how these cases were disclosed and managed by law enforcement agencies;
4. Combine the N-JOV4 data with all three prior N-JOV datasets to analyze how the prevalence and characteristics of such crimes have changed over time; and
5. Produce methodological reports; a final research report and statistical tables; a complete, archived dataset; and other research publications for dissemination of findings to practitioners, policy makers and the public.

Research Design, Methods, and Analytical Techniques

Background

The N-JOV4 Study collected information from a national sample of law enforcement agencies about the characteristics of technology-facilitated child exploitation crimes. This study aimed to build on the first three waves of National Juvenile Online Victimization Studies from 2000, 2006, and 2009. The present fourth wave focused on cases occurring within the focal year 2019. The goals of the methodology were to track and monitor new threats to children in a constantly changing technological environment. Additionally, we

aimed to understand investigative strategies associated with positive outcomes in protecting children involved in these types of cases.

In preparation for this study's launch, we consulted with the National Criminal Justice Training and Technical Assistance Center (NCJTC) to ensure that the study design best captured the most current state of knowledge about technology-facilitated crimes against children. With their assistance we identified an Expert Panel of law enforcement officials to consult on the study (See **Appendix A** for Expert Meeting Packet). This group convened virtually in a 6-hour meeting to inform the development of the study instruments and modes of survey administration. The meeting focused on the content and administration of the national agency-level survey to identify cases as well as the content and administration of the case-level interviews to gather details about the cases and their investigation. The goals of the meeting were to recommend key issues to study, questions for inclusion, wording of questions, and optimal modes of data collection at this time.

Recommendations from the meeting are included as **Appendix B** and the memo submitted to the Office of Management and Budget to obtain information collection clearance under the Paperwork Reduction Act is **Appendix C**.

The National Agency-Level Survey

Participants

A national sample of 2,686 state, county, and local law enforcement agencies (See Table 1) was surveyed by mail asking them whether they had investigated cases involving technology-facilitated crimes against children that ended with an arrest. Additionally, for this fourth wave of the study, we added a section specifically targeting cases of youth-produced images (YPI) that did not end in arrest. Data for this phase of the study was collected between May 23, 2022 and December 31, 2023.

The sample was drawn using a database available through the National Directory of Criminal Justice Data (National Public Safety Information Bureau, 2021). This data set included an annually updated census of local, county, and state law enforcement agencies in the United States and was designed to provide geographic and other identifying information for each record included in either the FBI's Uniform Crime Reports files or the Bureau of Justice Statistic's Directory of Law Enforcement Agencies. We constructed a stratified national sample of state, county, and local law enforcement agencies, dividing law enforcement agencies into three sampling frames based on affiliation with Internet Crimes against Children (ICAC) Task Forces. The first frame consisted of 61 agencies, including all ICAC Task Forces nationwide. These agencies were included with certainty due to their specialization in technology-facilitated crimes against children; they are the most likely to encounter these types of cases regularly and have more expertise in this type of crime. The second frame consisted of a random sample of approximately one-third of all

ICAC affiliate agencies, who receive specialized training on technology-facilitated child exploitation. This frame included a total of 1,600 ICAC affiliate agencies. The third frame contained a random sample of 10% of all other LEAs in the country. A total of 1,025 agencies fell into this category.

Table 1. NJOV4 Sample Characteristics by Agency Type (N=2,561)					
	Size	Population N	Sampling rate of pop N	Sample n	Eligible n¹
All agencies		15,177	---	2,686	2,561
First Stratum	ICAC Task Forces	61	100%	61	61
Second Stratum	ICAC Affiliates	4,858	33%	1,600	1,540
Third Stratum	All other LEAs	10,258	10%	1,025	960

Table 1 offers a breakdown of response type by stratum. We began with a sample of 2,686 agencies, of which 4.7% (n = 125) were ineligible because they were duplicates, no longer existed, or did not have jurisdiction to investigate cases of child sexual abuse. Almost half of all agencies, 43.3% (n = 1,164), never responded to any of the mail screeners. A total of 2,561 agencies were eligible for the study sample.

Nearly 55% percent (n = 1,397) of the eligible agencies (n = 2,561) responded to the mail surveys.

Procedures

We conducted a mail survey of the sampled law enforcement agencies in the sample. In the mail survey, we asked agencies whether, in the calendar year 2019, they had investigated technology-facilitated crimes involving child sexual abuse material (child pornography) or child sexual exploitation. To be eligible, cases had to (a) involve juveniles younger than 18 years; (b) involve arrests, detentions, or YPI cases that occurred during 2019; and (c) involve some form of technology. Eligible cases were separated into two different categories. First, cases which ended in an arrest in the year 2019 where the victim and offender met through technology, or the offender used technology to commit a sexual offense against a minor. Next, we asked about cases involving the distribution, access, or production of child sexual abuse material (CSAM) involving technology. Agencies were asked to provide the combined total number of these types of cases ending in arrest. Finally, we also included a separate section that asked about the number of YPI cases, which were defined as “any cases that did not result in an arrest that involved sexual images created by minors (age 17 or younger) AND these images were or could have been child sexual abuse material (child pornography) under the statutes of your jurisdiction?”

¹ Final n includes only eligible agencies. An agency is considered ineligible if it is duplicated, if it no longer exists, if they actively declined to participate (responded to the mail screener saying they do not want to submit data), or if they informed us that they do not have jurisdiction to investigate technology-facilitated crimes against children.

Agency heads were given the option of returning the survey via mail or completing the survey via a secure online link.

Measures

The agency-level mail survey was a multipage booklet that included a “Frequently Asked Questions” section and a glossary of study terms (Survey instrument accessible through OMB: https://www.reginfo.gov/public/do/PRAICList?ref_nbr=202103-1121-001). The survey portion of the booklet was separated into three parts: 1) Arrest Cases, 2: Youth-Produced Images (YPI) Cases, and 3) Additional Questions.

In the Arrest Cases section, agencies were asked to answer the following three questions:

- 1) Does your agency have **jurisdiction** to conduct criminal investigations of cases involving child sexual assault, child sexual exploitation or the possession or distribution of child sexual abuse material (i.e., child pornography)?
 - We conduct these investigations
 - We can conduct these investigations, but they are usually handed to a different agency
 - We never conduct these types of investigations (no jurisdiction to investigate)
- 2) Between **January 1, 2019 and December 31, 2019**, did your agency make ANY ARRESTS in cases involving the attempted or completed sexual exploitation of a minor, AND at least one of the following occurred:
 - The offender and the victim first met through technology
 - The offender committed a sexual offense where technology was used to facilitate the crime in some way (e.g., grooming, sex trafficking), regardless of whether or not they first met online
- 3) Between January 1, 2019 and December 31, 2019, did your agency make ANY ARRESTS in cases involving the possession, distribution, access, or production of child sexual abuse material (i.e., child pornography), and at least one of the following occurred:
 - Illegal images were found on technology (cloud, computer, flash drives, memory cards, tablet, cell phone, etc.) possessed or accessed by the suspect
 - The suspect used technology to order or sell child sexual abuse material
 - There was other evidence that illegal images were downloaded from the Internet or distributed by the suspect using technology
 - The suspect was using streaming apps to view live video of child sexual exploitation

If respondents answered “Yes” to questions 2 or 3, we asked them to indicate a total number of cases and list the case number (or other reference) and the name and contact

information of the key investigating officer (or most knowledgeable person) for each case they reported. This information was recorded and used in Phase 2 of the study.

In the YPI Cases section, agencies were asked to answer the following question:

- 1) Between January 1, 2019, and December 31, 2019, did your agency handle any cases that did not result in an arrest that involved sexual images created by minors (age 17 or younger) AND these images were or could have been child sexual abuse material (child pornography) under the statutes of your jurisdiction? Please include:
 - Cases where minors took pictures of themselves OR other minors, including “sexting”
 - Cases that may have been crimes, but were not prosecuted for various reasons
 - Cases that were handled as juvenile offenses
 - Other cases involving sexual images produced by juveniles and an arrest was not made

Like with the Arrest Cases section, we also asked agencies to provide a total number of these types of cases handled by their agency in 2019. Additionally, we asked the following open-ended question:

- 2) We are also interested in how these sexting cases come to the attention of your agency more generally and what you typically do with them when they do. Please use the space below to tell us a little bit about that.

For both Arrest and YPI sections, we emphasized that agencies should return surveys even if they had no cases to report.

The final Additional Questions section contained four questions about how agency staff searched for cases, the total volume of reports regarding technology-facilitated sex crimes against children (including a separate portion regarding NCMEC CyberTipline reports), and a question about whether the number of reports made regarding these types of cases is so large that the agency needs a triaging system to set priority for cases. If they answered “yes” to the triage question, they were provided with 11 different factors which could influence the way they triage cases and asked to rate each by importance.

We sent each of the 61 ICAC Task Force agencies a slightly modified version of the survey which omitted the question about jurisdiction of cases, since it was clear based on their role that they all would have jurisdiction to handle these cases. We also omitted the pages in which agencies should have written case details like identification number, lead investigator name, and contact information. Since we anticipated that ICAC agencies would have handled many of these types of cases within any given year, we instead noted that a researcher from our team would reach out to the survey respondent directly to coordinate Phase 2 of the study. One full-time, trained Research Associate on our team was dedicated solely to ICAC Task Force follow-up, and her direct contact information was

provided to investigators on the cover letter included with our mailings so that ICAC Task Force Commanders could reach out to her directly with questions and concerns.

Two weeks after sending the first mail survey, we sent a postcard reminder to all agencies which included a link to the online version. Two weeks after the postcard reminder, we sent another full survey package (the same as the first mailing) to any agencies who had not yet responded. The same mailing was sent again to non-responding agencies five weeks later.

Shortened Mail Survey

After four attempts at sending the full mail survey, we made an additional attempt to gather responses using a shortened version of the original mail screener, which only included the questions about whether agencies had cases involving technology-facilitated crimes against children or CSAM that ended in an arrest in 2019, and whether they had YPI cases in 2019 (not including the Additional Questions section). This shortened version also contained a link to a Qualtrics XM survey which asked the same four questions.

Our first OMB-approved draft of the shortened mail screener did not ask agencies for a total number of cases, it only asked whether the agency had cases or not (yes or no). Upon Phase 2 follow-up, many agencies reported that they were unable to provide an accurate number of cases for various reasons, including time constraints and lack of Records Management System (RMS) search capabilities that would allow them to easily obtain the exact number of the types of cases we were seeking. Rather than taking an estimated number that may not be accurate, we simply recorded that the agency had at least one case but could not provide a count of all. These agencies were not included in the Phase 2 interviews.

We did not send shortened versions of the mail screener to any ICAC Task Force agencies (First stratum). Instead, the researcher who conducted all interviews for ICAC Task Force agencies reached out for follow-up by phone and email individually to any Task Forces who had not responded to the initial mail screener.

Telephone Calls to Non-Responders

In addition to the mail survey attempts to gather data, we also employed the University of New Hampshire's Survey Center to make telephone calls to non-responding agencies. This attempt to collect data occurred between our fourth and fifth wave of mail screeners. Trained telephone interviewers asked the questions which appeared on the full-length version of the survey as the original mail screener.

Toward the end of the data collection process, the research team directly attempted to call agencies and gather answers to the shortened version of the mail screener. We also looked up email addresses for any non-responding agencies and sent the first four questions to

lead detectives, Chiefs of Police, and general inquiry inboxes. This final attempt allowed agencies to provide their answers directly to us via email or phone.

Agency Records Requests – Mail Screener Responses

Some of the survey responses and case reports were obtained through public records requests (PRR) which function similar to the Freedom of Information Act. We submitted PRR requests for survey responses in two situations: 1) Upon agency's request, and 2) At the end of the study for large agencies in Frame 1 that had not responded to any prior survey requests. We submitted a total of 26 PRR requests for mail screener information (numbered lists of cases) and received 46.2% of those requests back (n = 12). The remaining six PRR requests were either unanswered or denied. Please see the subsection of Phase 2 for more details on PRR/records requests for in-depth case information such as police reports.

Data Collection Outcomes

Of the 1,397 responding agencies, 63.5% (n = 887) responded to our original, full version of the mail screener booklet. Additionally, 36.5% (n = 510) responded to our shortened mail screener.

Across both of these types of responses, 38.4% (n = 537) of all responding agencies reported zero cases in 2019. Additionally, 14.1% (n = 197) of all responding agencies could not provide an exact number of cases, therefore, they were not included in Phase 2 of the study. The remaining 47.5% (n = 664) of all responding agencies (26% of all eligible agencies in the sample) reported an exact number of cases and were included in Phase 2. In total, these agencies reported 12,744 cases: 5,536 arrest cases, 5,405 YPI cases, and 1,803 cases which were listed on shortened screeners, but did not respond to any follow-up attempts (meaning, we never confirmed which ones were arrest cases versus YPI cases).

Highlight Box 1

Frequently Asked Questions

What is the N-JOV Study? N-JOV is a study of local, state, and federal law enforcement agencies to collect information from across the nation about technology-facilitated crimes with juvenile victims, in particular sex crimes and child sexual abuse image cases. The results will be reported to the U.S. Department of Justice and be available to law enforcement agencies.

Why is the N-JOV Study being conducted? The N-JOV Study measures growth and change in technology-facilitated sex crimes against juveniles. We have conducted three previous surveys. The 1st asked about cases ending in arrest in 2000, the 2nd asked about arrest cases in 2006, and the 3rd about arrest cases in 2009. Policy makers and law enforcement officials will use the final study results to help secure resources for investigators and encourage citizens to report these crimes. The enclosed bulletin is an example of the information this research provides to law enforcement policy makers.

Who sponsors the N-JOV Study? The N-JOV Study is sponsored by the U.S. Department of Justice, National Institute of Justice.

Who is conducting the N-JOV Study? Researchers at the Crimes against Children Research Center (CCRC) at the University of New Hampshire are conducting the N-JOV Study. The CCRC has completed numerous studies about crimes with juvenile victims. Information about us and copies of reports from the previous three N-JOV Studies can be downloaded from our website at <https://cola.unh.edu/family-research-laboratory/projects/national-juvenile-online-victimization-study-n-jov>

How was our agency chosen? Your agency was chosen randomly from a list of U.S. law enforcement agencies. You are part of a national sample of approximately 2500 agencies.

Why is our participation important, even if we don't have any of these cases? Your participation in this study is entirely voluntary. However, we need your response to make the study results accurate. Even if your agency did not investigate any relevant cases please complete and return this survey. Whatever your agency's experiences, they represent the experiences of other agencies like yours across the nation.

What will you do with the completed mail surveys? If your agency has a case related to the N-JOV Study, we will contact you to schedule a telephone interview with the key investigating officer about a random subset of these cases. Interviews should last approximately 40 minutes and will ask about case characteristics.

What security and confidentiality protections are in place for the N-JOV Study? Agency names, names of individuals, and other identifying information will not be used in any reports, published materials or discussions of the study results. In fact, the National Institute of Justice (NIJ) approves a Privacy Certificate for every study funded by their

agency. If we call you back to gather more information about a case, we will not ask you for information, like names, that will identify specific victims. Also, information that could link a specific agency with any data gathered will be accessible only to the researchers, all of whom have signed non-disclosure agreements, as required by federal law. Further, federal law states that information gathered for research studies is immune from legal process, including subpoenas, and may be used for research and statistical studies only (34 USC 10231a).

The Case-Level Interview Survey

If respondents answered “Yes” to any of the questions in the mail survey (Phase 1), we asked them to list the case number (or other reference to the case) and the name and contact information for the key investigating officer on each case. We then conducted detailed telephone interviews with case investigators (Phase 2). We designed a sampling procedure for case-level interviews that considered the total number of cases reported by each agency so we would not unduly burden respondents in agencies with many cases. If an agency reported between one and three cases, we conducted follow-up interviews for every case. Of the 664 agencies who reported at least one case, almost half (40.8%; $n = 271$) reported 1-3 cases and did not require sampling; we attempted to conduct interviews on all cases for these agencies. For agencies that reported between 4 and 15 cases, 50% of their cases were randomly selected for interviews. For agencies with 16 or more cases, we conducted interviews on a randomly selected 10-25% of cases from each agency. Interviewers were instructed to use their best judgement, based on the total number of cases, on what percentage of cases should be sampled for those agencies who reported more than 15 cases. Data for this phase of the study was collected between July 28, 2022 and September 30, 2024.

We encountered challenges when attempting to gather lists of cases from agencies. Although we defined the types of cases we were interested in, agency staff provided feedback that their own Records Management Systems (RMS) did not allow them to easily find all cases that would be eligible for our study. Some agencies reported being so overwhelmed with cases, especially since the COVID-19 pandemic, that they could not dedicate the time needed to determine eligibility and find a list of cases. Staffing issues in agencies also presented challenges when randomly sampling cases. To maximize the number of interviews, we used convenience sampling to select whichever cases were eligible and had investigators available to speak with us.

Of the 393 agencies who reported more than three cases in Phase 2, we were able to obtain complete case information about all cases (without sampling) for 47.3% of agencies ($n = 186$). We randomly sampled cases from 43.3% ($n = 170$) of those that met our criteria for sampling. We used convenience sampling for cases reported by the remaining 9.4% ($n = 37$) of agencies with greater than three cases.

Of the 12,744 cases reported by law enforcement, 43.6% (n = 5,542) were not selected for the sample and 7.5% (n = 960) were ineligible resulting in 6,242 cases in the sample. Ineligible sampled cases were not replaced in the sample because one study goal was to estimate annual numbers of arrests/detentions, for which we hoped to use for statistical weighting procedures that required non-replacement.

Of these, 77.5% (n=4,830) of cases did not end with an interview or case record entry. This was due to:

- 23% (n = 1,113) involved investigators that did not respond to requests for interviews,
- 22.4% (n = 1,083) involved respondents who refused to be interviewed
- 1.2% (n = 56) involved duplicate cases
- 51.6% (n = 2,492) of the seemingly eligible cases that law enforcement reported on mail screeners did not have anyone who could participate in interviews, and case records could not be located in agencies' RMS.
- 1.9% (n = 86) of the case records we received were too heavily redacted to extract data from and were omitted from the case record data.

A trained group of seven interviewers followed up on the eligible cases in sample (N=1,412) between July 2022 and December 2023. They conducted telephone interviews for 11.2% (n = 706) of the eligible cases in sample. To respect investigators' time, we also allowed them to send redacted police reports for incidents that they believed would qualify for the study. Our trained team of interviewers read through reports to answer the same questions asked in our telephone survey. Data was extracted from police reports in 11.3% (n = 706) of cases and entered into a separate survey² in Qualtrics XM. Given the large number of cases with extensive missing data (particularly from case record extraction), we decided to only include cases that have 80% valid responses in the final, analytic data file (N=1,155). Of these, 68% (n = 789) were arrest cases and 32% (n = 366) were YPI cases.

Procedures

Seven trained interviewers conducted telephone interviews using computer-assisted interviewing software. The interviewers attended a 2-day training session led by the lead researchers that provided extensive details about the background, purpose, and instrumentation of the study. They all also participated in a series of mock interviews with each other and the lead researchers until they were sufficiently familiar and comfortable with the interview process. Adjustments to sampling methods were decided in research

² The separate survey was identical to the interview one, with the addition of an answer choice for "Not in case record," which interviewers used when the information asked about in the survey was not available in the report we received.

team meetings with lead researchers present and available to assist with decision-making regarding the sampling process.

Agency Records Requests – Case Details/Police Reports

Just as we submitted PRR requests for mail screener responses, we also submitted some for non-responding investigators' case records. The request protocol for obtaining police reports/case records was strict for Phase 2 data as we strongly prioritized phone interviews per normal protocol rather than extracting information from case records. If an investigator offered a soft refusal to participate in phone interviews due to scheduling conflicts, interviewers asked investigators directly if they could send police reports for their cases. Sometimes investigators submitted them upon request, other times, they directed us to their agency's records division/bureau to complete formal requests per agency protocol or PRR requests.

If investigators listed on the mail screener were unresponsive upon follow-up, interviewers would consult the agency's website for details on how to request police reports. Sometimes the request was sent via email, other times the agency required official PRR request to obtain records. We tailored requests to the agency's guidelines. Some agencies charged monetary fees in exchange for sending police reports. All records requests which required payment were reviewed by the Principal Investigator and approved depending on the cost and amount of information (number of police reports) involved in the request.

If an investigator or other mail screener respondent declined participation in Phase 2 of the study entirely due to concerns aside from scheduling conflicts, we did not proceed to request records from the agency or submit PRR requests. In these circumstances, we considered the interviews refused/declined and stopped subsequent attempts at gathering additional information.

Measures. Questions for Phase 2 were developed through interviews and consultations with law enforcement. Completed surveys were also pilot tested with police before official data collection. The Phase 2 telephone interview instrument consisted of the following sections (Instrument available through OMB

https://www.reginfo.gov/public/do/PRAICList?ref_nbr=202103-1121-001):

- **Preliminary:** Asked to all participants. Included questions about the investigation, broad case elements (including questions which determined whether the case ended in arrest and specific case typology) and questions about the key people involved (identified minors and perpetrators).
- **CSAM Production Section:** Asked to participants who said that a case ended in arrest and involved a suspect who produced CSAM, and/or a minor victim who was depicted in CSAM. In cases where a suspect produced their own CSAM and possessed other CSAM (that they did not produce themselves), the Production Section took priority to collect details about possible hands-on offenses involved. The producer could be a minor if the minor was arrested. If the minor was not

arrested, the interviewer used the YPI section to ask for details about all minors involved. This section asks questions about how the suspect met and/or knew the minor and the content depicted in the material.

- **CSAM Possession Section:** Asked to participants who said that a case ended in arrest and involved a suspect who possessed and/or distributed CSAM that they did not produce themselves. This section asks questions about how the suspect met the minor and the content depicted in the material.
- **Technology-Facilitated Enticement/Grooming Section:** Asked to participants who said their case ended in arrest and involved a suspect who groomed a minor over technology. Some of these cases overlapped with the Undercover section if the suspect was caught by an investigator who posed as a minor online and ended up arresting the suspect. This section asked about how the suspect met the minor, how long they communicated with each other before the conversation became sexual, and questions about any in-person interactions the suspect and minor may have had.
- **Undercover Section:** Asked to participants who said that their case ended in arrest and involved an investigator posing as a minor online or monitoring peer-to-peer networks for exchanges of CSAM.
- **Suspect Section:** Asked to any participant whose cases involved an identified suspect/perpetrator that was arrested. The section asked about the suspect's background, criminal history, and charges faced because of their arrest.
- **Minor Section:** Asked to any participant who said their case ended in arrest and involved an identified minor. This section asked about the minor's background, their mental and physical health, their family, resources they may have been offered because of the investigation, and negative/positive outcomes the minor experienced after the investigation.

Interpretation of missing data. As noted earlier, there were many cases (n=257) with extensive missing data (particularly from case record extraction). As such, we decided to only include cases that have 80% valid responses in the final, analytic data file (N=1,155). Although this reduced the amount of missing data overall, it did not eliminate it. We make a distinction between two types of missing data throughout this report: not sure vs. not available to researchers. "Not sure" responses were less common and reflect information the respondent could not accurately answer as part of the interview. The main reasons for this included: the key investigating officer no longer worked for the agency so an officer less or 'not at all' familiar with the case responded based on case record notes only and when certain parts of the investigation were conducted by other jurisdictions, so specific details were not part of the responding agency's case record. "Missing to researchers" data reflects case details that were not available as part of the case record because case records were heavily redacted or merely summarized, or information that the participant did not feel comfortable disclosing as part of the interview.

Expected Applicability of this Research

The findings of this study are of great policy interest. Police, prosecutors, legislators, child welfare advocates, educators and those in the Internet industry all have strong and ongoing concerns about online safety. This study provides guidance about a number of these concerns. First, policy makers, advocates, researchers and others interested in criminal justice want statistics to inform whether training, legislative and policy changes in approaches to technology-facilitated child sexual exploitation crimes are having a positive impact. This research helps fill this need by providing a robust picture of law enforcement responses to such crimes in 2019. Findings quantify sample case characteristics and examine current law enforcement investigative strategies targeting these offenders.

Second, results help determine whether some types of technology-facilitated crime types need greater attention. For example, in previous N-JOV studies, we found a new surge in the number of youth-produced sexual images. The present study identifies which types of crimes occurred at the highest rates during our study year.

Third, findings examine offender demographics and methods. We examine current patterns that emerge such as the sample-level prevalence of multiple offender crimes or disproportionate rates of offenses in minority communities.

Fourth, N-JOV4 identifies where law enforcement efforts may be yielding some positive outcomes, such as high rates of arrests or convictions for certain sub-types of sex crimes.

Fifth, study findings identify recent law enforcement approaches, training, and inter-agency collaboration. For example, we examine the relative contribution of federal and local law enforcement.

Sixth, the study provides valuable information about the impact of the federally funded ICAC Task Forces and their training programs. One of the objectives of the ICAC program is to expand the skill sets to allow more investigation and prosecution by independent local LEAs. The study examines the role of ICAC involvement.

Finally, we identify the major barriers to greater law enforcement effectiveness in dealing with these crimes. The patterns of crimes may show regions or types of jurisdictions where activity may be more intensive or less developed. Examination of these patterns can help identify challenges and areas where attention is needed. Each of these issues are discussed in this final report, products, or associated documents prepared for the law enforcement community and policy makers.

Changes in Approach from the Original Design

We requested and received a change in the scope of work for this project due to unanticipated challenges collecting data from the law enforcement agencies in the sample

such that generating accurate national estimates is not feasible. How this impacted the original aims is detailed below:

1. Implement a national agency-level survey to produce accurate and reliable national estimates of the prevalence of arrests for technology-facilitated sex crimes against minors, and investigations involving youth-produced sexual images.

Several challenges associated with response rates have occurred throughout the data collection phase of this study. First, after several attempts by the UNH and NIJ teams, we were not able to recruit the federal agencies (FBI, US Postal, and DHS) to participate in this study. Upon consultation with our statistician at Westat and with approval from NIJ, we decided to stop pursuing participation from the federal agencies for this study and focused on ICAC Task Forces, municipal agencies, and county sheriff's offices.

Second, the response rate to the agency-level survey was lower than anticipated upon completion of that phase of the project. Several steps were taken in consultation with NIJ to help improve response rates, including:

- The addition of a “short form” that reduced the number of questions being asked of agencies
- Due to the large turnover in police chiefs and agency directors, we completed an additional second round of mailings for non-responders after updating the mailing address and main contact information for each agency.
- Overall, even with these additions to our methodology, the final response rate was 53.13% (n=1,4287). Even within responding agencies, there were challenges with the data we received in some cases. For example, 13.8% (n=197) of responding agencies told us they had eligible cases but did not know and had no way to track how many. A breakdown of agencies based on our certainty with their responses as follows:
 - 2,686 agencies in the original sample
 - 1,259 (46.9%) no response
 - 197 (7.3%) said they had cases but did not tell us how many
 - 764 (28.4%) responded and had no cases
 - 664 (24.7%) responded with information about the number of cases

We believe this reluctance or inability to respond was due, in part, to COVID-related changes to police work. These changes resulted in larger workloads and thus limited hours for police to participate in research. Indeed, we have heard that this is a widespread problem across multiple projects which are trying to gather data from law enforcement.

Furthermore, many agency officials reported that their records management systems do not allow them to easily search for cases based on our criteria, which prevented many from providing us with the number of cases they investigated. We found that each agency

differed in their method of searching for cases. Based on this feedback, we think it is likely that many agencies did not respond to the screener due to being overwhelmed with technology-related cases throughout their agency and not having an efficient method to access the data we requested.

In summary, due to the exclusion of federal agencies, the large non-response rate for non-federal agencies, and the agencies that responded but did not provide usable data, we concluded, in collaboration with NIJ and Westat, that weights could not be accurately and reliably applied to the agency-level data. As such, prevalence rates are not possible which deviates from this objective.

2. Conduct in-depth case-level interviews with investigators to understand how these cases were disclosed and managed by law enforcement agencies.

A second objective was to collect detailed information about specific cases reported in the agency mail survey from key investigating officers. Here also, we encountered several challenges centering around response rates for case-level interviews. Key investigating officers of the cases listed on mail screener surveys had often left the agency when we called to attempt interviews, not allowed to share case details as part of a research project, and/or could not find the time to schedule interviews, resulting in low response rates. Taken together, for many agencies, we were not able to apply a random sample of cases for interviews (which was a critical process for our weighting and prevalence estimates). Instead, to ensure we gathered as many case details as possible, we had to sometimes conduct interviews on non-randomly selected cases based on officers' knowledge and willingness to participate. We also applied an additional strategy to maximize the number of cases we obtained data on for agencies where we could not schedule and complete case phone interviews. We requested case records where we, in turn, extracted as much information as possible that aligned with the interview. In combination with the challenges of establishing reliable weights at the agency-level, the challenges noted for collecting randomly identified case-level data add to the joint UNH-NIJ-Westat decision that developing reliable weighted prevalence estimates was not possible for this study. However, we have a wealth of rich case-level details which allows for important dissemination products and messaging efforts.

3. Combine the N-JOV4 data with all three prior N-JOV datasets to analyze how the prevalence and characteristics of such crimes have changed over time.

Given the lack of federal agencies data in N-JOV4 and the inability to weigh the data for reliable national estimates, we were not able to meet this objective.

4. Produce methodological reports; a final research report and statistical tables; a complete, archived dataset; and other research publications for dissemination of findings to practitioners, policy makers and the public.

Although providing prevalence estimates was central to several objectives of this project, we strongly felt that we could not release estimates that were unreliable. However, given all of the rich case-level data we were able to gather, we have several scholarly and public-facing materials resulting from this data which will be of considerable interest to policy makers and practitioners.

Key Considerations in Interpreting Findings

1. Data collection difficulties prohibited the use of statistical weights

The agency- and case-level sampling method was initially designed with the intention to weigh the data. Statistical weighting would improve the representativeness of the data and allow us to use results to develop estimates of national cases of internet crimes against children being seen by law enforcement agencies across the U.S. Data weighting provides unbiased (or nearly unbiased) estimation under probability samples. Nonresponse can interfere with that inference, but non-response adjustments can mitigate or reduce nonresponse bias. However, due to issues with data collection as described, the research team decided to leave the N-JOV4 data unweighted. As a result, population-based adjustments like post-stratification, raking or calibration were not possible and could not be used to help improve the precision or face-validity of resulting estimates.

There were several concerns that led to the decision to leave the N-JOV4 data unweighted. First, the agency response rates were lower than expected, and therefore would require and depend upon more extensive and therefore more unstable nonresponse adjustments. Although the nonresponse bias analysis provided insight on the factors (population served, number of sworn officers) associated with differential nonresponse (See **Appendix D** for more information), adjusting based on these variables alone likely would not sufficiently correct for or reduce nonresponse bias. Second, some agencies were unable to give the appropriate case-level counts that would allow for a case-level probability, or weight, to be calculated. Additionally, many agencies that did provide case counts were not able or willing to randomly select a probability sample of cases. This made inverse probability data weighting challenging if not impossible, and therefore difficult to justify probability sampling-based inference.

The primary issue related to the data collection difficulties noted above was that agencies had were often unable to identify 2019 cases of internet crimes against children in their records. This was due to both: 1) an extensive number of technology-facilitated abuse cases in their records, and 2) the inability to search efficiently for technology-facilitated child victim cases in their data management systems. Agency officials said that their caseloads for these types of incidents had heavily increased in the past 5-10 years, which presents challenges when searching for and reporting case numbers and details.

We collected data on how agencies searched their records for these cases—most did search their record management systems (70.5%) but a large proportion of agencies also had to use recollection (28.7%) and/or search by hand (20.2%). Based on qualitative findings and notes gathered during data collection, those who searched their record management systems (RMS) had widely varying strategies for trying to identify cases, with better or worse success depending on the system. Additionally, some agencies reported that they changed RMS altogether since 2019, making these older cases inaccessible.

Case identification proved especially difficult for cases involving youth production of sexual images, as agencies do not typically track these in their records. They tend to approach these types of investigations differently from technology-facilitated abuse committed by adults against minors. Agencies were also very protective of any data releases involving details about minor suspects, especially if none were arrested or charged with a formal crime. This concern likely resulted in substantial under-reporting of youth-produced sexual image cases since many agencies opted out of reporting this data.

Given these challenges, the lack of resources and time that agency officials had to locate and report their data per our research protocol was often prohibitive. This was especially true for ICAC investigators who, due to the nature of their position, had the highest number of these types of cases. Agencies also had high investigator turnover, which sometimes prevented us from interviewing investigators who had led the case. When the lead investigator was unavailable for a case, other officers would provide information via the case record, but in many instances, they were hesitant to provide data on a case they had not worked on. To maximize the number of interviews and, in turn, the amount of information for this study, our team chose to prioritize interviews for investigators who were responsive and available rather than the random-selection protocol that we had originally proposed.

Finally, to increase our sample size and relieve investigator burden we provided agencies with the option to send us de-identified police reports/case records instead of participating in a telephone interview. However, the amount of information available in the records varied. Heavily redacted reports resulted in missing data. Additionally, case records are not standardized across agencies, which means that some can be long and detailed, while others contain minimal details.

These challenges resulted in a decision to prioritize the amount and quality of data over the randomization and meant that estimating nonresponse bias and creating accurate weights was not possible.

2. Impact of using unweighted data on interpretation of study results

Our inability to weight the data means that results cannot be considered to be representative of all technology-facilitated sex crime cases investigated by law enforcement nationally in 2019. We were not able to provide national estimates, and the

cases that we have included could over- or under-estimate particular types of cases that come to the attention of the police.

In particular, the problems law enforcement agencies had identifying cases of technology-facilitated child victimization means that the following issues should be kept in mind when considering the implications of findings:

- 1) Agencies that did not respond to our mail survey may have done so because they did not see an efficient option for counting the number of cases meeting our definitional criteria.
- 2) Agencies that reported zero cases may just not have been able to identify cases that were in fact in their caseload for 2019.
- 3) For those agencies that reported cases, the numbers of cases they reported may not have been accurate, and in some cases for large agencies or ICAC agencies, it was clear that the number that was provided was a rough estimate.
- 4) Cases counted in agency estimates or included for interview in our sample may have over-estimated types of technology-facilitated abuse that were more salient or memorable, and underestimated cases that were less serious or incidents in which technology played a less prominent role.

This also means that our original aim of comparing the results of N-JOV4 to prior N-JOV studies could not be done in a reliable and valid manner.

3. Additional limitations of the data

There were additional limitations to the data collected in the study that should be considered when interpreting findings.

- Missing data. Missing data at the case level could have been a result of not being recorded or redacted in a case record. As a result, we report the amount of missing data in all descriptive analyses. In this report, we differentiate between missing data and unknown or unclear data. When extracting data from police records, research staff were trained to indicate that data was missing (not in case record) when the element in question was not mentioned at all in the police report. If the element in question was mentioned but unclear in some way, whether due to redaction or unclear notes/phrasing in the narrative, staff were advised to use “Not sure” as the response.
- Technological advances. Our target year for data collection was 2019 and there have been some key technological advances since then, such as AI capability.
- Only arrest cases included. Most sex crimes do not come to police attention and many of those that do, do not end in arrest. This is a sample of cases that came to police attention and resulted in arrest (except for the non-arrest YPI cases). Cases

are thus not representative of all technology-facilitated sex crimes against minors that occur.

- The data are limited by what is known by law enforcement. Law enforcement perspectives are an excellent source of information about these crimes, but data availability is likely affected by training, professional attitudes, and departmental policies. Law enforcement agencies have good information about the investigation, data collection, and criminal justice outcomes, but less information on the history of suspects and victims, including prior adverse experiences and mental health and wellbeing. As such, there is more missing data about these aspects of the case.

4. Strengths of the data

Despite the limitations noted above, the study still provides a wealth of information from a large sample of law enforcement investigations of internet crimes against children from across the country, including ICAC agencies and agencies from urban and rural communities. The collection of cases provides an opportunity to examine and better understand the details and context in which these crimes come to police attention and are investigated. Specifically, with the data collected and analyzed we were able to show the diversity of internet crimes against children coming to police attention and provide information that can help police better identify and investigate technology-facilitated sex crimes against minors. We can:

- Analyze variations across cases and answer important questions about the challenges that law enforcement faces in investigating these cases.
- Identify investigative approaches that are more likely to lead to positive case outcomes.
- Identify critical variations in case characteristics by suspect and youth characteristics and demographics.
- Provide information on the kinds of youth-produced image cases coming to police attention and characteristics of these cases.

5. Implications of data collection challenges for improving LEA data on internet-facilitated crimes against children

Research that seeks to understand the nature of crimes investigated by police is critical for informing criminal justice responses. Internet crimes against children is a particularly important area of focus for research, given its substantial negative impact on children. Additionally, the dynamics of technology-facilitated crimes against children change rapidly and research can identify larger crime patterns that may be missed at the case-level. As internet technology shifts and expands, so do the challenges to law enforcement and the need for research to inform best practices.

The demands on law enforcement agencies are extensive and researchers may need to adjust strategies to reduce the burden on them and improve their ability to respond to research requests. We recommend that researchers limit the length of surveys and interviews as much as possible. The availability of case records is a promising option for future research, and their use would reduce the burden on investigators. However, missing data and heavy redaction was a problem in the current study. It might be possible to set up protocols with agencies for more minimal redaction given that research with approval by institutional review boards (IRBs) have stringent protocols in place that protect data privacy.

However, the difficulties that law enforcement agencies had in identifying cases of internet crimes against children suggest important implications for improving law enforcement information systems so that these cases can be better tracked and researched. It was notable that so many law enforcement agencies had to rely on memory or search files by hand to identify internet crimes against children. It was also clear that there were no systematic strategies available across many of the case record management systems for identifying these cases. A key take-home from the study is the need for improved methods for data systems to be able to identify these crimes. It is going to be difficult to understand more about how these cases come to law enforcement attention, which investigation strategies are used with what success, and how cases are changing over time without better options for identifying internet crimes against children in police case data systems.

OUTCOMES

Results and Findings

Topic 1: Types of technology-facilitated sex crimes against children

Our case interview survey was structured to collect information on cases based on the roles of the person interviewees identified as the primary suspect and the person they identified as the primary minor involved (if there was one). These case categories overlapped, since some cases contain multiple elements. For example, an undercover investigation may have focused on a suspect who was attempting to entice a minor; this case would have fallen into the category of Undercover Operation and Enticement/Grooming. Similarly, a case involving a suspect who was arrested for enticement/grooming and also possessed a collection of CSAM that they did not create would have been typified as both Enticement/Grooming and CSAM Possession.

Table 2. Types of technology-facilitated sex crimes against children in arrest cases (N=789)

	% (n)
CSAM Possession	56.5% (446)
CSAM Production	30.9% (244)
Enticement/Grooming	27.0% (213)
Undercover	24.2% (191)

Note. Types are not unique.

Below are descriptions of each type of case and the number/percentage of each case type present in our data:

CSAM Possession: 56.5% (n=446)

Involves a suspect who possessed and/or distributed CSAM that they did **not** produce themselves.

CSAM Production: 30.9% (n=244)

Involves either a suspect who produced CSAM of a minor themselves (photos, videos, or live streams) and/or an identified minor who was depicted in CSAM.

TYPES OF TECHNOLOGY-FACILITATED ABUSE ARRESTS

From the Fourth National Juvenile Online Victimization Study (NJOV-4)

56.5% (N=446) CSAM POSSESSION

These cases involve a suspect who possessed and/or distributed CSAM that they did not produce themselves.



30.9% (N=244) CSAM PRODUCTION

These cases involve a suspect who produced CSAM, and/or a minor victim who was depicted in CSAM. This could include minors who took photos of other minors or themselves, if they were arrested for doing so.



27% (N=213) ENTICEMENT/GROOMING

These cases involve a suspect who groomed a minor over technology. Sometimes, these also involve a suspect caught by an undercover investigator who posed as a minor online and ended up arresting the suspect.



24.2% (N=191) UNDERCOVER OPERATIONS

These cases involve an investigator posing as a minor online or monitoring peer-to-peer networks for exchanges of CSAM.

Enticement/Grooming: 27% (n=213)

Involves a suspect who used technology to entice/lure a minor into meeting in person for sexual purposes. An actual in-person meeting was not necessary to qualify; police only needed sufficient evidence to show that sexual conversations occurred between the suspect and minor (or, in the case of undercover investigations, an investigator who was posing as a minor). Similarly, this type of case could involve a party who reported sexual communications facilitated with technology between an identified minor and an adult, even if the suspect was never identified.

Undercover Operations: 24.2% (n=191)

Involves an undercover officer who either posed as a minor online to catch an adult trying to entice/groom a minor or monitored online networks of CSAM exchange (such as peer-to-peer platforms) to catch suspects who were trading, purchasing, or selling CSAM.

Infographic 1. Types of technology-facilitated sex crime arrests

Agency Involvement with Different Case Types

Figure 1 shows a comparison of the percentage of all case types investigated by the agencies within each frame of this study. Significant differences were noted across agency types with ICAC Task Forces being the most likely to investigate CSAM possession (74.9%) and undercover (34.5%) cases. ICAC affiliate

agencies were slightly more likely (51.3%) than other municipal agencies (43.2%) to investigate CSAM possession cases, but the two agency types investigated similar percentages of enticement/grooming cases (each about 29%). ICAC Task Forces (34.5%) were significantly more likely than ICAC affiliate agencies (20.9%) and other municipal agencies (20.5%) to investigate undercover cases. There were no significant differences between the percentages of CSAM production cases across agency types, but the general pattern shows that municipal agencies investigated the highest percentage of cases (38.6%), followed by ICAC affiliates (32.5%) and ICAC Task Forces (24.6%).

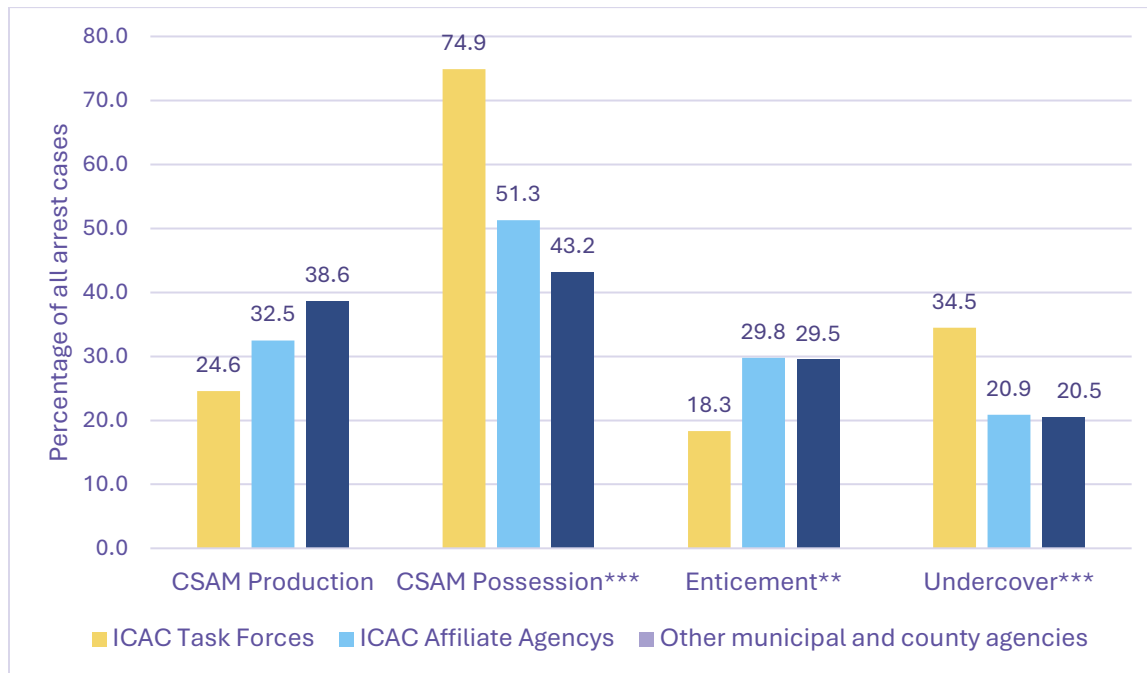


Figure 1. Types of cases by type of agency: ICAC Task Forces, ICAC affiliate agencies, all others. *** $p \leq .001$, ** $p \leq .01$.

Figure 2 shows the distribution of types of agency involvement (i.e., cases involving two or more agencies, an ICAC Task Force, and federal agencies) across case type. An ICAC Task Force was most involved in CSAM possession (51.3%) and undercover (42.9%) cases; they were involved in 25.4% of CSAM production cases and 24.4% of enticement cases. Less variability was noted for federal agency involvement: 20.4% in undercover cases, 19.3% in CSAM possession cases, 14.7% of CSAM production cases, and 14.1% of enticement cases. Two or more agencies were involved in 59.5% of CSAM possession cases, 57.9% of undercover cases, 52.2% of enticement cases, and 50.7% of CSAM production cases. Statistical significance was not tested due to many cases involving more than one case type (e.g., CSAM possession and undercover).

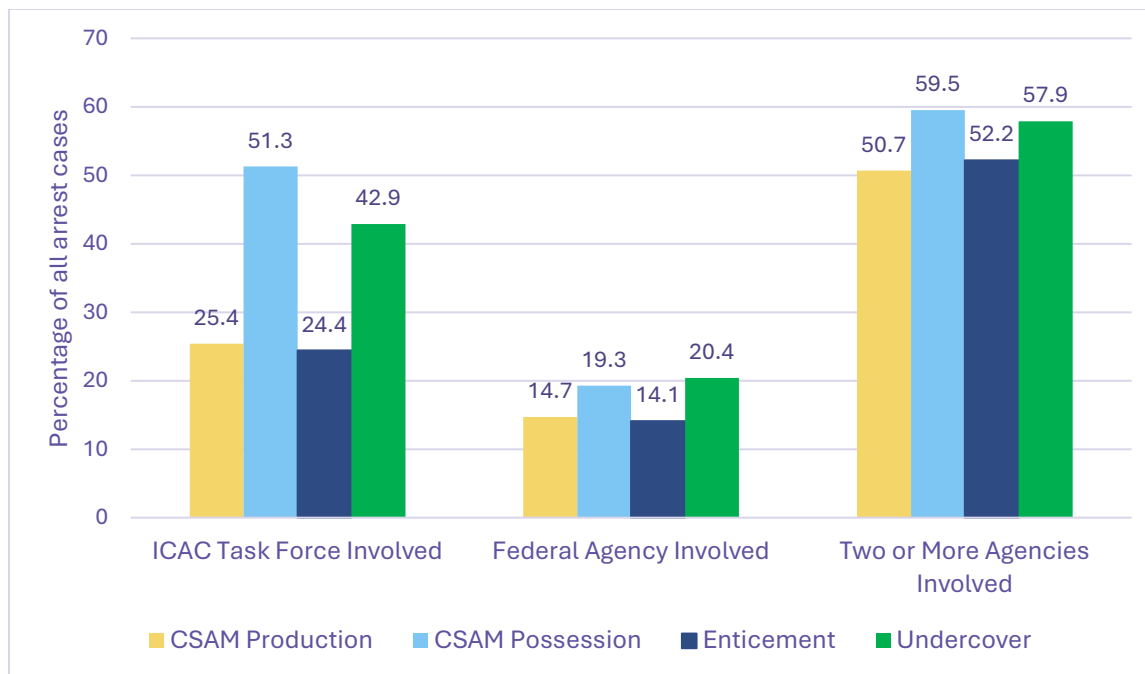


Figure 2. Types of cases by type of agency involvement.

Typology of arrests for technology-facilitated sex crimes against children

After collecting data on each type of case based on the roles of primary minor(s) and suspect(s) involved, we created a typology for arrest cases which would sort cases uniquely into discrete categories. These discrete case types were based on elements of the case beyond the role the suspect(s) and/or minor(s) had in the case, considering dynamics such as where the parties first met for enticement cases, the elements of the undercover investigation, and whether CSAM possession cases involved distribution. **Infographic 2** outlines the percentages and frequencies of these unique typologies, which are described in detail below:

Crimes against identified victims

As suggested by the category's name, these cases always involved an identified victim. In total, 41.4% (n=327) of cases fell into this type, which we further disaggregated into other branches depending on how the identified minor and suspect first met. In almost half (40.7%, n=133) of the cases involving an identified victim, the offender was an acquaintance before the crime occurred. About a quarter (23.2%, n=76) of these cases involved a suspect who the victim met online. Family member offenders accounted for 21.4% (n=70) of cases with an identified victim. Lastly, 14.7% (n=48) of these cases involved some other type of relationship between victim and offender, for example, someone trafficking a minor or a stranger that the minor did not meet online.

Undercover operations (no identified victim)

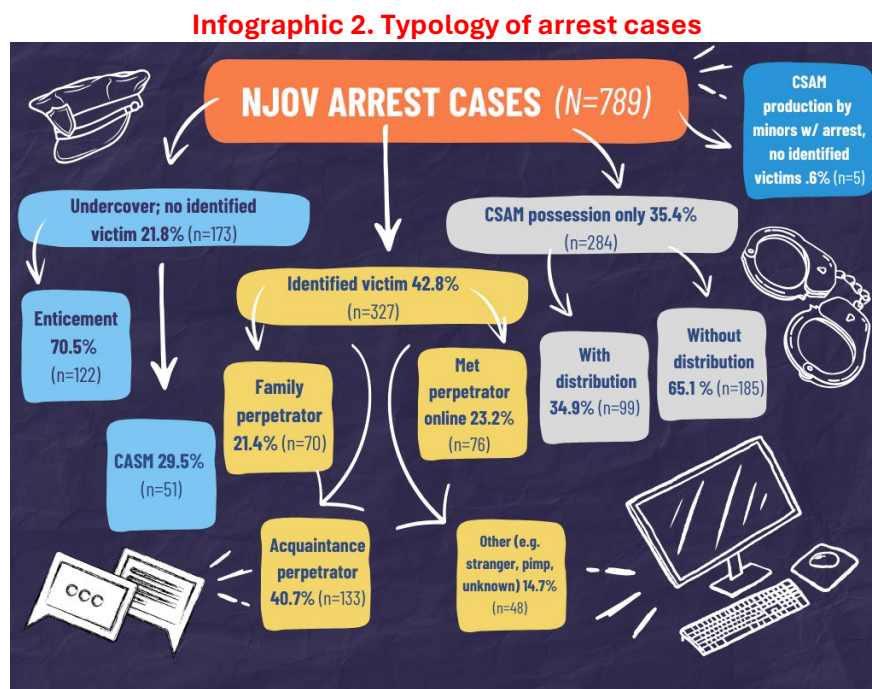
Undercover operations cases could fall into two different types depending on other elements involved in the case. The majority of undercover operations (70.5%, n=122) involved a suspect attempting to entice someone they thought was a minor. The rest (29.5%, n=51) of these cases involved the undercover investigator(s) monitoring CSAM exchanges, where the minor in the material was not identified or involved in the investigation.

CSAM possession only

CSAM possession only cases involved suspects who had CSAM that did not depict an identified minor. More than half (65.1%, n=185) did not involve distribution, meaning that the suspect was caught with the material but was not exchanging it with others. About 35% (n=99) of these cases did involve some form of distribution.

CSAM production by minors with arrests and no identified victims.

Finally, a very small portion (.6%, n=5) of all cases involved a minor who produced CSAM of another minor or themselves and was arrested. These cases involve similar elements to youth-produced image cases but are distinct due to the minor being arrested as a result of the content they produced.



Case Summaries Across Typology

Written by the trained interviewer after each interview, case summaries are brief narrative descriptions of how the investigation unfolded, broadly covering key elements such as who the suspect and minor were, how they met/what type of relationship they had, where communication took place, how the case came to police attention, and arrest outcomes. Summaries vary in length and detail based on how much information the investigator or case record offered.

These summaries do not represent all cases of their type, they simply serve as examples of the investigative dynamics that can (but do not always) occur in the data we collected. They also lack any identifiable information about suspects and minors involved; they only include basic information such as demographic characteristics like age and race. Below, we highlight some of these summaries to illustrate examples of each case type in narrative form.

Identified victims – family perpetrator

This [case] began as an undercover proactive investigation on a peer-to-peer network. The police were able to download CSAM from a server. They were able to identify the suspect with the IP address. The suspect, an adult white male, lived with his mother. The investigation revealed that the suspect had produced CSAM of his 8- and 10-year-old nieces, while they were visiting their grandmother. The produced images did not show any sexual activity involving the girls. They were nude or semi-nude images of them. The police also found other CSAM images that the suspect possessed, with unknown victims. He distributed all of them through the peer-to-peer network. The case involving the hands-on abuse of the suspect's nieces was turned over to the local PD. The girls were interviewed and made disclosures, and a report was made to child protective services. The suspect was charged with 5 counts of CSAM production and was sentenced to 100 years in prison (stacked), and he is required to register as a sex offender.

This [case] involved a juvenile girl who was living with her father. She discovered a camera in the bathroom prior to taking a shower, which her father had put there. The minor told her father's ex-girlfriend, and she reported it to the police. This was the suspect's second offense involving a minor in less than a year. The first offense involved the minor's [suspect's daughter's] friend. Her father texted the daughter's friends asking her to engage in sexual activity. Following this case, the suspect was required to register as a sexual offender. His daughter was removed from his care and is

living with other family members. The police never saw the images because the suspect deleted them.

This agency received a priority 2 CyberTip from the National Center for Missing & Exploited Children (NCMEC) indicating there was a possibility of a child being victimized. They got a subpoena to get the suspects subscriber info and a search warrant. The police seized the suspect's phone, where they found CSAM images. The suspect had 6 kids in the residence, his own children. None of them, however, matched the description of the child in the CSAM that the suspect had produced. The police were able to determine that the background of the suspect's bathroom matched the background in one of the CSAM pictures and the suspect confessed. The child in the CSAM that the suspect produced, roughly 6 pictures, were of the suspect's very young grandson (age 4 or 5). The suspect admitted to sending the images to several people, but police were only able to identify one. The second suspect, who received the images, admitted to having them. He didn't pay for them; the primary suspect just sent them to him. The primary suspect also had other CSAM images in his possession that he did not produce, all boys around the age of 12. The primary suspect was charged with federal crimes, and the case was turned over the feds. The second suspect was charged with state crimes. Both suspects were part of an online group called "Kik".

This case is about a man who was addicted to pornography, produced child pornography depicting his own daughter from age 3 until her mom reported the case due to the toddler disclosing sexual abuse by her father. The suspect also possessed CSAM of other children. When approached by the police the suspect confessed to the crimes at once. The man was arrested.

This was initiated by a CyberTip from NCMEC. The suspect, a black male, produced over 300 images of CSAM and over 1,300 images of erotica (pictures of children naked or partially clothed that do not meet the threshold of CSAM). The children depicted in the images were the suspect's own children and other related children that were in his care. The suspect stored the images on the cloud and distributed them to others. Police were not able to get a warrant for the cloud storage because it was encrypted, but they were able to see what was on his phone and computer. The suspect was a military veteran and on full disability. He reported being a victim of child abuse while he was in foster care and later disclosed a history of mental health issues.

The case is pending federal sentencing. Once he is sentenced, the state charges will be dropped. But he will be required to register as a sexual offender.

Adult male reported to have been sexually abusing his young daughter from age 4 or 5 to age 13 or 14. She said he has taken videos and pictures of her body, has forced her to give him nude pictures on one occasion, and has told her about and shown her sexual pictures and videos as examples for her to learn from (of both adults and children). During a search of his devices, thousands of pictures were found including anime pornography with perceived juvenile females, as well as an over-5-minute-long video of a prepubescent female performing sexual acts.

Identified victims – acquaintance perpetrator

20-year-old male was caught asking for nudes and sending nudes to a 16-year-old girl that he knew through another friend. The 16-year-old girl had some mental disabilities that made her mental age less than 16. They also discussed sexual topics. Other kids at school heard about this and reported it, and police found the evidence on the girl's iPad. The suspect was also charged in other jurisdictions for soliciting a 13-year-old.

This case is about motel neighbors, an adult male and juvenile female who was married [to a different man] at the time of the case. The adult male offered money to the juvenile in exchange of CSAM and offered a job for the husband. The juvenile complied with sending YPI that didn't include her face. The suspect became angry and demanded more pictures including her face and she refused. The suspect went inside the girl's room, took her clothes off forcefully, touched/fondled her, and took the images he wanted of her. Since the juvenile knew that the suspect had a gun in his room, she didn't fight back and waited for him to leave to call the police. When the police came, they arrested him and charged him with felonies. The detective shared that the prosecutor accepted a guilty plea for having weapon illegally, but all sex charges were dropped, because the girl never answered the phone and there was no follow-up with her. The suspect did no jail time, and didn't have to register as a sex offender.

Two high school students informed their school resource officer that another student had pictures of naked girls on his phone. Police looked at the suspect's phone and found numerous photos of nude underage females, which were be considered child pornography. Some of the pictures showed a female engaging in sexual acts, such as touching herself and posing in a provocative way. The female and suspect had been in a relationship a couple of years prior. The female reported being 17 at the time the pictures were taken but was 18 at the time of the investigation. It's not clear how old the suspect was at the time the pictures were taken or when the investigation took place. The suspect went to juvenile court and pleaded guilty in an informal hearing. He was given unsupervised probation but if he didn't follow through with recommendations, possible charges could be presented.

The agency investigated the report of a sexual assault on a local school campus after a basketball game. A video was taken during the assault, the victim performing oral sex on the suspect, that was shown around the school. The victim, a minor female, reported that she had been around a group of other minors who were smoking marijuana. She denied smoking but believed she got high from being around it.

A father found his 13-year-old daughter was communicating with what he believed was an adult. His daughter and the male were sending nude images of themselves to each other via social media. The suspect asked the minor to take pictures of herself and send them to her. The suspect was a friend of the family, so he knew the minor. He pretended to be a 13-year-old male on social media and initiated contact with the minor. The minor didn't realize she was communicating with someone she knew. The father of the minor ended up setting up a fake Instagram account, posing as a girl. The suspect shared his real phone number, which the father recognized.

During a school break, a middle school teacher set up a recording/video device in a classroom where a group of 6 middle school girls were sent to change out of their street clothes and into swimsuits. The local sheriff office and state police were involved in the investigation. The suspect initially denied videotaping them but then when confronted with what the girls reported, he admitted to it. The suspect's electronic devices were searched, and they found he had been communicating with other minor females online. He also possessed CSAM that he did not produce.

Identified victims – someone met online perpetrator

The police received a report from the suspect's girlfriend that her boyfriend had CSAM on his phone. The police had a history with the suspect, as he was a registered offender. They found CSAM and evidence that he was trafficking minors. There were approximately 15 female victims over the course of several years. The suspect was communicating with the minors via snapchat, pretending to be a 15-year-old male. He would then meet with them and take pictures of them and engage in sexual activity with them. He would pay them with money and drugs, threaten them, and physically hurt them. He was given multiple incarcerations that totaled life in prison. There was no evidence that the suspect shared any of the CSAM involving the minors, other than with one of the victims. The suspect had 5 or 6 children. There was no evidence that he had sexually abused them.

A 14-year-old female received picture of an adult male's penis on Snapchat, she asked him to stop, and he also sent a video of him taking out his penis. This all happened when she was staying at her friend's house. Before this, he had also asked her to sneak him into her friend's house multiple times and asked for her to give him a blowjob for \$100. He had previously asked how old she was, and she said 14 years old, and he said he was 18. He was also found to be located near her house when the friend's father went to go find him. The 14-year-old female and the adult male were both were sharing their locations on Snapchat.

The mother told police she found her daughter was having sexual conversations with the suspect, a 19-year-old male, on Snapchat. She was also sending naked pictures of herself to the suspect. Police found over 150 images. The suspect initially requested that she send photos of herself naked, but she later started sending them voluntarily. The minor believed they were in a relationship. He told her that he wanted to come and see her, but his car was broken down and he couldn't. They never made a specific time to meet. He made a lot of promises to keep her sending him pictures. There was a plea deal, but the investigator didn't know the specifics of the sentence. He was, however, required to register as a sex offender. The respondent noted that in 2023 the suspect was arrested for failing to change his address.

This case involved a CyberTip from NCMEC. They received a report from Facebook regarding contact between a 14 old female and an adult male from different states. They were sending nude pictures of themselves to each other. ICAC interviewed the minor and this agency interviewed the suspect. The suspect was involved in a prior undercover investigation, where he was found trying to elicit sex from a minor. He was not required to register as a sex offender following the prosecution of that case.

A 17-year-old victim met 40-year-old suspect on a social media dating app Seeking Arrangements after she ran away from home. They meet and the suspect paid her for sexual intercourse on two separate occasions.

The suspect, an 18-year-old Hispanic male, was communicating with a 15-year-old female and trying to have sex with her. The suspect sent nude pictures of himself to the victim, and she send nude photos of herself to the suspect. The minor female indicated she was willing to meet with the suspect to engage in sexual activity. The minor female's parents saw some of the text exchanges with the suspect on their daughter's phone and called the school. A school resource officer made the report to this agency. The respondent stated that the minor female had a history of running away and she had been in contact with multiple men and was sending them pictures of herself nude. This suspect threatened to expose the minor female if she didn't send more of what he wanted. The mother reached out to the suspect to tell him she was calling the police. The suspect was arrested and charged with felony sextortion.

This case was an enticement/grooming case that involves a minor who created a Grindr account and communicated with an adult. The adult promised the minor love/relationship and they agreed to meet in person. After having sex with the minor, the adult threw him out of the house. Since the minor didn't have a ride home, he called his mom to pick him up and made an elaborate lie about having been kidnapped. Mom reported the alleged kidnapping to the police. The adult was arrested, charged, and is serving a sentence.

A 15-year-old girl met a 34-year-old male online, on Kik. They exchanged nude images/videos of themselves with each other. After exchanging

messages for a couple of weeks they agreed to meet. The minor female ran away from home, taking her bike to meet the male suspect. The minor's mother went out to start looking for her and someone asked her if she was looking for a teenage girl on a bike, as they saw her get into a car with an adult male. The mother contacted the police, and they began looking for her. They found the two before anything had happened. The respondent was not the key investigator. He noted that this was not their first contact with this minor female. She had been contacting adult males online several times before. She also had a history of running away from home. The respondent believed that the minor female lived with her mother, and there was some conflict between them.

Identified victims – other perpetrator

Report from a truck stop that there were 2 young girls (around 16 or 17) that went into the store and said they were being assaulted by a truck driver. The employee said that the male truck driver purchased 2 showers, then they left. The male came back later. The girls came back later with marks on their body, and they reported they had been assaulted.

The victim was a 15-year-old female. The mother found images on the victim's phone of herself and discovered a relationship with the suspect. The victim produced the images of herself and sent it to the suspect, there were about 6. The suspect kept the CSAM on his smartphone. The investigator stated that there were possibly prior victims, but they never got enough evidence to arrest him, and there was also evidence that the suspect abused younger family members. The investigator stated that the victim's family is well known to police because the parents are drug dealers and have since been incarcerated since the crime.

Police record: This agency took a report of sexual extortion, extortion by theft, and commercial exploitation of minor. A 17-year-old female student had her Snapchat account hacked in April 2019 by another account. All the victim's nude photos were removed from her account by the hacker. The victim was given access back to her account shortly after the incident by the hacker as he demanded her "My eyes only" folder password. The hacker threatened the victim to expose her current nude photos if she did not comply and give the password. The victim gave the hacker the password to the folder out of fear

of her photos would be exposed. The suspect hacked into at least 50 other students' accounts and threatened them in similar ways.

The respondent was contacted by the US Marshal Service for a complaint they received from one of their local group homes about a missing juvenile they believed was being trafficked. The juvenile was participating in commercial sex acts with a known suspect who ran a local escort website. He had initially been investigated in 2013. The suspect had images and videos of the juvenile females that he put on his website. They all showed sexual activity between one of the minors and the suspect. The suspect owned the website and made money from it keeping a percentage of the money any of the escorts made. The victims voluntarily provided the images and were paid for them. The suspect was charged with federal crimes and ordered to 8-10 years of incarceration. He is also required to register as a sex offender. The primary victim was a ward of the state and living in a group home. She remained at that home but ran away and eventually aged out of the system.

Undercover operation (no identified victims) – enticement

Police record: This is an undercover operation where the investigator created a profile on Skout.com. Skout requires users to be 18 years of age or older to use their service, so the investigator posed as a 22-year-old female. Once the investigator was contacted by the suspect, he informed him that he was 13-years-old. The investigator then asked him to text. The purpose of the profile was to identify individuals targeting juveniles for sexual conduct, exploitation or trafficking.

This was an undercover chat operation, which was comprised of various law enforcement investigators across the state. They hosted a proactive chat operation and communicated with an adult male who expressed an interest in having sex with a 15-year-old female, posed by the undercover (UC) officer. The UC officer and suspect met on the social media site, Skout. The suspect initiated the talk about having sex with the UC officer (minor female). They communicated for about 24 hours prior to a face-to-face meeting. The suspect brought alcohol with him to the face-to-face meeting. The suspect pleaded guilty to federal charges and was given an incarceration time of about 5 years. He is also required to register as a sex offender.

This was an undercover operation. The UC agent posed as a 13-year-old female and posted an ad to the effect that "she" was new in town and looking for someone to show her around. The ad received a lot of responses. The suspect in this case was a retired coach. He brought up sex related topics and asked the UC agent to send sexual pictures. A meeting was set up for the purpose of the suspect and minor to have sex and the suspect was arrested. Homeland Security was involved and conducted the interview with the suspect. The suspect was charged with federal crimes and sentenced to 10 years.

Police conducted an undercover operation targeting adults online who were looking to solicit sex from minors. Police posted an ad online in which the suspect replied looking for sex. The undercover account told the suspect they were only 15 and the suspect didn't care. The suspect requested sexual photos from the undercover account. They agreed to meet at the home listed under the undercover account where police were waiting to arrest the suspect if he showed up. The suspect was arrested and brought into the station.

33-year-old white male EMT was caught in an undercover investigation. He was messaging who he believed to be a 15-year-old male on Grindr and agreed to meet up for oral sex. When he arrived at the meeting spot, he was arrested by police. This all occurred on the same day. He was found with guns and knives in his truck.

The initial report came from a CyberTip received by NCMEC. Through online investigations, the suspect had 10-14 images of CSAM located on personal devices mostly received from the social chat application Mocospace. 6 more CyberTip Reports from NCMEC were received in the next couple of months related to Terry along with search warrants being granted for access to the contents of suspect's Mocospace.com account. Investigative subpoenas were also served to AT&T Wireless for content located on a cellular device found while executing a search warrant of suspect's house. Between May 1st, 2019, and June 3, 2019, Investigator conducted an undercover investigation on the social media platform Mocospace posing as a 13-year-old female. The suspect in the undercover investigation was discovered to be the suspect.

The suspect sent sexually explicit photos to an undercover phone number asking for undercover persona to engage in sexual conduct.

Undercover operation (no identified victims) – CSAM

This was an undercover case where the investigator was monitoring a peer-to-peer network and saw numerous downloads of CSAM. The suspect was downloading large amounts of files from the P2P website and putting them on his kindle tablet. The tablet would then crash, and he would load the images back onto the P2P site and then attempt to download them again. Police had some difficulty in finding the suspect because he was using internet services from other people in town. The police initially got a search warrant for one of these homes. This was a very small town and word got back to the suspect, so he switched to another internet source. The police were eventually able to find him. The suspect had a fairly large collection of CSAM on his tablet that was not password protected in any way. He lived with his wife, was retired, and it was believed his interest in CSAM was fairly recent. The suspect had grandchildren who visited but there was no evidence that he had any hands-on victims.

Investigator was conducting an undercover proactive investigation and found an IP address actively sharing child pornography via BitTorrent. A search warrant was issued, and they took the suspect's computer. They found all videos of the CSAM, no images. The suspect admitted to downloading them and stated that he would delete them after watching them but there were some saved on his computer. A forensic exam of the computer found numerous videos of CSAM. He was arrested with 1 count of transmission of child pornography, 10 counts of possession of CSAM, and 1 count of compiling CSAM. He was incarcerated but not for very long because he had significant health issues and was in a wheelchair. The children in the videos were not identified but the videos were sent to NCMEC to be added to their database.

Two agencies worked together on an undercover operation to find CSAM on the P2P network, BitTorrent. This agency identified a suspect in their jurisdiction. The suspect's devices were seized. Initially, the suspect was only charged with distribution (as the CSAM had been shared with the undercover agent via their program that looks for it) until the devices could

be reviewed. It took over a year for the forensic examination on the devices. The examination found CSAM on a computer and several flash drives. Some of the flash drives couldn't be reviewed because the police were not able to access them. BitLocker had been used to restrict access. The suspect was charged with possession of the CSAM they did find. Some of them were part of a known series. There was no evidence that indicated the suspect had any hands-on victims.

Police received FBI reports regarding the suspect caught in an undercover operation involving child pornography. Undercover persona had received images of child pornography from suspect. The suspect was identified using an IP address. A search warrant was executed on the suspect's address and was brought in for an interview. Suspect admitted to looking at underage porn and recognized the various folders on his desktop containing child pornography. Suspect denied ever having sex with any children. 56 videos of child pornography were found on suspect's computer. Hundreds of photos and videos were found on a USB drive received by the FBI regarding the suspect. Images were from infancy to early stages of puberty. Suspect used BitTorrent to download and access child porn. Arrest warrant was filed for suspect on the charge of sexual exploitation of a child.

CSAM possession only – with distribution

Police received a NCMEC report that came from CSAM being shared on Facebook. Police tracked the IP address to a 53 y/o white male. Police conducted a search warrant and confiscated two phones. The suspect admitted that he had received CSAM from random people on Facebook, and police found him in two different CSAM related Facebook chat groups. Police also searched the suspect's phone and found CSAM of teenage girls that were sent to him.

This case involved a CyberTip from NCMEC regarding CSAM that had been shared with a group on Discord. Police located the IP address and found the suspect. Suspect was a minor, male. They found hundreds of images/videos combined. Some of which were part of a known series. There was no evidence that the suspect had any hands-on victims or that he produced any CSAM images. The suspect was charged with state crimes and went to juvenile court. He did not receive any jail time. He received probation and

participated in a diversion program. He was not required to register as a sex offender.

The suspect, a Hispanic male, was staying in brother's home. He got a new phone and had left his old phone at his brother's house. His brother found the phone and saw CSAM and texts, through Kik, where he was actively trading CSAM images. The suspect was living with various other people. He had several girlfriends and had fathered several children. It took a long time for the police to locate him. There was no evidence that any of the children in the CSAM were hands-on victims or anyone the suspect knew. A report was made to child protective services so they would have it on record. Police also contacted the mothers of his children, but they didn't seem concerned.

The agency received a CyberTip from NCMEC. Tumblr had made the report to NCMEC. Police located the suspect, a white male, age 43, living with his wife and two minor stepdaughters. Police found thousands of CSAM images on the suspect's tablet. He had other devices that likely had CSAM, but they were encrypted and difficult to access. The suspect made admissions of possessing and sharing CSAM during the interview. He admitted to having fetishes in bestiality and fisting. Police then obtained a warrant to talk to Yahoo about the suspect's account and found evidence of him downloading and sharing CSAM. Prior to interviewing the suspect's stepdaughters, they were informed that one of the girls, a teenager, attempted to overdose on drugs. Neither of the daughters made any disclosure of abuse and there was no physical evidence to indicate they were hands-on victims. The case went to trial and the suspect was convicted. He did not receive any incarceration. He received 2 years' probation and was required to register as a sex offender. He was also not to have contact with children.

This case is about a girl who showed and sent a video of a boy from her school to 2 other students. The girl had her Miranda Rights read to her so this interview will be taken as possession/distribution case.

CSAM possession only – without distribution

This case is about a 20-year-old white male who possessed 2 CSAM "he deliberately searched for petit teens and younger children on his browser, didn't save cookies, and deleted the images from his flash drive but they were recovered. The suspect was arrested.

This was a CyberTip from NCMEC. They received 2 reports from Microsoft One Drive about possible CSAM. The police identified the suspect with the IP address. There was a search warrant for One Drive. One file had over 1,000 CSAM images. Another search warrant was obtained for the suspect's home. The suspect confirmed it was his account but denied having CSAM. Police took the suspect's devices and there were numerous files of CSAM on removable media. A forensic exam was never completed on the other devices because they had enough for prosecution. The suspect was arrested for 1 count of CSAM on the day of the house search. He was later Indicted on the charges and pled guilty to 1 count of possession, a 3rd degree felony, and sentenced to 6 years in jail. He was not required to register as a sex offender.

This was a CyberTip report from NCMEC. Discord reported that a user had uploaded CSAM. NCMEC determined that the offense occurred in [redacted state]. They reviewed the images/videos and found close to 100, mostly videos of young girls, aged 2-8. The suspect lived with his mother. The suspect's nieces were in that age range and visited the house often. The investigator stated that they looked for hands-on victims but found no evidence that the suspect had any. The suspect's mother and sister were made aware to look for signs of abuse and to report any concerns. They were also advised to keep the suspect away from the girls. The respondent didn't know the sentencing but stated that he was sure the suspect didn't get any jail time, just probation, and he was required to register as a sex offender.

They received a CyberTip from NCMEC regarding a Bing search. The IP address was in their jurisdiction. They got a search warrant, and the suspect was looking at CSAM when they arrived to his house. They found both images and videos of CSAM on his computer (10 in all). They were not able to identify the minors depicted in the CSAM. The suspect lived across the street from a high school. The case is still pending because the suspect is claiming mental incompetence. He is being charged with a felony and if found guilty he will be required to register as a sex offender.

NCMEC tip was sent to police through Yahoo email regarding several CSAM photos. Police found the suspect and searched his home. In the home they found more CSAM content on a disk drive and a USB. Suspect (61 white male) a first stated it was someone else using his accounts, but when police discovered his timeline did not match the evidence, he admitted to looking at pictures containing child nudity. He was arrested, charged, and is serving 3 years in prison.

CSAM production by minors with arrest and no identified victims

The agency was notified by a school administrator about 3 kids sending nude photos of themselves and sending them to each other through snapchat. All three were arrested but the charges were later dropped, and they went through juvenile court. As far as the police know, the pictures weren't sent any further than to the three involved who took the photos of themselves. They were selfies, no one else was in the pictures with them. But they are considered CSAM since they are nude photos of juveniles in sexually provocative poses.

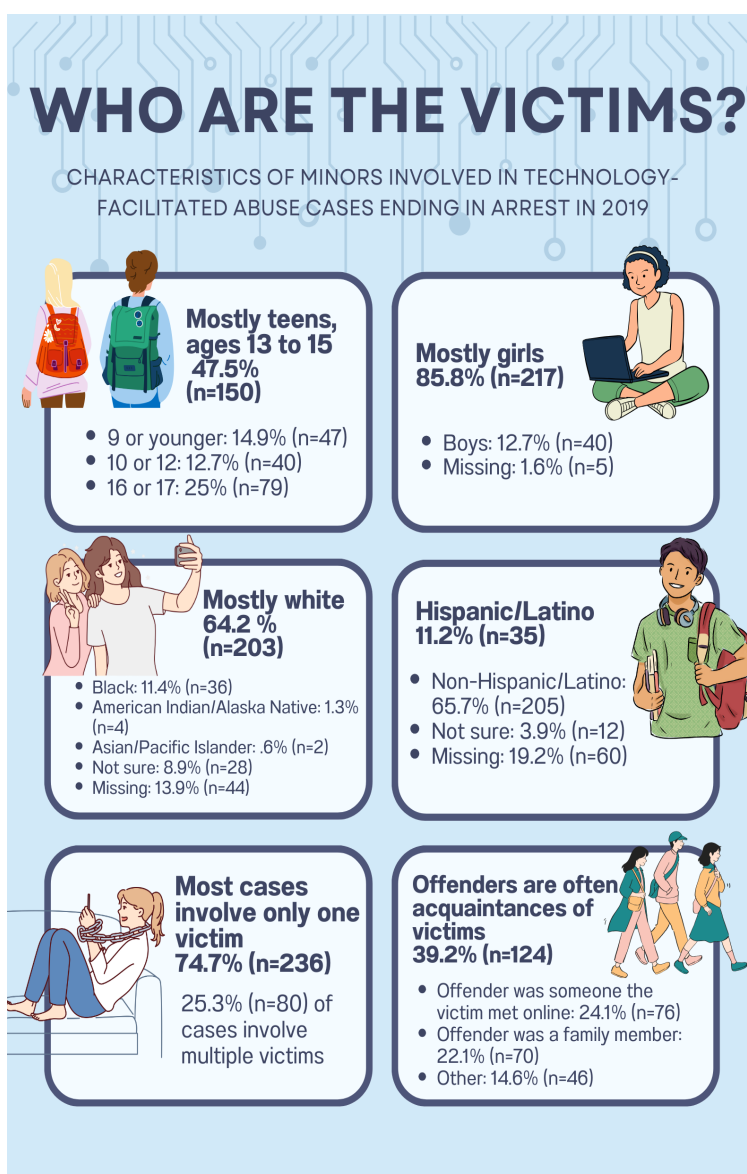
This case is about a 15-year-old female who made a video of herself naked "no sexual innuendos on the video/not graphic". She used Snapchat to create the video but didn't distribute on social media. The juvenile was in her school cafeteria and airdropped the video. Many kids received the video, but the police were unable to determine who received it. The IT department at the school shut down the internet for some time to stop the future dissemination of the video. The minor was arrested and charged with 2 felonies in juvenile court. Her sentence involved probation.

This case involved a juvenile female who posted pictures of herself on Facebook. It came in as a CyberTip from NICMEC. Facebook reported it. The minor was charged because in this state it is illegal to possess CSAM, even if it's of you. She was referred to juvenile court and was given probation.

Topic 2: Characteristics of victims and offenders by type of case

A key element of interest is understanding who the victims and offenders are in these cases. Almost half (41.4%) of all arrest cases involved a minor who was identified and contacted as part of the investigation. It is important to note that CSAM possession cases have victims, but they were not identified as part of the current investigation. Identified victims were found in crimes that involved online enticement only (31.2%, n=102), CSAM production only (44.9%, n=147) and crimes that involved both enticement and production (20.5%, n=67). In 3.4% of cases, it was not possible to determine the minor's role (n=11).

Among our sample of 327 identified victims, there was a small percentage (3.7%, n=12) with missing information. Of those with information regarding the victims, 74.7% (n=236) involved one identified minor victim and 25.3% (n=80) involved multiple minor victims. In cases where there was more than one victim involved in the case, a "primary involved victim" was selected by the investigator for interviewers to ask specific questions about. The primary victim was the one who was most directly involved in technology-facilitated victimization. If more than one victim was equally involved, the primary minor was the one who was most seriously victimized. If there was still more than one, we picked the youngest.



Infographic 3. Who are the victims of technology-facilitated sex crimes against minors?

Information was collected on characteristics and demographics of the 316 identified victims involved in our sample of N-JOV cases (see **Table 3**). Most identified victims were female (85.8%, n=271), with a significantly smaller percentage of victim who were male (12.7%, n=40). This information was not provided for 1.6% of cases.

Almost half of the identified victims in our sample were adolescents between the ages of 13-15 years (47.5%, n=150), with 16–17-year-olds making up the second largest group (25%, n=79). Smaller percentages of identified victims were younger minors, 9 or younger (14.9%, n=47) and 10–12-year-olds (12.7%, n=40).

White victims made up the largest percentage of identified minors (64.2%, n=203), with the next largest group being comprised of victims where information regarding their race was missing (13.9%, n=44). Black or African Americans made up the third largest (11.4%, n=36); followed by victims where there was uncertainty regarding their race (8.9%, n=28). The smallest percentages included victims who were American Indian/Alaska Native (1.3%, n=4) and Asian/Pacific Islander (.6%, n=2). A little over 10% were Hispanic victims (11.2%, n=35).

The largest percentage of offenders (39.2%, n=124) were acquaintances of the minor victims. Someone the minor victim met online were the next largest offenders (24.1%, n=76), followed by family members (22.1%, n=70), and others not in those categories (14.6%, n=46).

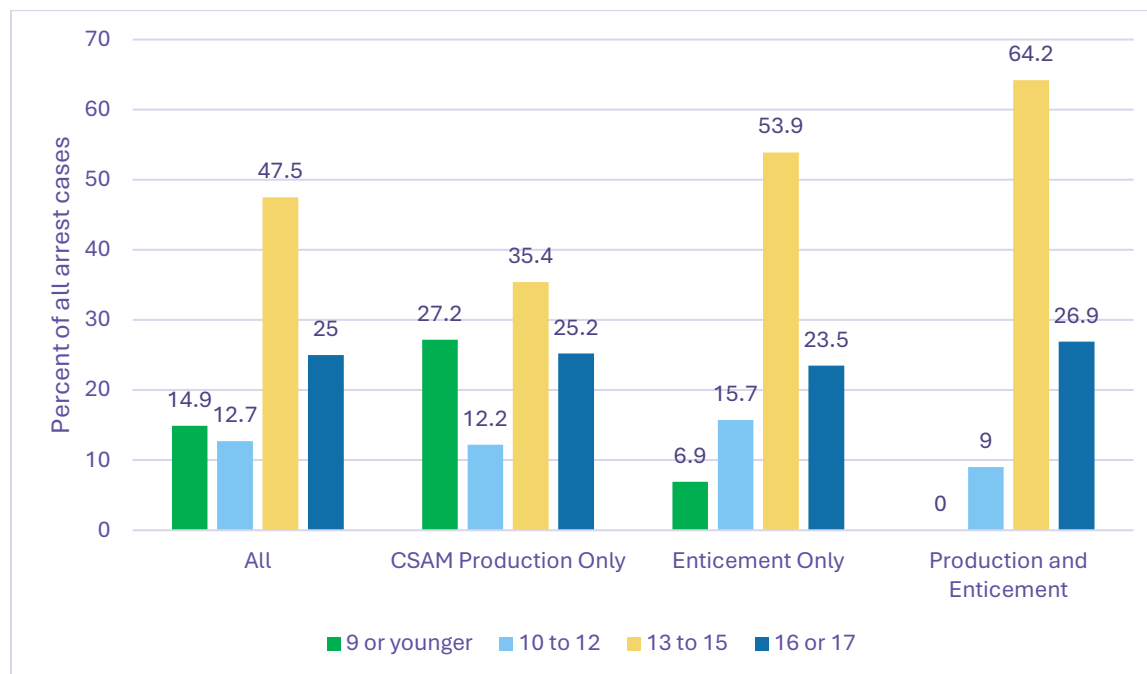


Figure 3. Age of victims by type of case ($p < .001$)

Figure 3 statistically compares the ages of victims involved in each case type ($p < .001$). Overall, adolescents ages 13 to 15 were significantly most frequently represented across all types (47.5%). Sixteen- and 17-year-olds were the second largest age group represented across case types (25%). Only about 15% of all cases involved children ages 9 or younger. Finally, the least commonly represented age group across types was children aged 10 to 12 (12.7%). The case type which most often involved children 9 and younger was CASM production (27.2%). However, older adolescents ages 13 to 15 (35.4%) and 16 and 17 (25.2%) were still more likely than those 9 and under to be victims of production.

Children ages 9 and younger were least likely to be involved in enticement/grooming cases (6.9%). Teens ages 13 to 15 were by far the most likely to be involved in enticement/grooming cases, accounting for over half (53.9%) of these cases. In cases involving enticement and CASM production, teens ages 13 to 15 once again make up the highest percentage of cases by far (64.2%). No children ages 9 and younger were represented in these cases, and smaller percentages of 10- to 12-year-olds (9%) and 16- or 17-year-olds (26.9%) were involved in this case type.

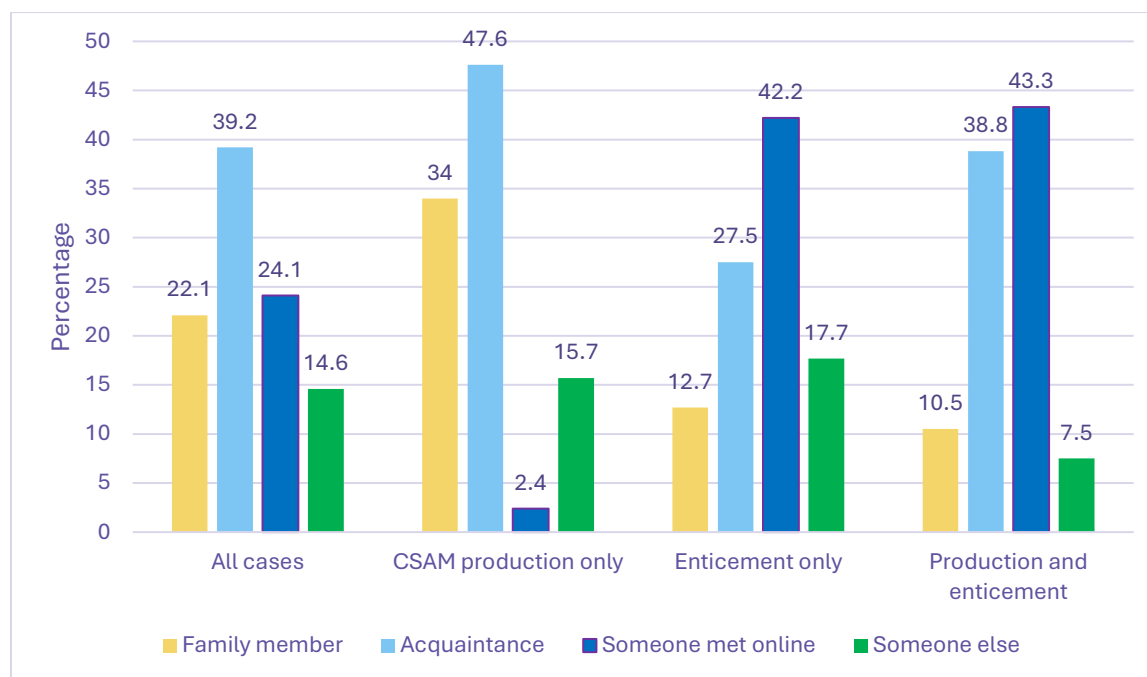


Figure 4. Relationship between the victim and offender by type of case ($p < .001$)

Figure 4 highlights how varied the relationship between the victims and offenders was based on the type of case. Acquaintances (47.6%) and family members (34.0%) were the most common types of offenders in cases that involved CSAM production only. In contrast, offenders who met their victims online were the most common in enticement only cases (42.2%); cases that involved both production and enticement were predominately committed by offenders who were acquaintances of the victims (38.8%) or who met their victims online (43.3%).

Table 3. Identified victim characteristics					
	All (n=316)^a n (%)	CSAM production only (n=147) n (%)	Enticement only (n=102) n (%)	Both enticement and production (n=67) n (%)	Chi- square p value
<u>Age</u>					<.001
9 or younger	47 (14.9)	40 (27.2)	7 (6.9)	0	
10 or 12	40 (12.7)	18 (12.2)	16 (15.7)	6 (9.0)	
13 to 15	150 (47.5)	52 (35.4)	55 (53.9)	43 (64.2)	
16 or 17	79 (25.0)	37 (25.2)	24 (23.5)	18 (26.9)	
<u>Sex</u>					.37
Male	40 (12.7)	20 (13.6)	11 (10.8)	9 (13.4)	
Female	271 (85.8)	122 (83.0)	91 (89.2)	58 (86.6)	
Missing	5 (1.6)	5 (3.4)	0	0	
<u>Multiple victims in case</u>					.05
No	236 (74.7)	104 (70.7)	85 (83.3)	47 (70.1)	
Yes	80 (25.3)	43 (29.3)	17 (16.7)	20 (29.9)	
<u>Race</u>					
White	203 (64.2)	97 (66.0)	61 (59.8)	45 (67.2)	.52
Black	36 (11.4)	18 (12.2)	11 (10.8)	7 (10.5)	.90
American Indian / Alaska Native	4 (1.3)	2 (1.4)	2 (2.0)	0	.53
Asian/Pacific Islander	2 (0.6)	0	1 (1.0)	1 (1.5)	.38
Not sure	28 (8.9)	15 (10.2)	7 (6.9)	6 (9.0)	.66
Missing	44 (13.9)	18 (12.2)	19 (18.6)	7 (10.5)	.23
<u>Hispanic/Latino</u>					.88
No	205 (65.7)	96 (66.2)	64 (62.7)	45 (69.2)	
Yes	35 (11.2)	18 (12.4)	10 (9.8)	7 (10.8)	
Not sure	12 (3.9)	5 (3.5)	5 (4.9)	2 (3.1)	
Missing	60 (19.2)	26 (17.9)	23 (22.5)	11 (16.9)	
<u>Relationship with offender</u>					<.001
Family member	70 (22.1)	50 (34.0)	13 (12.7)	7 (10.5)	
Acquaintance	124 (39.2)	70 (47.6)	28 (27.5)	26 (38.8)	
Someone met online	76 (24.1)	4 (2.4)	43 (42.2)	29 (43.3)	
Other	46 (14.6)	23 (15.7)	18 (17.7)	5 (7.5)	

^a The 12 cases with missing data on the specific victim role are dropped from this comparison.

Among our sample of 784 identified offenders, a little over half included offenders who possessed CSAM (56.1%, n=441). Offenders who engaged in enticement made up 27% (n=212) and offenders identified through an undercover investigation made up 24.4% (n=191). A small percentage of offenders (4.9%, n=38) were one of multiple suspects in a case. As with identified victims of technology facilitated crimes, in cases where there was more than one suspect involved in the case, a “primary suspect” was selected to ask

detailed questions about. The primary suspect was the one who committed or attempted to commit the most serious crime. If there was still more than one, we picked the youngest.

Information was collected on characteristics and demographics of the 784 identified offenders in our sample of N-JOV cases (see **Table 4**). The overwhelming majority of them were male (96.8%, n=759), with female offenders making up 2.8% (n=22), and offenders whose sex was unknown making up less than half a percent (0.4%, n=3).

Almost three-quarters of the offenders in our sample were White (73.2%, n=574), with Black or African Americans making up the next largest group (10.3%, n=81); followed by offenders where there was uncertainty regarding their race (8.9%, n=28). The smallest percentages included offenders who were Asian or Pacific Islander (2.2%, n=17) and American Indian/Alaska Native (0.8%, n=6). About 10% of all offenders were Hispanic (10.7%, n=84).

The ages of the primary suspect at the time of the crime were most typically ages 26-39 (32.8%, n=257), 40-59 (23.3%, n=183) or 18-25 (20%, n=157). Smaller percentages of suspects were 60 and older 14.9% (n=117) or minors, 17 and younger (8.9%, n=70).

(Offenders who were married or living with a partner accounted for 6 24.7% (n= 164) of the sample of adult suspects. The educational background of offenders was missing 29.1% (n=193) of adult suspects, however, 3.3% (n=88) were reported as having more than a high school education. Those working full-time at the time of the incident made up 40.1% (n=266).

Table 4. Offender characteristics in technology-facilitated crimes against children					
	All (n=784)	Identified victim (n=327)	Undercover (n=173)	CSAM possession only (n=284)	X² P value
Any possession	441 (56.1)	97 (29.7)	60 (34.7)	284 (100)	---
Any undercover investigation	191 (24.4)	18 (5.5)	173 (100)	0	---
Any enticement	212 (27.0)	169 (51.7)	37 (21.4)	6 (2.1)	---
Multiple suspects in case					.003
No	746 (95.1)	301 (92.1)	169 (97.7)	276 (97.2)	
Yes	38 (4.9)	26 (7.9)	4 (2.3)	8 (2.8)	
Sex					.01
Male	759 (96.8)	311 (95.1)	171 (98.8)	277 (97.5)	
Female	22 (2.8)	16 (4.9)	1 (0.6)	5 (1.8)	
Missing	3 (0.4)	0	1 (0.6)	2 (0.7)	
Race / ethnicity					

Table 4. Offender characteristics in technology-facilitated crimes against children					
	All (n=784)	Identified victim (n=327)	Undercover (n=173)	CSAM possession only (n=284)	X² P value
White	574 (73.2)	217 (66.4)	136 (78.6)	221 (77.8)	.001
Black	81 (10.3)	52 (15.9)	13 (7.5)	16 (5.6)	<.001
American Indian / Alaskan Native	6 (0.8)	6 (1.8)	0	0	---
Asian or Pacific Islander	17 (2.2)	7 (2.1)	4 (2.3)	6 (2.1)	.99
Not sure	37 (4.7)	20 (6.1)	4 (2.3)	13 (4.6)	.16
<u>Hispanic/Latino</u>					.09
No	528 (67.3)	219 (67.0)	122 (70.5)	187 (65.9)	
Yes	84 (10.7)	41 (12.5)	10 (5.8)	33 (11.6)	
Not sure	17 (2.2)	11 (3.4)	1 (0.6)	5 (1.8)	
Missing	155 (19.8)	56 (17.1)	40 (23.1)	59 (20.8)	
<u>Age</u>					<.001
17 or younger	70 (8.9)	50 (15.3)	0	20 (7.0)	
18 – 25	157 (20.0)	81 (24.8)	17 (9.8)	59 (20.8)	
26 - 39	257 (32.8)	107 (32.7)	74 (42.8)	76 (26.8)	
40 – 59	183 (23.3)	62 (19.0)	52 (30.1)	69 (24.3)	
60 or older	117 (14.9)	27 (8.3)	30 (17.3)	60 (21.1)	
<u>Suspect was a minor</u>					<.001
No	714 (91.1)	277 (84.7)	173 (100)	264 (93.0)	
Yes	70 (8.9)	50 (15.3)	0	20 (7.0)	
<u>Marital status^a</u>	<u>(n=663)</u>	<u>(n=257)</u>	<u>(n=159)</u>	<u>(n=247)</u>	.06
Single, never married	270 (40.7)	115 (44.7)	49 (30.8)	106 (42.9)	
Married	139 (21.0)	50 (19.5)	36 (22.6)	53 (21.5)	
Living w/ partner	25 (3.8)	9 (3.5)	5 (3.1)	11 (4.5)	
Separated/divorced	58 (8.7)	23 (8.9)	16 (10.1)	19 (7.7)	
Not sure	46 (6.9)	22 (8.6)	15 (9.4)	9 (3.6)	
Missing	125 (18.9)	38 (14.8)	38 (23.9)	49 (19.8)	
<u>Education^a</u>	<u>(n=663)</u>	<u>(n=257)</u>	<u>(n=159)</u>	<u>(n=247)</u>	.004
Did not finish high school	32 (4.8)	17 (6.6)	3 (1.9)	12 (4.9)	
High school graduate	133 (20.1)	67 (26.1)	22 (13.8)	44 (17.8)	
Some college education or technical training	38 (5.7)	13 (5.1)	9 (5.7)	16 (6.5)	
College graduate	40 (6.0)	12 (4.7)	9 (5.7)	19 (7.7)	
Post college degree	1 (0.4)	5 (3.1)	4 (1.6)		
Not sure	217 (32.7)	87 (33.9)	49 (30.8)	81 (32.8)	
Missing	193 (29.1)	60 (23.3)	62 (39.0)	71 (28.7)	
<u>Full time employment at time of incident^a</u>	<u>(n=663)</u>	<u>(n=257)</u>	<u>(n=159)</u>	<u>(n=247)</u>	.03
No	198 (29.9)	78 (30.3)	38 (23.9)	82 (33.2)	
Yes	266 (33.9)	95 (29.1)	78 (45.1)	93 (32.7)	

Table 4. Offender characteristics in technology-facilitated crimes against children					
	All (n=784)	Identified victim (n=327)	Undercover (n=173)	CSAM possession only (n=284)	X² P value
Missing	199 (25.4)	84 (25.7)	43 (24.9)	72 (25.3)	
<u>Had any known direct access to minors^b</u>					<.001
No	207 (26.4)	63 (19.3)	54 (31.2)	90 (31.7)	
Yes	401 (51.1)	216 (66.1)	55 (31.8)	130 (45.8)	
Missing	176 (22.5)	48 (14.7)	64 (37.0)	64 (22.5)	
<u>Had own children</u>					<.001
No	332 (42.3)	153 (46.8)	51 (29.5)	128 (45.1)	
Yes	189 (24.1)	75 (22.9)	47 (27.2)	67 (23.6)	
Not sure	64 (8.2)	33 (10.1)	18 (10.4)	13 (4.6)	
Missing	199 (25.4)	66 (20.2)	57 (32.9)	76 (26.8)	
<u>Had own children under age 18^c</u>	(n=189)	(n=75)	(n=47)	(n=67)	<.001
No	45 (28.6)	9 (12.0)	16 (34.0)	29 (43.3)	
Yes	123 (65.1)	61 (81.3)	26 (55.3)	36 (53.7)	
Not sure	6 (3.2)	3 (4.0)	1 (2.1)	2 (3.0)	
Missing	6 (3.2)	2 (2.7)	4 (8.5)	0	
<u>Other access to minors</u>					
Lived w/ minors	163 (20.8)	96 (29.4)	20 (11.6)	47 (16.5)	<.001
Visitation w/ minors	16 (2.0)	9 (2.7)	1 (0.6)	6 (2.1)	.26
Worked directly with children	43 (5.5)	26 (7.9)	3 (1.7)	14 (4.9)	.01
Worked in proximity to children	41 (5.2)	15 (4.6)	7 (4.1)	19 (6.7)	.37
Volunteered w/ children	22 (2.8)	10 (3.1)	2 (1.2)	10 (3.5)	.31
Spent time w/ children	118 (15.1)	63 (19.3)	19 (11.0)	36 (12.7)	.02
Friends who were minors	103 (13.1)	79 (24.2)	1 (0.6)	23 (8.1)	<.001
Missing	237 (30.2)	70 (21.4)	80 (46.2)	87 (30.6)	<.001
<u>Evidence had ongoing sexual interest in children</u>					<.001
No	138 (17.6)	89 (27.2)	25 (14.5)	24 (8.5)	
Yes	400 (51.0)	145 (44.3)	72 (41.6)	183 (64.4)	
Not sure	57 (7.3)	27 (8.3)	10 (5.8)	20 (7.0)	
Missing	189 (24.1)	66 (20.2)	66 (38.1)	57 (20.1)	
<u>Someone at arrest scene made statement that suspect has molested minors</u>					<.001
No	454 (57.9)	174 (53.2)	99 (57.2)	181 (63.7)	
Yes	79 (10.1)	64 (19.6)	4 (2.3)	11 (3.9)	

Table 4. Offender characteristics in technology-facilitated crimes against children					
	All (n=784)	Identified victim (n=327)	Undercover (n=173)	CSAM possession only (n=284)	X² P value
Not sure	25 (3.2)	14 (4.3)	3 (1.7)	8 (2.8)	
Missing	226 (28.8)	75 (22.9)	67 (38.7)	84 (29.6)	
<u>Prior history....</u>					
Diagnosed mental illness or other evidence of mental illness	49 (6.3)	25 (7.7)	7 (4.1)	17 (6.0)	.28
Problems with drugs or alcohol	128 (16.3)	59 (18.0)	25 (14.5)	44 (15.5)	.52
History of violence	41 (5.2)	25 (7.7)	2 (1.2)	14 (4.9)	.008
Social service investigations	18 (2.3)	14 (4.3)	0	4 (1.4)	.004
Prior child abuse investigations	18 (2.3)	12 (3.7)	0	6 (2.1)	.03
Arrest for non-sexual offense	156 (19.9)	78 (23.9)	23 (13.3)	55 (19.4)	.02
Missing	273 (34.8)	102 (31.2)	80 (46.2)	91 (32.0)	.002
<u>Any known prior arrest for sexual offense committed against a minor</u>					.06
No	430 (54.9)	189 (57.8)	83 (48.0)	158 (55.6)	
Yes	84 (10.7)	35 (10.7)	15 (8.7)	34 (12.0)	
Not sure	40 (5.1)	21 (6.4)	9 (5.2)	10 (3.5)	
Missing	230 (29.3)	82 (25.1)	66 (38.1)	82 (28.9)	
<u>Ever reported to CPS for child abuse or neglect</u>					<.001
No	385 (49.1)	157 (48.0)	76 (43.9)	152 (53.5)	
Yes	47 (6.0)	33 (10.1)	2 (1.2)	12 (4.2)	
Not sure	86 (11.0)	42 (12.8)	18 (10.4)	26 (9.1)	
Missing	266 (33.9)	95 (29.1)	77 (44.5)	94 (33.1)	
<u>Was a registered sex offender</u>					<.001
No	464 (59.2)	215 (65.7)	87 (50.3)	162 (57.0)	
Yes	59 (7.5)	11 (3.4)	15 (8.7)	33 (11.6)	
Not sure	20 (2.5)	12 (3.7)	1 (0.6)	7 (2.5)	
Missing	241 (30.7)	89 (27.2)	70 (40.5)	82 (28.9)	

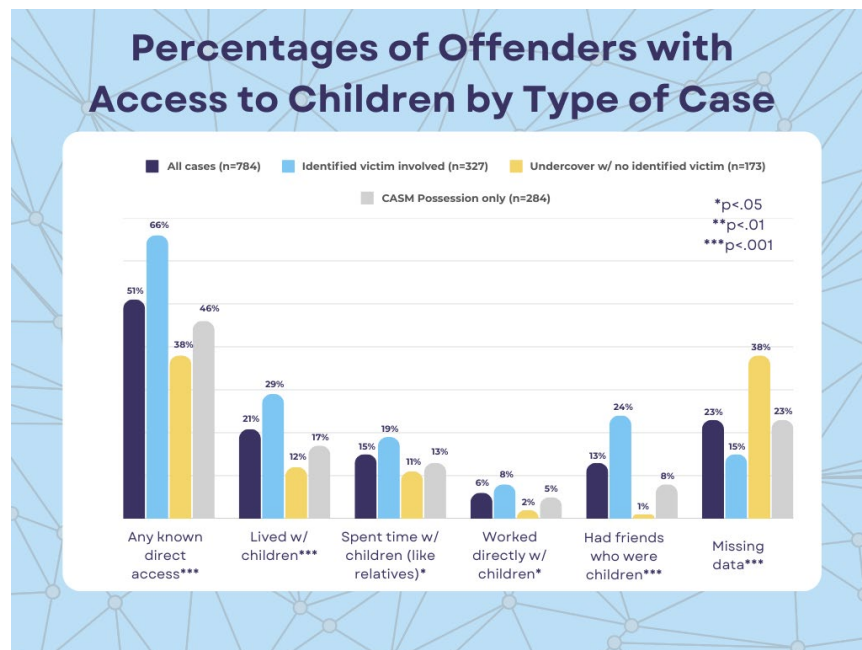
^a Question only asked of adults.

^b New variable to reflect any of the reported ways offender had access to children.

^c Of the subgroup who said they had any children.

CPS = child protective services

Infographic 4. How offenders have access to children



In general, over half (51.0%, n=400) of the offenders had direct access to minors.

Offenders with children of their own who were under the age of 18 accounted for 15.7% (n=123), those living with minors 20.8% (n=163), and those who had visitation with minors 2% (n=16). As for contact with children outside the home, 5.5% (n=43) of offenders worked directly with children, 5.2% (n=41) worked in proximity to children, 2.8% (n=22)

volunteered with children, and 15.1% (n=118) spent time with children. Another 13.1% (n=103) reported having friends who were minors.

There was evidence that a little over half of the offenders (51.5%, n=400) had ongoing sexual interest in children. In 10.1% (n=79) cases, someone at the scene of the arrest made a statement that the suspect had molested minors.

As for mental health characteristics, 6.3% (n=49) were diagnosed with mental illness or there was evidence of mental illness, and 16.3% (n=128) had known problems with drugs and/or alcohol.

A small percentage of offenders had a history of violence (5.5%, n=41), involvement in prior social services or child abuse investigations (3.2%, n=25) or were reported to child protective services for child abuse and neglect (6%, n=47). There was a larger percentage of offenders with a prior arrest for a non-sexual offense (19.9%, n=156) compared to those with a prior arrest for a sexual offense committed against a minor (10.7%, n=84). And only 7.5% (n=59) were registered sex offenders. Overall, 30.6% (n=240) of the offenders had prior involvement within the correctional or child protective services system.

WHO ARE THE OFFENDERS OF TECHNOLOGY-FACILITATED SEX CRIMES AGAINST CHILDREN?



Mostly men 96.8% (n=759)

- Women: 2.8% (n=22)
- Missing: .4% (n=3)

Mostly white 73.2% (n=574)

- Black: 10.03% (n=81)
- Asian/Pacific Islander: 2.2% (n=17)
- American Indian/Alaskan Native: .8% (n=6)
- Not sure: 4.7% (n=37)



Age of offenders varies

- 17 or younger: 8.9% (n=70)
- 18-25: 20% (n=157)
- 26-39: 32.8% (n=257)
- 40-59: 23.3% (n=183)
- 60+: 14.9% (n=117)

51.1% (n=401) had direct access to minors

- 20.8% (n=163) lived with minors
- 15.7% (n=123) had children under age 18

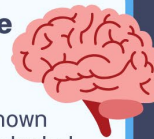


51% (400) had ongoing sexual interest in children

- 10.7% (n=84) Had a prior arrest for a sexual offense against a minor

A minority of offenders struggle with other mental health issues

- 16.3% (n=128) Had known problems with drugs/alcohol
- 6.3% (n=49) had a diagnosed mental illness/evidence of having one



Infographic 5. Who are the offenders of technology-facilitated sex crimes against children?

Topic 3: Understanding how cases are coming to police attention and innovative approaches to investigations

Agency initiation and involvement

Table 5 outlines the ways in which different types of technology-facilitated abuse cases ending in arrest came to police attention. Overall, almost half of all cases (52.3%) began in a municipal police department. The case type with the highest percentage of cases initiated by municipal police departments were those involving an identified victim, accounting for 62.7% of those cases. County sheriff's offices had the second-highest percentage of all cases, initiating approximately one-third of all cases (32.1%). The highest percentage of cases initiated by county sheriff's offices involved CSAM possession only (36.3%). In contrast, only 1.3% of all cases were initiated by a prosecutor's office, making them least likely to serve as the starting point for cases. Across case types, the highest percentage of cases initiated by prosecutor's offices were undercover cases without an identified victim, still only accounting for a small portion of those cases (5.2%).

ICAC Task Forces were involved in 38.3% of all cases. They were most frequently involved in cases with CSAM possession only, representing over half (54.2%) of these cases. Cases involving an identified victim were least likely to involve an ICAC Task Force, accounting for less than a quarter (21.1%) of those cases.

Who reports technology-facilitated abuse cases to police?

Cases came to police attention in many different ways. The most reported were: 1) CyberTip from NCMEC, 2) proactive undercover investigation, and 3) family members of the primary minor (16.2%). School officials also reported cases to police in 6.1% of cases and the involved minor themselves reported in 5.1% of cases. More details are provided in **Table 5**. Identified victim cases were significantly more likely to be reported by a variety parties, including (but not limited to) the involved minor (11.9%), the minor's family member (38.2%), school officials (11.9%), and concerned citizens (6.7%). Undercover cases with no identified victim were almost always (98.3%) initiated by law enforcement. Only one undercover case (0.6%) was initiated by a concerned citizen. Finally, shifting focus to CSAM possession only cases, over half of these were initiated via NCMEC CyberTips (64.4%), 9.1% as a referral from a different law enforcement agency, as part of a proactive undercover operation (9.1%), and a technology or social media company (6.3%), to name a few.

Which cases involve multiple agencies?

Almost half (46.1%) of all cases involved multiple law enforcement agencies while 39.2% only involved one law enforcement agency. It is important to note that nearly 15% of data regarding how many agencies involved was missing (14%) or unclear (0.8%). Multiple

agencies were more likely to be involved in CSAM possession (52.5%) cases, followed by undercover with no identified victims (48.0%), and lastly, identified victim cases (39.5%) ($p=.03$).

When examining the types of other agencies involved in cases ($n=361$), over half (51.5%) involved another city, county, or state LEA. ICAC Task Forces assisted in about one-third of cases (31.9%). Specifically, ICAC Task Forces had a significantly large percentage of assists with CSAM possession only cases compared to other case types, accounting for half of that case type (50.3%).

Probation and parole were least likely to assist with the investigation, accounting for only 4.7% of all assists to LEAs. The differences between types for probation and parole involvement did not differ significantly across case types.

When it comes to which jurisdiction brings forth charges for the crime, the majority of charges are brought forth by states (75.9%). There are no significant differences between case types and percentage involving state charges. Federal charges were not as common, with 8.9% of all cases with federal charges against the offender. Still, much of the data regarding charges was either unknown or missing. Almost 20% of cases were missing data related to state charges (4.5% not sure, 13.8% missing). Similarly, data regarding federal charges was unknown (5.5%) or missing (25.1%) in over 30% of cases overall.



Infographic 6. How are technology-facilitated sex crimes against minors coming to police attention?

Other parties involved in cases

Aside from law enforcement agencies, we also asked about whether school resource officers, technology/social media companies, and

news media were involved in cases. While school resources officers (SROs) were only involved in about 10% of all cases, they were significantly more frequently involved in cases with an identified victim, making up about 20% of all identified victim cases. Perhaps understandably, undercover cases without an identified victim usually did not involve SROs; almost 90% of the time SROs were not involved in this type of case. As with other cases mentioned above, data regarding SROs was unknown or missing in almost 18% of all cases.

Meanwhile, 19.3% of cases were known to involve a social media company. The type of case most likely to involve a social media company were CSAM possession only cases, accounting for 34.9% of these cases. About 17% of all cases had unclear (2.1%) or missing (14.9%) information about whether a technology/social media company was involved. Finally, we also asked investigators whether the cases in question received media attention. Media coverage was known to occur in 25.9% of cases. Undercover cases without an identified victim were significantly more likely to receive media attention, with this occurring in 28.9% of undercover cases ($p=.03$). Closely behind were cases involving an identified victim, with 27.8% of these cases receiving media attention. Whether the case gained media attention was unknown in 4.6% of cases, and missing in 28.1% of cases, meaning that we do not have data regarding media coverage for almost 35% of all cases.

Infographic 7. Innovative investigative approaches used in technology-facilitated sex crimes

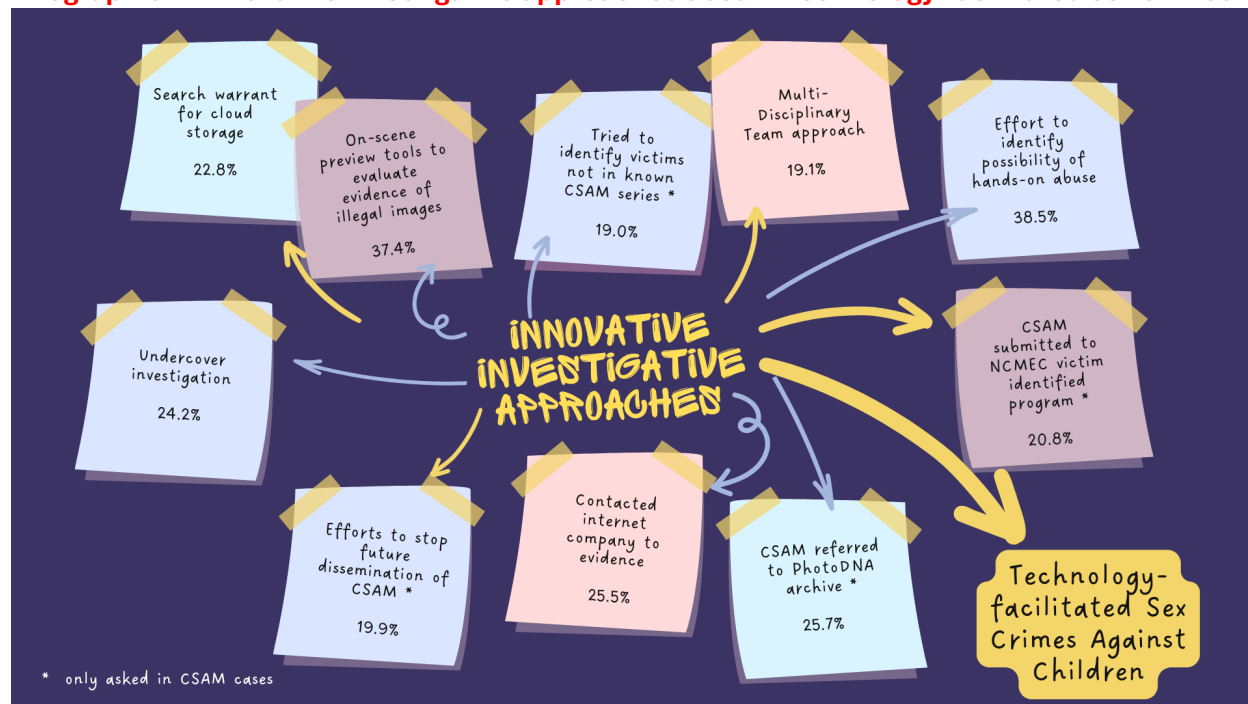


Table 5. How cases came to police attention and which agencies were involved by type of case

	All (n=784)	Identified victim (n=327)	Undercover (no identified victim) (n=173)	CSAM possession only (n=284)	X² P value
<u>Type of agency</u>					<.001
Attorney's Office	25 (3.2)	6 (1.8)	7 (4.1)	12 (4.2)	
County Sheriff's Office	252 (32.1)	92 (28.1)	57 (32.9)	103 (36.3)	
Municipal Police Department	410 (52.3)	205 (62.7)	73 (42.2)	132 (46.5)	
Prosecutor's Office	10 (1.3)	0	9 (5.2)	1 (0.3)	
State Bureaus of Investigation	37 (4.7)	12 (3.7)	10 (5.8)	15 (5.3)	
State Police and Highway Patrols	50 (6.4)	12 (3.7)	17 (9.8)	21 (7.4)	
ICAC Task Force involved in any way	300 (38.3)	69 (21.1)	77 (44.5)	154 (54.2)	<.001
<u>How came to police attention...</u>					
Involved minor	40 (5.1)	39 (11.9)	0	1 (0.3)	<.001
Family member of minor	127 (16.2)	125 (38.2)	0	2 (0.7)	<.001
School official/authority	48 (6.1)	39 (11.9)	0	9 (3.2)	<.001
Psychologist or counselor	6 (0.8)	6 (1.8)	0	0	---
Concerned citizen	30 (3.8)	22 (6.7)	1 (0.6)	7 (2.5)	.001
Employer	1 (0.1)	1 (0.3)	0	0	---
Computer/cell phone repair shop	5 (0.6)	0	0	5 (1.8)	---
Social services / CPS / Parole	10 (1.3)	8 (2.5)	0	2 (0.7)	.04
Technology or social media company	20 (2.5)	2 (0.6)	0	18 (6.3)	<.001
Proactive undercover operation	218 (27.8)	22 (6.7)	170 (98.3)	26 (9.1)	<.001
CyberTip from NCMEC	226 (28.8)	42 (12.8)	1 (0.6)	183 (64.4)	<.001
Referral from other LEA	49 (6.3)	20 (6.1)	3 (1.7)	26 (9.1)	.006
Someone who knew suspect	11 (1.4)	5 (1.5)	0	6 (2.1)	.17
Friend/classmate of minor	5 (0.6)	5 (1.5)	0	0	---
Someone from church / other local organization	7 (0.9)	3 (0.9)	0	4 (1.4)	.30
Other local business	3 (0.4)	1 (0.3)	0	2 (0.7)	---
Not sure	13 (1.7)	4 (1.2)	0	9 (3.2)	.03
Missing	9 (1.1)	5 (1.5)	0	4 (1.4)	.27

Table 5. How cases came to police attention and which agencies were involved by type of case

	All (n=784)	Identified victim (n=327)	Undercover (no identified victim) (n=173)	CSAM possession only (n=284)	X² P value
<u>Other LEAs involved</u>					.03
No	307 (39.2)	151 (46.2)	61 (35.3)	95 (33.5)	
Yes	361 (46.1)	129 (39.5)	83 (48.0)	149 (52.5)	
Not sure	6 (0.8)	3 (0.9)	1 (0.6)	2 (0.7)	
Missing	110 (14.0)	44 (13.5)	28 (16.2)	38 (13.4)	
<u>Types of agencies involved ^a</u>	<u>(n=361)</u>	<u>(n=129)</u>	<u>(n=83)</u>	<u>(n=149)</u>	
ICAC Task Force	115 (31.9)	23 (17.8)	17 (20.5)	75 (50.3)	<.001
Another city, county or state LEA	186 (51.5)	76 (58.9)	49 (59.0)	61 (40.9)	.003
FBI	55 (15.2)	21 (16.3)	14 (16.9)	20 (13.4)	.72
Homeland Security	79 (21.9)	21 (16.3)	22 (26.5)	36 (24.2)	.15
Probation and Parole	17 (4.7)	10 (7.7)	3 (3.6)	4 (2.7)	.12
Other	47 (13.0)	18 (13.9)	11 (13.3)	18 (12.1)	.90
<u>Jurisdiction bringing charges</u>					
<u>State</u>					.32
No	46 (5.9)	17 (5.2)	13 (7.5)	16 (5.6)	
Yes	595 (75.9)	259 (79.2)	127 (73.4)	209 (73.6)	
Not sure	35 (4.5)	16 (4.9)	9 (5.2)	10 (3.5)	
Missing	108 (13.8)	35 (10.7)	24 (13.9)	49 (17.3)	
<u>Federal</u>					.13
No	474 (60.5)	207 (63.3)	88 (50.9)	179 (63.0)	
Yes	70 (8.9)	33 (10.1)	18 (10.4)	19 (6.7)	
Not sure	43 (5.5)	17 (5.2)	12 (6.9)	14 (4.9)	
Missing	197 (25.1)	70 (21.4)	55 (31.8)	72 (23.3)	
<u>School Resource Officer involved</u>					<.001
No	569 (72.6)	197 (60.2)	152 (87.9)	220 (77.5)	
Yes	76 (9.7)	66 (20.2)	0	10 (3.5)	
Not sure	8 (1.0)	6 (1.8)	0	2 (0.7)	
Missing	131 (16.7)	58 (17.7)	21 (12.1)	52 (18.3)	

Table 5. How cases came to police attention and which agencies were involved by type of case					
	All (n=784)	Identified victim (n=327)	Undercover (no identified victim) (n=173)	CSAM possession only (n=284)	X ² P value
<u>Case involved reports from social media company</u>					<.001
No	473 (63.6)	213 (68.1)	139 (80.3)	121 (46.9)	
Yes	144 (19.3)	48 (15.3)	6 (3.5)	90 (34.9)	
Not sure	16 (2.1)	4 (1.3)	0	12 (4.7)	
Missing	111 (14.9)	48 (15.3)	28 (16.1)	35 (13.6)	
<u>Case received media attention</u>					.03
No	325 (41.5)	142 (43.4)	58 (33.5)	125 (44.0)	
Yes	203 (25.9)	91 (27.8)	50 (28.9)	62 (21.8)	
Not sure	36 (4.6)	16 (4.9)	4 (2.3)	16 (5.6)	
Missing	220 (28.1)	78 (23.9)	61 (35.3)	81 (28.5)	

^a Of cases with at least one other agency involved.

Innovative approaches used in investigations

Table 6 outlines some of the innovative approaches used in investigations, comparing how frequently each approach is used in all cases (n=789) compared to those specifically involving CSAM (n=584). Most cases (85.4%) used at least one approach, and the bottom row of the table shows the mean number of approaches per case type. Cases ranged from 0-9 in number of approaches. The mean number of approaches was slightly higher for CSAM cases at almost 3 approaches (mean = 2.98, SD=1.96), compared to a mean of about 2.5 approaches for all cases.

The type of approach most used for all cases and those involving CSAM was making an effort to identify the possibility of hands-on abuse, which was used in 38.5% of all cases with significant differences between CSAM (45.4%) vs non-CSAM cases (9.0%) ($p<.001$). The next most common across all cases and CSAM cases was use of on-scene preview tools to evaluate evidence of illegal images, which was used in 37.4% of all cases – 44.9% of CSAM cases and 16.1% of non-CSAM cases ($p<.001$).

Another innovative approach used was getting a warrant for cloud storage, which was more common in CSAM cases (25.3% vs 15.6% of non-CSAM cases, $p=.004$). Undercover investigations are inherently innovative and significantly more likely in non-CSAM cases (58.5%) compared to CSAM cases (12.2%, $p<.001$). Other innovative approaches were specific to CSAM cases including trying to identify victims not in a known series (25.7% of CSAM cases), efforts to stop the future dissemination of CSAM (26.7%), referring CSAM for inclusion in an archive of PhotoDNA images (34.8%), and submitting images to NCMEC's victim identification program (28.1%).

Innovative approach	All cases n (%)	Non-CSAM cases n (%)	CSAM cases n (%)	X² P value
	n=789	n=205	n=584	
Warrant for cloud storage	180 (22.8)	32 (15.6)	148 (25.3)	.004
Use of on-scene preview tools to evaluate evidence of illegal images	295 (37.4)	33 (16.1)	262 (44.9)	<.001
MDT involved in case	151 (19.1)	33 (16.1)	118 (20.2)	.20
Active effort to identify the possibility of hands-on abuse	304 (38.5)	39 (9.0)	265 (45.4)	<.001
Tried to identify victims not in known series ^a	150 (19.0)	---	150 (25.7)	---
Efforts to stop future dissemination	157 (19.9)	---	156 (26.7)	---
Internet company contacted for help ^a	201 (25.5)	---	201 (34.4)	---
CSAM referred for inclusion in archive of PhotoDNA images ^a	203 (25.7)	---	203 (34.8)	---
Images submitted to NCMEC's victim identification program ^a	164 (20.8)	---	164 (28.1)	---
Any undercover component	191 (24.2)	120 (58.5)	71 (12.2)	<.001
Mean number innovative approaches (SD)	2.53 (1.96)	1.26 (0.96)	2.98 (2.03)	<.001

^a Asked only in cases involving CSAM. SD = standard deviation.

Topic 4: How police reports and investigative response varies across metro and non-metro communities

Examining differences between community types can help us understand whether there are unique aspects of rural versus metropolitan areas when it comes to technology-facilitated abuse cases. We used the United States Department of Agriculture data's categorizations for urbanicity/rurality, breaking into four categories: Metropolitan core (the most urban areas, belonging to a large metro area), Metropolitan commuting (areas which lie outside of a major metropolitan area but are tied to them based on commuting patterns), Micropolitan (areas adjacent to large metro areas), and finally, Rural/small towns which are not connected to any metropolitan/micropolitan areas (U.S. Department of Agriculture, 2024).

Respondents in our sample were mostly from metro core communities, accounting for 72.2% (n=834) of communities. Fifteen and a half percent (n=178) came from micropolitan areas, followed by 6.3% (n=73) from rural areas or small towns. Finally, the smallest percentage of our respondents came from metro commuting areas, accounting for 5.8% (n=67) of all respondents.

Three case types significantly differed in frequency across community types (See **Table 7**). CSAM possession cases were significantly more likely to be reported in metropolitan commuting areas (44.8%) compared to other community types. On the other hand, possession cases were least commonly reported by rural/small town residents, making up only 26% of those communities' cases. Enticement cases were significantly more common in micropolitan (25.8%) and rural/small town communities (26%) compared to metropolitan commuting and core communities. Undercover operations were also significantly more common in metropolitan commuting areas (23.9%) compared to other communities.

While the differences across community type were not significant for CSAM production or youth-produced image (YPI) cases, some unique patterns emerged. Rural/small town respondents reported the highest percentage of YPI non-arrest cases, accounting for 38.4% of this case type. The highest percentage of CSAM production cases were reported in metropolitan commuting areas (23.9%).

Table 7. Case details by type of community					
	Rural / small town (n=73)	Micropolitan (n=178)	Metropolitan commuting (n=67)	Metropolitan core (n=834)	X ² P value
CSAM production	16 (21.9)	37 (20.8)	16 (23.9)	175 (21.0)	.95
CSAM possession	19 (26.0)	52 (29.2)	30 (44.8)	343 (41.1)	.002
Undercover operation	5 (6.9)	30 (16.9)	16 (23.9)	140 (16.8)	.05
Enticement	19 (26.0)	46 (25.8)	13 (19.4)	135 (16.2)	.007
YPI non-arrest	28 (38.4)	66 (37.1)	17 (25.4)	254 (30.5)	.13

Table 8 examines patterns between the community type and the party who first reported the case to law enforcement. Significant differences emerged between communities for several different reporting parties. For example, rural/small town communities had the highest percentage of reports from a family member of the primary minor involved in the case (37%). Another significant difference was related to CyberTip reports from NCMEC; the highest percentage of these reports came from metropolitan areas (26.1%). Reports from psychologists or counselors significantly more frequently came from rural/small town communities (4.1%) compared to others.

A few of the overall less-common case originations only occurred in metropolitan areas, including reports from employers (0.1% of metropolitan reports), computer/cell phone repair shops (0.5% of metropolitan reports), someone from a church or other local organization (0.8% of metropolitan reports, and other local businesses (0.4% of metropolitan reports).

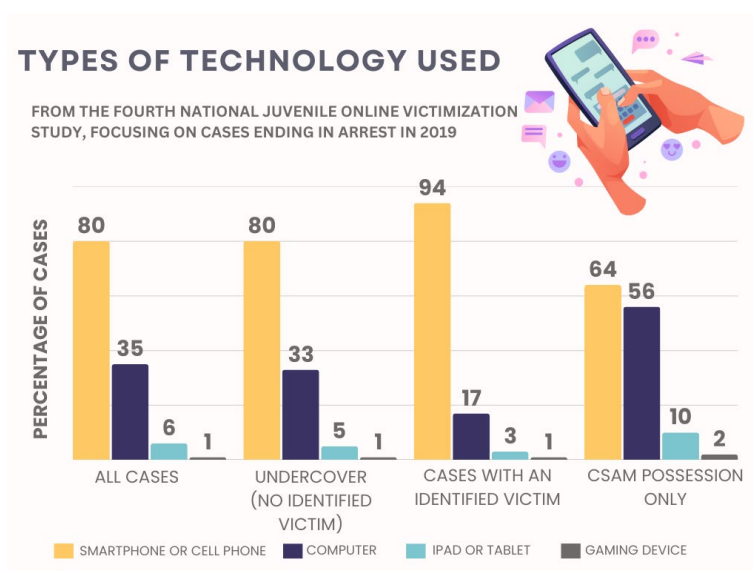
About seven percent of all cases either contained unclear information about the reporting party (1.4%) or did not offer any information about it (5.5%).

Table 8. Case origination by type of community				
	Rural / small town (n=73)	Micropolitan (n=178)	Metropolitan (n=901)	P value
Case was reported to LEA by...				
Involved minor	4 (5.5)	9 (5.1)	69 (7.7)	.40
Family member of minor	27 (37.0)	48 (27.0)	182 (20.2)	.001
School official/authority	15 (20.5)	14 (7.8)	124 (13.8)	.02
Psychologist or counselor	3 (4.1)	5 (2.8)	6 (0.7)	.004
Concerned citizen	4 (5.5)	6 (3.4)	29 (3.2)	.59
Employer	0	0	1 (0.1)	---
Computer/cell phone repair shop	0	0	5 (0.5)	---
Social services / CPS / Parole	0	3 (1.7)	10 (1.1)	.51
Technology or social media company	2 (2.7)	6 (3.4)	20 (2.2)	.65
Proactive undercover operation	5 (6.9)	37 (20.8)	183 (20.3)	.02
Cybertip from NCMEC	7 (9.6)	36 (20.2)	235 (26.1)	.003
Referral from other LEA	4 (5.5)	16 (9.0)	39 (4.3)	.04
Someone who knew suspect	0	2 (1.1)	12 (1.3)	.60
Friend/classmate of minor	0	1 (0.6)	12 (1.3)	.43
Someone from church / other local organization	0	0	7 (0.8)	---
Other local business	0	0	4 (0.4)	---
Not sure	1 (1.4)	5 (2.8)	12 (1.3)	.35
Missing	4 (5.5)	3 (1.7)	12 (1.3)	.03

Topic 5: Role technology has in these crimes, and how it is utilized to initiate or further a sex crime

Knowing the types of technology used to facilitate crimes against children is key to understanding the environments in which abuse occurs. With this knowledge, law enforcement officials can better determine which investigative tools are necessary to target suspects using different types of devices, and which types of platforms to surveil carefully. **Table 9** outlines the types of devices used in these cases, along with the frequencies of which peer-to-peer networks and the Dark Net are involved.

Infographic 8. Types of technology used in sex crimes against children



The device most used throughout all cases by far was a smartphone, which was used in 75.1% of all cases. Almost all cases (89%) involving an identified victim occurred using a smartphone, representing the largest percentage of smartphone usage across case types. Computers were the second most used device, with about a third (34.7%) of all cases having involved a computer. Computers were significantly more likely to be used in cases which only involved CSAM possession in comparison to other case types, being used in over half (56%) of all CSAM possession cases. Cloud storage was also significantly more frequently used in CSAM possession only cases compared to other case types, being used in 12.3% of CSAM possession cases. The least commonly used devices across all cases were gaming devices (1.3%), web cameras (1.3%), and MP3 players (0.1%). There were no significant differences between types of cases for these less frequently used devices³.

³ Definitions and examples of these specific devices were not provided in the interview.

Only a small minority of cases involved peer-to-peer file sharing networks (12.1%) and the Dark Net (5.6%). Peer-to-peer networks were significantly more often used in undercover cases with no identified victim (31.2%), while the Dark Net was involved significantly more often with CSAM possession only cases (8.1%). However, there were quite a few cases which lacked information about peer-to-peer networks and the Dark Net. Information about peer-to-peer networks was unclear in about 4% of all cases and completely missing from almost 30%. Over 35% of cases in total had unclear (6.1%) or missing (30%) information regarding activity on the Darknet.

Table 9. Roles of technology by case type in arrest cases

	All (n=784)	Identified victim (n=327)	Undercover with no identified victim (n=173)	CSAM possession only (n=284)	P value
<u>Types of technology used</u>					
Computer	272 (34.7)	56 (17.1)	57 (32.9)	159 (56.0)	<.001
Cell phone (no internet connection)	39 (5.0)	16 (4.9)	14 (8.1)	9 (3.2)	.06
Smartphone	589 (75.1)	291 (89.0)	125 (72.3)	173 (60.9)	<.001
Gaming device	10 (1.3)	4 (1.2)	1 (0.6)	5 (1.8)	.55
Digital Camera	20 (2.5)	16 (4.9)	1 (0.6)	3 (1.1)	.002
Web camera	10 (1.3)	5 (1.5)	2 (1.2)	3 (1.1)	.86
MP3 player	1 (0.1)	1 (0.3)	0	0	---
iPad or tablet	46 (5.9)	9 (2.7)	9 (5.2)	28 (9.9)	.001
Social networking site					
Cloud	54 (6.9)	18 (5.5)	1 (0.6)	35 (12.3)	<.001
Other device	109 (13.9)	29 (8.9)	27 (15.6)	53 (18.7)	.002
Not sure	10 (1.3)	8 (2.5)	0	2 (0.7)	.04
Missing	21 (2.7)	4 (1.2)	8 (4.6)	9 (3.2)	.07
<u>Use of peer-to-peer file sharing</u>					<.001
No	439 (56.0)	229 (70.0)	57 (32.9)	153 (53.9)	
Yes	95 (12.1)	11 (3.4)	54 (31.2)	30 (10.6)	
Not sure	31 (3.9)	11 (3.4)	2 (1.2)	18 (6.3)	
Missing	219 (27.9)	76 (23.2)	60 (34.7)	83 (29.2)	
<u>Dark net</u>					<.001
No	457 (58.3)	219 (67.0)	86 (49.7)	152 (53.5)	
Yes	44 (5.6)	11 (3.4)	10 (5.8)	23 (8.1)	
Not sure	48 (6.1)	20 (6.1)	8 (4.6)	20 (7.0)	
Missing	235 (30.0)	77 (23.5)	69 (39.9)	89 (31.3)	

Topic 6: How investigators are proactively catching technology-facilitated sex offenders

Undercover investigators are common in technology-facilitated abuse cases to proactively identify and arrest suspects who may be grooming and enticing minors or exchanging CSAM with other offenders. In this study, we identified seven types of investigator roles in a total of 139 proactive investigations. The most common role was undercover investigators posting online as a minor (63.8%). Another common role used in over a quarter (27.1%) of cases was investigators monitoring peer-to-peer networks for CSAM. Less commonly, in only about 3% of cases, undercover investigators took over the identity of a real child to catch a suspect engaging in technology-facilitated abuse. The other four types each accounted for less than 3% of cases, including sex trafficking investigations (2.1%), someone providing or promoting access to a child (1.6%), undercover investigators seeking or offering sexual access to a minor (1.1%), and undercover investigators posing as an adult interested in CSAM (1.1%).

Infographic 9. Roles of undercover investigators in technology-facilitated sex crimes against children

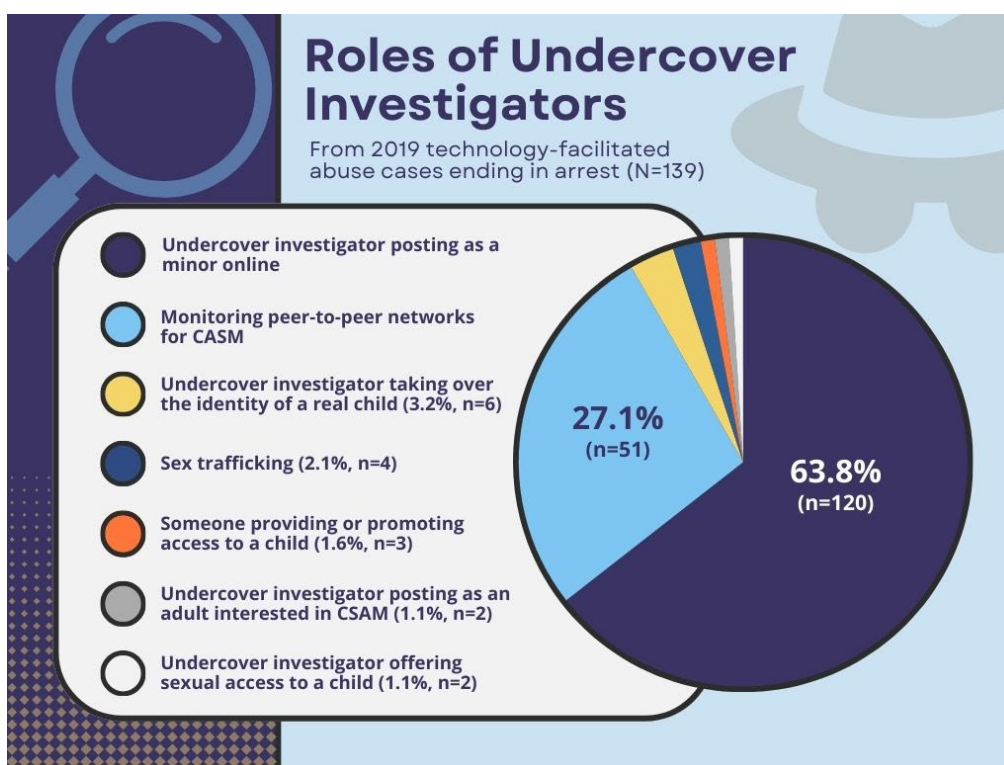


Table 10 offers a breakdown of elements involved in undercover investigations. Starting with the sex of the person investigators impersonate, the majority of cases (81.3%) involve an investigator posing as a female, while only 10.8% posed as a male. About 8% of the

cases did not provide information about the sex of the person the investigator was portraying.

The undercover investigator most often met suspects on social networking sites, with over half (58.3%) of all cases occurring on these types of platforms. Craigslist and other bulletin boards were used to meet suspects in about 11% of cases. About 9% of the time, investigators met the suspect in a text-based chatroom. Investigators in about a third (33.1%) of cases deemed the location to be of a sexual nature.

Investigators' length of communication with suspects varied, but the most common timeframes were more than 1 day to 7 days (30.2%) and one day or less (22.3%). The investigator and suspects' communication lasted over a month in only 11.5% of cases. The suspect almost always (89.2% of cases) was the one to mention sexual topics first. Sexual topics were most often (74.2% of time) mentioned within a day of the conversation beginning.

Availability of data on the details of conversations' content was limited. The suspect asked for sexual pictures or videos of the undercover investigator in over half of cases (60%), but data about this was missing in 21% of cases. The suspect sent sexual photos or videos to the undercover investigator in about half of cases (49.2%), but a quarter of the cases (25%) were missing data about this specific type of exchange. Finally, a face-to-face meeting was arranged in the majority of cases (71.9%), with about 8% of cases missing data about whether the suspect and investigator met.

Table 10. Details of undercover operations (n=139)	
	n (%)
<u>Sex of person impersonated</u>	
Male	15 (10.8)
Female	113 (81.3)
Not sure	1 (0.7)
Missing	9 (7.2)
<u>Where online first met suspect</u>	
Social networking site	81 (58.3)
Text-based chatroom	12 (8.6)
Chat with video capability	1 (0.7)
Craigslist or other bulletin board	15 (10.8)
P2P network	1 (0.7)
Some other way	18 (12.9)
Not sure	3 (2.2)
Missing	8 (5.7)
<u>Sexually oriented location</u>	
No	68 (48.9)
Yes	46 (33.1)
Not sure	12 (8.6)
Missing	13 (9.4)

Table 10. Details of undercover operations (n=139)	
	n (%)
<u>How long communicated online</u>	
1 day or less	31 (22.3)
> 1 day to 7 days	42 (30.2)
> 1 week to 1 month	29 (20.9)
> 1 month	16 (11.5)
Missing	21 (15.1)
<u>Offender brought up sex or sex-related topics to UC</u>	
No	2 (1.4)
Yes	124 (89.2)
Not sure	1 (0.7)
Missing	12 (8.6)
<i>Subsample n</i>	<i>(n=124)</i>
<u>How long before brought up sexual topics</u>	
1 day or less	92 (74.2)
> 1 day to 7 days	13 (10.5)
> 1 week to 1 month	5 (4.0)
> 1 month	3 (2.4)
Missing	11 (8.9)
<u>Asked UC to masturbate or engage in sex acts</u>	
No	48 (38.7)
Yes	45 (36.3)
Not sure	4 (3.2)
Missing	27 (21.8)
<u>Offender harassed or stalked the UC</u>	
No	73 (58.9)
Yes	10 (8.1)
Not sure	3 (2.4)
Missing	38 (30.7)
<u>Offender used technology to send or show sexual pictures to UC</u>	
No	44 (35.5)
Yes	61 (49.2)
Missing	19 (15.3)
<u>Offender asked UC to make and/or send sexual images or videos</u>	
No	24 (19.3)
Yes	74 (59.7)
Not sure	3 (2.4)
Missing	23 (18.5)
<u>Offender pretended to be younger</u>	
No	74 (59.7)
Yes	27 (21.8)
Not sure	3 (2.4)
Missing	20 (16.1)

Table 10. Details of undercover operations (n=139)	
	n (%)
Met face-to-face	(n=139)
No	28 (20.1)
Yes	100 (71.9)
Missing	11 (7.9)

How do offenders with identified victims differ from those who do not?

To address this question, we compared the characteristics of the offender between those arrested in undercover investigations and those arrested in enticement cases with identified victims. **Table 11** compares different characteristics of suspects caught using undercover investigations with types of cases involving enticement with undercover investigators only (n=122) to cases involving enticement with identified victims (n=171).

For both case types, the suspect was almost always male (98.4% of undercover investigations and 97.7% for cases with identified victims). Significant differences between these types of cases begin to emerge when looking at age groups involved. Suspects aged 26-39 were most common among both types; 42.6% of suspects involved with undercover enticement cases fell into this group compared to 40.3% of suspects in enticement cases involving an identified victim. Suspects of enticement cases with identified victims were significantly more likely to be younger. None of the suspects in undercover investigations were 17 or under compared to 4.1% of suspects in enticement cases with identified victims. By contrast, 31.1% of suspects in undercover enticement cases were 40-59 years old, compared to only 18.1% of enticement cases with identified victims.

Suspects involved in undercover enticement cases were significantly more likely to be married or living with a partner (25.4%) compared to enticement cases with an identified victim (14%). Some of the risks related to hands-on offenses were significantly less for suspects involved in undercover enticement cases compared to those involving an identified victim. For example, cases involving an identified victim were much more likely to involve a suspect with direct access to children compared to suspects in undercover investigations (Odds Ratio (OR) = 2.03). Cases involving identified victims were much more likely to have involved a person at the scene making accusations regarding the suspect molesting children (OR = 11.4).

Table 11. Characteristics of offenders arrested in enticement cases with identified victims vs those in undercover operations

	Enticement with undercover investigations (n=122)	Enticement with identified victims (n=171)	Odds Ratio	P value
<u>Sex</u>				
Male	120 (98.4)	167 (97.7)	0.96	.33
Female	1 (0.8)	4 (2.3)		
<u>Race / ethnicity</u>				
White	95 (77.9)	116 (67.8)	0.41	.01
Black	9 (7.4)	27 (15.8)	2.31	.04
Hispanic/Latino	9 (7.4)	26 (15.2)	2.17	.06
<u>Age</u>				
17 or younger (ref)	0	7 (4.1)	1.0	
18 – 25	15 (12.3)	55 (32.2)	6.9	<.001
26 - 39	52 (42.6)	69 (40.3)	2.5	.04
40 – 59	38 (31.1)	31 (18.1)	1.5	.37
60 or older	17 (13.9)	9 (5.3)	---	
Married or living w/ partner	31 (25.4)	24 (14.0)	0.35	.001
More than high school education	11 (9.0)	20 (11.7)	0.52	.15
Full time employment at time of incident	56 (45.9)	54 (31.6)	0.46	.009
Had known direct access to minors	35 (28.7)	93 (54.4)	2.03	.02
Evidence had ongoing sexual interest in children	38 (31.1)	77 (45.0)	0.93	.82
Someone at the arrest scene made a statement that suspect has molested minors	2 (1.6)	32 (18.7)	11.4	.001
Diagnosed mental illness or other evidence of mental illness	5 (4.1)	12 (7.0)	1.25	.69
Any known problems with drugs or alcohol	16 (13.1)	29 (17.0)	0.91	.79
Any known history of violence	2 (1.6)	10 (5.9)	2.77	.20
Prior social service or child abuse investigations or children removed from home	0	7 (4.1)		---
Any known prior arrest for non-sexual offense	16 (13.1)	42 (24.6)	1.43	.31
Any known prior arrest for sexual offense committed against a minor	9 (7.4)	19 (11.1)	1.13	.78
Ever reported to CPS for child abuse or neglect	1 (0.8)	9 (5.3)	5.01	.13
Registered sex offender	9 (7.4)	7 (4.1)	0.38	.07
Any known prior involvement with system	26 (21.3)	57 (33.3)	1.34	.32

All odds ratios adjust for missing data on the independent variable.

Are undercover investigations being successfully prosecuted?

Table 12 compares case outcomes like charges and prosecution in enticement cases with undercover investigators versus enticement cases with identified victims. State crimes were common in both case types, with 77.1% of undercover enticement cases and 80.7% of enticement cases with identified victims ending with state-level charges. Enticement cases with identified victims were more likely to be resolved at the time of interview. However, neither of these factors significantly differed between case types. Undercover enticement cases had lower odds of ending with the suspect pleading guilty to a felony (OR=0.7). Almost all undercover enticement cases (90.9%) compared to almost three-quarters (72.1%) of enticement cases with identified victims ended with a felony guilty plea. Enticement cases with undercover investigators had higher odds of resulting in probation (64.7%, OR=0.35) compared to enticement cases with identified victims (39.1%). Incarceration sentences varied between the two types of cases. Suspects in enticement cases with identified victims were significantly more likely (36.1%, OR=16.17) to receive one year or less of jail time, compared to 19.3% of enticement cases with undercover investigators. Longer sentences of 10 years or more were significantly more likely in cases involving undercover investigations, with 16.1% of these suspects receiving 10 or more years, compared to 13.1% of suspects in enticement cases with identified victims.

Finally, neither case had statistically significantly higher odds of ending with federal charges. The percentage of federal charges was slightly higher for enticement cases with identified victims (6.4% compared to 5.7% of undercover enticement cases). However, information about federal charges was commonly missing for both case types. Almost half (42.6%) of enticement cases with undercover investigators were missing data about federal charges, and same with over a quarter of enticement cases with identified victims (28.1%).

Table 12. Charges and outcomes of offenders arrested in enticement cases with identified victims vs those in undercover operations					
	All enticement cases (n=293)	Enticement with undercover investigations (n=122)	Enticement with identified victims (n=171)	OR^a	X² P value
Charged with state crimes					
No	10 (3.4)	4 (3.3)	6 (3.5)	0.98 ^a	.97
Yes	232 (79.2)	94 (77.1)	138 (80.7)		
Not sure	14 (4.8)	3 (2.5)	11 (6.4)		
Missing	37 (12.6)	21 (17.2)	16 (9.4)		
<i>Subsample n</i>	<i>(n=232)</i>	<i>(n=94)</i>	<i>(n=138)</i>		
State case resolved^b	159 (68.5)	55 (58.5)	104 (75.4)	1.35 ^a	.62
Not sure	4 (1.7)	1 (1.1)	3 (2.2)		

Table 12. Charges and outcomes of offenders arrested in enticement cases with identified victims vs those in undercover operations

	All enticement cases (n=293)	Enticement with undercover investigations (n=122)	Enticement with identified victims (n=171)	OR ^a	X ² P value
Missing	57 (24.6)	33 (35.1)	24 (17.4)		
<i>Subsample n</i>	<i>(n=159)</i>	<i>(n=55)</i>	<i>(n=104)</i>		
How resolved? ^c					
Guilty plea	122 (76.7)	47 (85.5)	75 (72.1)	0.56 ^a	.22
Convicted at trial	9 (5.7)	4 (7.3)	5 (4.8)	0.69 ^a	.60
Charges dropped or dismissed	10 (6.3)	0	10 (9.6)		---
Suspect died	1 (0.6)	1 (1.8)	0		
Other	7 (4.4)	2 (3.6)	5 (4.8)		
Not sure	9 (5.7)	1 (1.8)	8 (7.7)		
Missing	1 (0.6)	0	1 (1.0)		
<i>Subsample n</i>	<i>(n=159)</i>	<i>(n=55)</i>	<i>(n=104)</i>		
Suspect was sentenced ^c	138 (86.8)	51 (92.7)	87 (83.7)	0.17 ^a	.10
Not sure	8 (5.0)	2 (3.6)	6 (5.8)		
Missing	2 (1.3)	1 (1.8)	1 (1.0)		
<i>Subsample n</i>	<i>(n=138)</i>	<i>(n=51)</i>	<i>(n=87)</i>		
Type of sentenced received ^{d, e}					
Incarceration	92 (66.7)	31 (60.8)	61 (70.1)	1.87 ^a	.12
Suspended or deferred sentence	13 (9.4)	5 (9.8)	8 (9.2)	0.94 ^a	.91
Probation	67 (48.5)	33 (64.7)	34 (39.1)	0.35 ^a	.007
Restitution	4 (2.9)	0	4 (4.6)		---
Diverse	0	0	0		
Something else	12 (8.7)	1 (2.0)	11 (12.6)		
Not sure	12 (8.7)	3 (5.9)	9 (10.3)		
<i>Subsample n</i>	<i>(n=92)</i>	<i>(n=31)</i>	<i>(n=61)</i>		
Incarceration length ^f					
One year or less	28 (30.4)	6 (19.3)	22 (36.1)	16.17 ^b	.006
>1 to 3 years	16 (17.4)	10 (32.3)	6 (9.8)		
>3 to 5 years	12 (13.0)	7 (22.6)	5 (8.2)		
>5 to 10 years	14 (15.2)	1 (3.2)	13 (21.3)		
More than 10 years	13 (14.1)	5 (16.1)	8 (13.1)		
Missing	9 (9.8)	2 (6.5)	7 (11.5)		
Charged with federal crimes					
No	175 (59.7)	63 (51.6)	112 (65.5)	0.88 ^a	.81
Yes	18 (6.1)	7 (5.7)	11 (6.4)		
Not sure	15 (5.1)	4 (3.3)	11 (6.4)		

Table 12. Charges and outcomes of offenders arrested in enticement cases with identified victims vs those in undercover operations

	All enticement cases (n=293)	Enticement with undercover investigations (n=122)	Enticement with identified victims (n=171)	OR^a	X²P value
Missing	85 (29.0)	48 (39.3)	37 (21.6)		

^a Unadjusted odds ratio using logistic regression to adjust for the missing data.

^b Among cases with state charges.

^c Among resolved state cases.

^d Among cases that received sentencing.

^e Multiple options possible.

^f Among sentences that involved incarceration.

Note. There was not enough data on federal crimes to report the same breakdown as was done with state crimes.

Topic 7: Commercial elements of technology-facilitated sex crimes against children

A recent, similar study to NJOV-4 focused on commercial sexual exploitation (CSE) of children found that the use of technology in these types of cases has increased over the past decade (Mitchell et al., 2021-2023). This suggests the need to consider how common commercial elements are in technology-facilitated abuse cases. By “commercial element,” we mean the exchange of money or other items of value for sexual activity, images, or videos with minors. In the present study, only about 5% (n=58) of all cases were known to have any commercial element. Information about whether a commercial element was present in the case was missing for much of this data. Given that most of the missing data reflects gaps in what was available to the researchers, it is unclear whether police are actually capturing this information and not disclosing it to the researchers, or this detail was not gathered at all.

Specifically, **Table 13** shows the types of commercial elements present in both arrest and non-arrest cases. In non-arrest cases (n=366), only 3% of respondents confirmed that minors were paid for youth-produced images; respondents were often either not sure (5.5%) about this or the data was missing to the researchers (49.7%). Similarly, over half of the data regarding whether someone other than the minor sold or tried to sell images/videos was missing (54.9%) or the respondent was not sure (9.3%). Only 1.1% of youth-produced image cases were confirmed to have someone other than the primary minor sell or try to sell images/videos.

Similar patterns related to missing data emerged in CSAM arrest cases (n=240). For example, less than 10% of CSAM production cases involved a minor being paid for the images in which they were depicted, yet data regarding this was unavailable to the researchers in the vast majority of CSAM production cases (88.7%) (there was no “not sure” responses). The suspect was known to try and sell the CSAM in 0.8% of cases with 9.2% not sure and 31.3% missing. In enticement cases (n=167), questions asked about commercial-related tactics the suspect used to gain the victim’s trust or cooperation with multiple responses possible. These types of tactics were rare, with the most common being promises of something of non-monetary value (9.6%); 7.8% involved promises of money, 1.2% made to take part in commercial sexual exploitation, and 0.6% threats of trafficking (4.8% of respondents were not sure about the use of any of these tactics and data was missing for 7.2%).

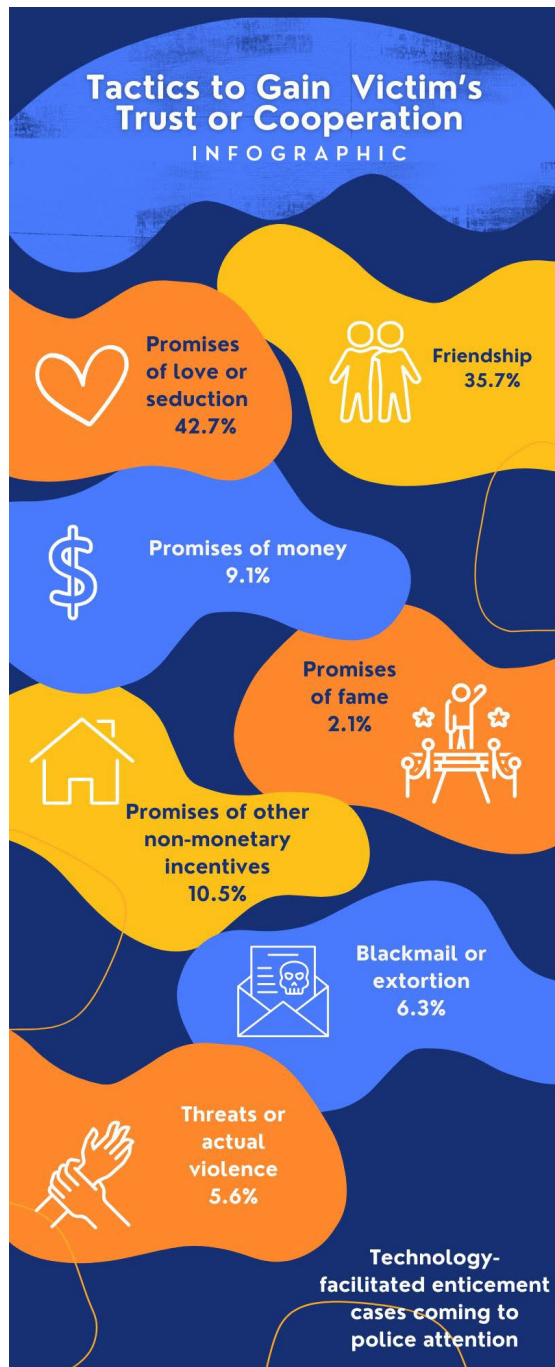
Table 13. Overlap between commercial sexual exploitation and technology-facilitated sex crimes against children

	All n (%)
Non-arrest youth produced images cases	(n=366)
<u>Minor paid for pictures/posing</u>	
No	153 (41.8)
Yes	11 (3.0)
Not sure	20 (5.5)
Missing	182 (49.7)
<u>Someone sold or tried to sell images/videos</u>	
No	127 (34.7)
Yes	4 (1.1)
Not sure	34 (9.3)
Missing	201 (54.9)
CSAM production arrest cases	(n=240)
<u>Suspect tried to sell images</u>	
No	141 (58.7)
Yes	2 (0.8)
Not sure	22 (9.2)
Missing	75 (31.3)
<u>Minor was paid or given items of value in exchange for pictures/videos or posing</u>	
No	4 (1.7)
Yes	23 (9.6)
Missing	213 (88.7)
Enticement arrest cases	(n=167)
<u>Tactics used by offenders to gain trust or cooperation</u>	
Promises of money	13 (7.8)
Promises of other non-monetary material	16 (9.6)
Threats of trafficking	1 (0.6)
Made to take part in CSEC	2 (1.2)
Not sure	8 (4.8)
Missing	12 (7.2)

CSEC = commercial sexual exploitation of children

Topic 8: Differences in crimes by offenders known only online versus those committed by family, friends and acquaintances

Infographic 10. Tactics used by offenders to gain trust or cooperation with victims in technology-facilitated enticement cases



Data suggest technology has provided new opportunities for family and acquaintance offenders to coerce and groom youth for the purposes of sexual exploitation (Mitchell et al., 2005). However, much of the current messaging around prevention of technology-facilitated sex crimes against minors continues to highlight offenders who meet their young victims online (World Health Organization, 2022). As noted earlier, family members (21.4%) and acquaintances (40.7%) made up a larger percentage of offenders in identified victim cases than those offenders who met their victims online (23.2%). **Table 14** explores whether enticement case dynamics vary based upon the relationship between the victim and offender. Overall, in 55.4% of enticement cases where offenders met their victims either online or through family or acquaintance connections, the offender told the victim they were an adult (in 12.2% of cases this information was not available). In 13.7% of cases (17.3% missing) the offender deceived the victim about their sexual motives.

Aggravating elements, or those that have the potential to make the offense worse or more serious, were identified in 22.3% (n=31) of cases (respondents were not sure in 2.1% of cases and this information was missing in 4.8%).

Respondents could pick all that applied to the case and included CSAM production (25.0% of the 31 cases with at least one aggravating element), the victim being offered or given illegal drugs or alcohol (8.2%), offered or given adult

pornography (5.5%), physical injury (3.4%), being illegally detained (2.7%), offered or given CSAM (2.1%), and being forced to take part in commercial sexual exploitation (1.4%) – in 2.1% of cases the respondent did not know if there were any aggravating elements and in 4.8% this information was missing). We also asked respondents if offenders used specific tactics to gain the trust or cooperation with the victim – this was true in 79.1% of cases (n=110). Of these cases, tactics included: Promises of love / seduction (42.7%), friendship (35.7%), promises of money (9.1%), promises of other non-monetary material incentives (10.5%), blackmail or extortion (6.3%), other coercion (14.0%), promises of fame (2.1%), threats of violence (3.5%), actual violence (2.1%), or something else (11.9%).

82.7% of cases (n=115) involved the offender bringing up sex or sex-related topics to the victim (7.9% not sure, 2.9% missing). Of these, in 63.5% of cases the offender asked the victim to make and/or send sexual images or videos (16.5% missing), in 57.4% the offender asked the victim to masturbate or engage in sex acts (20.9% missing). Almost one in four (23.5%) of these cases where offender brought up sex or sex-related topics involved the offender harassing or stalking the victim using technology (4.3% not sure, 13.9% missing), and 67.0% involved the offender using technology to send or show sexual pictures to the victim (2.6% not sure, 7.0% missing).

We were interested in whether differences existed in case characteristics between those that involved family/acquaintance offenders versus online offenders. To explore this while adjusting for missing data, we conducted a series of bivariate logistic regressions using “dummy” variables coded as “yes vs. all other” and “missing vs. all other” for each construct. Then for each regression, both are included to adjust for missing data. These adjusted odds ratios are displayed in **Table 14**. We identified very few differences between family/acquaintance offenders and those who met their victims online. Family or acquaintance offenders were less likely than offenders who met victims online (OR=0.36, p=.05) to ask the victim to make and/or send sexual images or videos and harass or stalk the victim using technology (OR=0.28, p=.008).

Table 14. Differences in features of technology-facilitated enticement crimes by relationship with the offender					
	All (n=139)	Met online (n=65)	Family member / acquaintance (n=74)	Odds ratio ^a	P value
<u>Suspect told victim s/he was an adult</u>	77 (55.4)	40 (61.5)	37 (50.0)	0.62	.20
Not sure	5 (3.6)	2 (3.1)	3 (4.1)		
Missing	12 (8.6)	5 (7.7)	7 (9.5)		
<u>Suspect deceived victim about sexual motives</u>	19 (13.7)	7 (10.8)	12 (16.2)	1.64	.34
Not sure	10 (7.2)	4 (6.1)	6 (8.1)		
Missing	14 (10.1)	7 (10.8)	7 (9.5)		
<u>Aggravating features (any)</u>	31 (22.3)	12 (18.5)	19 (25.7)	1.53	.31
Not sure	3 (2.1)	0	3 (3.9)		
Missing	7 (4.8)	3 (4.3)	4 (5.3)		
<i>Subsample n</i>	<i>(n=31)</i>	<i>(n=11)</i>	<i>(n=13)</i>		
<u>Aggravating elements</u>					
CSAM production (videos taken)	16 (51.6)	9 (81.8)	7 (53.8)	---	---
Offered or given illegal drugs or alcohol	12 (38.7)	6 (54.5)	6 (46.1)	---	---
Abducted				---	---
Illegally detained	4 (12.9)	1 (9.1)	3 (23.1)	---	---
Physically injured	5 (16.1)	2 (18.2)	3 (23.1)	---	---
Offered or given adult pornography	8 (25.8)	1 (9.1)	7 (53.8)	---	---
Offered or given CSAM	3 (9.7)	0	3 (23.1)	---	---
Asked to self-harm	0	0	0	---	---
Made to take part commercial sexual exploitation	2 (6.5)	1 (9.1)	1 (7.7)	---	---
<u>Tactics used to gain trust or cooperation with victims (any)</u>	110 (79.1)	47 (72.3)	63 (85.1)	1.67	.31
Not sure	7 (4.9)	5 (7.3)	2 (2.7)		
Missing					
<i>Subsample n</i>	<i>(n=110)</i>	<i>(n=47)</i>	<i>(n=63)</i>		
Friendship	51 (46.4)	18 (38.3)	33 (52.4)	---	---
Promises or love, seduction	61 (55.5)	33 (70.2)	28 (44.4)	---	---
Promises of fame	3 (2.7)	2 (4.3)	1 (1.6)	---	---

Table 14. Differences in features of technology-facilitated enticement crimes by relationship with the offender					
	All (n=139)	Met online (n=65)	Family member / acquaintance (n=74)	Odds ratio ^a	P value
Promises of money	13 (11.8)	9 (19.1)	4 (6.3)	---	---
Promises of other non-monetary material incentives	15 (13.6)	4 (8.5)	11 (17.5)	---	---
Blackmail or extortion	9 (8.2)	4 (8.5)	5 (7.9)	---	---
Other coercion	20 (18.2)	6 (12.8)	14 (22.2)		
Threats of violence	5 (4.5)	2 (4.3)	3 (4.8)	---	---
Threats of trafficking	0	0	0	---	---
Actual violence	3 (2.7)	1 (2.1)	2 (3.2)	---	---
Something else	17 (15.5)	6 (12.8)	11 (17.5)	---	---
<u>Brought up sex or sex-related topics</u>	115 (82.7)	52 (80.0)	63 (85.1)	2.42	.23
Not sure	11 (7.9)	5 (7.7)	6 (8.1)		
Missing	4 (2.9)	2 (3.1)	2 (2.7)		
<i>Subsample n</i>	<i>(n=115)</i>	<i>(n=52)</i>	<i>(n=63)</i>		
<u>Asked minor to masturbate or engage in sex acts</u>	66 (57.4)	33 (63.5)	33 (52.4)	0.56	.23
Not sure	12 (10.4)	3 (5.8)	9 (14.3)		
Missing	12 (10.4)	7 (13.5)	5 (7.9)		
<u>Harass or stalk using technology</u>	27 (23.5)	18 (34.6)	9 (14.3)	0.28	.008
Not sure	5 (4.3)	2 (3.9)	3 (4.8)		
Missing	16 (13.9)	8 (15.4)	8 (12.7)		
<u>Suspect used technology to send or show sexual pictures to victim</u>	77 (67.0)	43 (82.7)	34 (54.0)	0.85	.84
Not sure	3 (2.6)	0	3 (4.8)		
Missing	8 (7.0)	3 (5.8)	5 (7.9)		
<u>Suspect asked victim to make and/or send sexual images or videos</u>	73 (63.5)	36 (69.2)	37 (58.7)	0.36	.05
Not sure	9 (7.8)	5 (9.6)	4 (6.3)		
Missing	10 (8.7)	5 (9.6)	5 (7.9)		

Note. n=14 “other relationship” cases dropped from this analysis.

^a Unadjusted odds ratio (OR) using logistic regression to adjust for the missing data by including dummy variables to account for this.

Topic 9: Child sexual abuse material offenders – differences between those who possess only and those who produce (hands-on offenders)

A key interest in CSAM investigations is to determine how cases might differ between those that involve offenders who only possess CSAM and those who produce CSAM – and thus also have hands-on offenses. Of the CSAM cases that resulted in an arrest, 41.8% involved the production of CSAM and 58.2% involved possession only.

As seen in **Table 15**, the ages of the victims depicted in the CSAM covered a wide range with 31.0% known to include children ages 5 or younger, 53.9% ages 6 to 12, and 46.9% ages 13 to 17. Sixty-nine percent of CSAM cases depicted nudity or semi-nudity, 50.0% sexual contact between an adult and minor, and 11.6% violence. CSAM predominately depicted girls (76.7%) while 19.5% depicted boys. We also asked investigators about how organized the suspect's CSAM collection was. Few cases involved CSAM collections that were very (6.0%) or extremely (4.3%) organized (37.0% missing) and in 34.3% the CSAM was password protected or encoded to restrict access. Distribution of the CSAM was known to have occurred in 41.6% of cases. Computer-generated CSAM was identified in 9.8% of cases. Not sure and missing responses are detailed in the table for each.

Details of the CSAM varied across these two offender groups. Again, here we utilized a series of logistic regressions to account for missing data within constructs. Several significant differences were noted, with CSAM producers almost 3 times more likely ($OR = 2.86, p < .001$) to have CSAM of minors ages 13-17, even when accounting for offenders who were minors themselves. CSAM producers were less likely to have their CSAM organized into a collection and those who did were less likely to have it well organized (using a chi-square statistic for the categorical variable, $p < .001$). Production cases were significantly less likely than possession only cases to depict victims ages 5 or younger ($OR = 0.12, p < .001$) and ages 6 to 12 ($OR = 0.05, p < .001$). Production cases were also less likely to depict sexual contact between an adult and a minor ($OR = 0.06, p < .001$), violence ($OR = 0.15, p < .001$), and boys ($OR = 0.40, p < .001$). Production cases were also less likely to be computer generated ($OR = 0.21, p < .001$). It is important to note that these cases were investigated in 2019 before the recent influx of AI and computer-generated CSAM which may explain the lower endorsement of this characteristic.

Table 15. Characteristics of cases involving possessed and produced CSAM

	All (n=584)	Possession only (n=340)	Any production (n=244)	OR ^a	P value
<u>Age groups of victims</u> ^b					
5 or younger	181 (31.0)	152 (44.7)	29 (11.9)	0.12	<.001
6 to 12	315 (53.9)	249 (73.2)	66 (27.1)	0.05	<.001
13 to 17	274 (46.9)	118 (34.7)	156 (63.9)	2.86 ^c	<.001
Not sure	44 (7.5)	31 (9.1)	13 (5.3)		
Missing	47 (8.0)	37 (10.9)	10 (4.1)		
<u>CSAM depicted...</u> ^b					
Nudity/semi-nudity	405 (69.3)	229 (67.3)	176 (72.1)	0.65	.10
Not sure	43 (7.4)	36 (10.6)	7 (2.9)		
Missing	72 (12.3)	49 (14.4)	23 (9.4)		
<u>Sexual contact between adult and minor</u>	292 (50.0)	230 (67.7)	62 (25.4)	0.06	<.001
Not sure	7 (1.2)	4 (1.2)	3 (1.2)		
Missing	42 (14.2)	39 (21.5)	3 (4.1)		
<u>Violence</u>	68 (11.6)	58 (17.1)	10 (4.1)	0.15	<.001
Not sure	52 (8.9)	46 (13.5)	6 (2.5)		
Missing	100 (17.1)	69 (18.5)	37 (15.2)		
<u>Sex of children</u> ^b					
Boys	114 (19.5)	82 (24.1)	32 (13.1)	0.40	<.001
Girls	448 (76.7)	258 (75.9)	190 (77.9)	0.58	.03
Not sure	22 (3.8)	19 (5.6)	3 (1.2)		
Missing	36 (6.2)	33 (9.7)	3 (1.2)		
<u>How organized collection was</u>					
Not at all	130 (22.3)	80 (23.5)	50 (20.5)	61.47 ^c	<.001
Somewhat	94 (16.1)	67 (19.7)	27 (11.1)		
Very	35 (6.0)	25 (7.3)	10 (4.1)		
Extremely	25 (4.3)	16 (4.7)	9 (3.7)		
No collection	84 (14.4)	17 (5.0)	67 (27.5)		
Not sure	51 (8.7)	33 (9.7)	18 (7.4)		
Missing	163 (27.9)	101 (29.7)	62 (25.4)		
<u>Password protected or encoded to restrict access</u>	200 (34.3)	112 (32.9)	88 (36.1)	1.41	.08
Not sure	40 (6.8)	16 (4.7)	24 (9.8)		
Missing	126 (21.6)	71 (20.9)	55 (22.5)		
<u>Any distribution</u>	243 (41.6)	142 (41.8)	101 (41.4)	1.13	.53
Not sure	55 (9.4)	30 (8.8)	25 (10.2)		
Missing	114 (19.5)	63 (18.5)	51 (20.9)		
<u>Any computer-generated images</u>	57 (9.8)	48 (14.1)	9 (3.7)	0.21	<.001
Not sure	32 (5.5)	21 (6.2)	11 (4.5)		
Missing	160 (27.4)	100 (29.4)	60 (30.3)		

^a Unadjusted odds ratio using logistic regression to adjust for the missing data; ^b Multiple responses possible; ^c Chi-square statistic.



Table 16 highlights similarities and differences between offenders who produce and those who possess without a hands-on offense. For this table, we also report odds ratios using a series of logistic regressions to account for missing data within constructs. Offenders arrested in investigations that featured CSAM production were significantly more likely to also have an enticement element to the case (OR=9.43, $p<.001$) as well as multiple suspects involved in the case (OR=4.96, $p<.001$) - compared to only one. Arrested offenders in production cases were significantly younger with 21.3% being aged 17 or younger compared to 5.6% of arrested offenders being minors who possessed without a hands-on offense ($p<.001$). Production cases were also more likely to involve a female suspect (OR=6.3, $p<.001$). Even taking into account the age of the offender, offenders who produced CSAM were significantly more likely to have children under the age of 18 (OR=2.45, $p<.001$), spend time with children (OR=1.66, $p=.04$), have friends who were minors (OR=3.17, $p<.001$) and overall, have more direct access to minors (OR=2.92, $p<.001$). Offenders who produced CSAM were also more likely to have a prior social service or child abuse investigation (OR=2.57, $p=.04$), and to have been reported to child protective services for child abuse and neglect (OR=2.96, $p=.002$).

Infographic 11. Differences in case details between CSAM production and possession only cases

Table 16. Characteristics of offender who produce CSAM and those who possess only					
	All (n=584)	CSAM Possession only (n=340)	Any CSAM production (n=244)	OR ^a	P value
Any possession	440 (75.3)	340 (100)	100 (41.0)	---	---
Any undercover investigation	71 (12.2)	61 (17.9)	10 (4.1)	0.19	<.001
Any enticement	89 (15.2)	15 (4.4)	74 (30.3)	9.43	<.001
Multiple suspects in case	38 (6.5)	9 (2.7)	29 (11.9)	4.96	<.001
Any suspect female	39 (6.7)	6 (1.8)	33 (13.5)	6.3 ^b	<.001
<u>Race / ethnicity</u>					
White	428 (73.3)	269 (79.1)	159 (65.2)	0.35	<.001
Black	62 (10.6)	21 (6.2)	41 (16.8)	3.20	<.001
Not sure	31 (5.3)	16 (4.7)	15 (6.1)		
<u>Hispanic/Latino</u>	61 (10.5)	35 (10.3)	26 (10.7)	0.83	.38
Not sure	13 (2.2)	5 (1.5)	8 (3.3)	---	---
Missing	112 (19.2)	67 (19.7)	45 (18.4)	---	---
<u>Age</u>					
17 or younger	71 (12.2)	19 (5.6)	52 (21.3)	48.64 ^c	<.001
18 – 25	111 (19.0)	58 (17.1)	53 (21.7)		
26 – 39	172 (29.5)	101 (29.7)	71 (29.1)		
40 – 59	134 (22.9)	87 (25.6)	47 (19.3)		
60 or older	96 (16.4)	75 (22.1)	21 (8.6)		
<u>Suspect was a minor</u>	71 (12.2)	19 (5.6)	52 (21.3)	4.57	<.001
<i>Subsample n^d</i>	<i>(n=474)</i>	<i>(n=296)</i>	<i>(n=178)</i>		
<u>Marital status</u>					
Married or living w/ partner	129 (22.1)	78 (22.9)	51 (20.9)	1.11 ^c	.63
Not sure	25 (5.3)	14 (4.7)	11 (6.2)	---	---
Missing	78 (16.5)	52 (17.6)	26 (14.6)	---	---
<u>Education</u>					
More than high school education	70 (12.0)	53 (15.6)	17 (7.0)	0.43 ^c	.007
Not sure	152 (32.1)	96 (32.4)	56 (31.5)	---	---
Missing	121 (25.5)	75 (25.3)	46 (25.8)	---	---
<u>Full time employment at time of incident</u>	183 (31.3)	116 (34.1)	67 (27.5)	1.01 ^c	.96
Not sure	47 (9.9)	23 (7.8)	24 (13.5)	---	---
Missing	85 (17.9)	56 (18.9)	29 (16.3)	---	---
<u>Direct access to minors</u>					

Table 16. Characteristics of offender who produce CSAM and those who possess only					
	All (n=584)	CSAM Possession only (n=340)	Any CSAM production (n=244)	OR ^a	P value
Had children under the age of 18	97 (16.6)	46 (13.5)	51 (20.9)	2.45 ^c	<.001
Lived w/ minors	135 (23.1)	61 (17.9)	74 (30.3)	2.19 ^c	<.001
Visitation w/ minors	15 (2.6)	7 (2.1)	8 (3.3)	1.72 ^c	.31
Worked directly with children	32 (5.5)	18 (5.3)	14 (5.7)	1.16 ^c	.69
Worked in proximity to children	29 (5.0)	21 (6.2)	8 (3.3)	0.55 ^c	.16
Volunteered w/ children	18 (3.1)	10 (2.9)	8 (3.3)	1.19 ^c	.73
Spent time w/ children	93 (15.6)	44 (12.9)	49 (20.1)	1.66 ^c	.04
Friends who were minors	86 (14.7)	22 (6.5)	64 (26.2)	3.17	<.001
Had any of the above direct access to minors	319 (54.6)	150 (44.1)	169 (69.3)	2.92 ^c	<.001
Not sure	53 (9.1)	34 (10.0)	19 (7.8)	---	---
Missing	95 (16.3)	69 (20.3)	26 (10.7)	---	---
<u>Evidence had ongoing sexual interest in children</u>	333 (57.0)	223 (65.6)	110 (45.1)	0.22	<.001
Not sure	45 (7.7)	24 (7.1)	21 (8.6)	---	---
Missing	118 (20.2)	66 (1.4)	52 (21.3)	---	---
<u>Someone at arrest scene made statement that suspect had molested minors</u>	63 (10.8)	16 (4.7)	47 (19.3)	5.05	<.001
Not sure	18 (3.1)	7 (2.1)	11 (4.5)	---	---
Missing	152 (26.0)	95 (27.9)	57 (23.4)	---	---
<u>Suspect history</u>					
Diagnosed mental illness or other evidence of mental illness	38 (6.5)	17 (5.0)	21 (8.6)	1.82	.08
Any known problems with drugs or alcohol	95 (16.3)	54 (15.9)	41 (16.8)	1.08	.75
Any known history of violence	29 (5.0)	14 (4.1)	15 (6.1)	1.54	.26

Table 16. Characteristics of offender who produce CSAM and those who possess only					
	All (n=584)	CSAM Possession only (n=340)	Any CSAM production (n=244)	OR ^a	P value
Prior social service or child abuse investigations or children removed from home	22 (3.8)	8 (2.3)	14 (5.7)	2.57	.04
<u>Any known prior arrest for non-sexual offense</u>	116 (19.9)	65 (19.1)	51 (20.9)	1.13	.57
Not sure	44 (7.5)	22 (6.5)	22 (9.0)	---	---
Missing	135 (23.1)	82 (24.1)	53 (21.7)	---	---
<u>Any known prior arrest for sexual offense committed against a minor</u>	69 (11.8)	40 (11.8)	29 (11.2)	1.01	.97
Not sure	25 (4.3)	11 (3.2)	14 (5.7)	---	---
Missing	155 (26.5)	94 (27.7)	61 (25.0)	---	---
<u>Ever reported to CPS for child abuse or neglect</u>	42 (7.2)	15 (4.4)	27 (11.1)	2.96	.002
Not sure	65 (11.1)	37 (10.9)	28 (11.5)	---	---
Missing	181 (31.0)	104 (30.6)	77 (31.6)	---	---
<u>Registered sex offender prior to this case</u>	49 (8.4)	36 (10.6)	13 (5.3)	0.47	.03
Not sure	15 (2.6)	7 (2.1)	8 (3.3)	---	---
Missing	165 (28.3)	96 (28.2)	69 (28.3)	---	---

^a Unadjusted odds ratio using logistic regression to adjust for the missing data

^b Adjusts for whether the suspect was a minor.

^c Chi-square statistic.

^d Only asked about offenders aged 18 or older.

Note. Additional offender races are not reported due to small cell sizes. More details can be found in Table 4.

Infographic 12. Characteristics of offenders who produce vs only possess CSAM



Topic 10: When and how police take steps to stop the dissemination of CSAM

Victims of CSAM often report feeling ongoing fear over the circulation or resurfacing of their images online, as well as worry about being recognized in public. The sharing of images and the public accessibility of the images is one of the most difficult aspects of the crime to overcome (Binford et al., 2015; Gewirtz-Meydan et al., 2018) and contributes to the feelings of ongoing vulnerability (Gewirtz-Meydan et al., 2018), helplessness (Von Weiler et al., 2010) and powerlessness (Canadian Centre for Child Protection, 2017). One way that police can help mitigate this impact is to take steps to stop the dissemination of CSAM.

Among the cases that involved the production of CSAM that resulted in an arrest, 64% included efforts by the police to stop the dissemination of the CSAM (in 4.5% of cases respondents were not sure and another 24.1% had missing data about this). For the non-arrest cases that involved youth-produced sexual images, 51.4% included efforts by the police to stop the future dissemination of images (in 3.8% of cases the respondent was not sure and this information was missing or not available in 36.9% of cases).

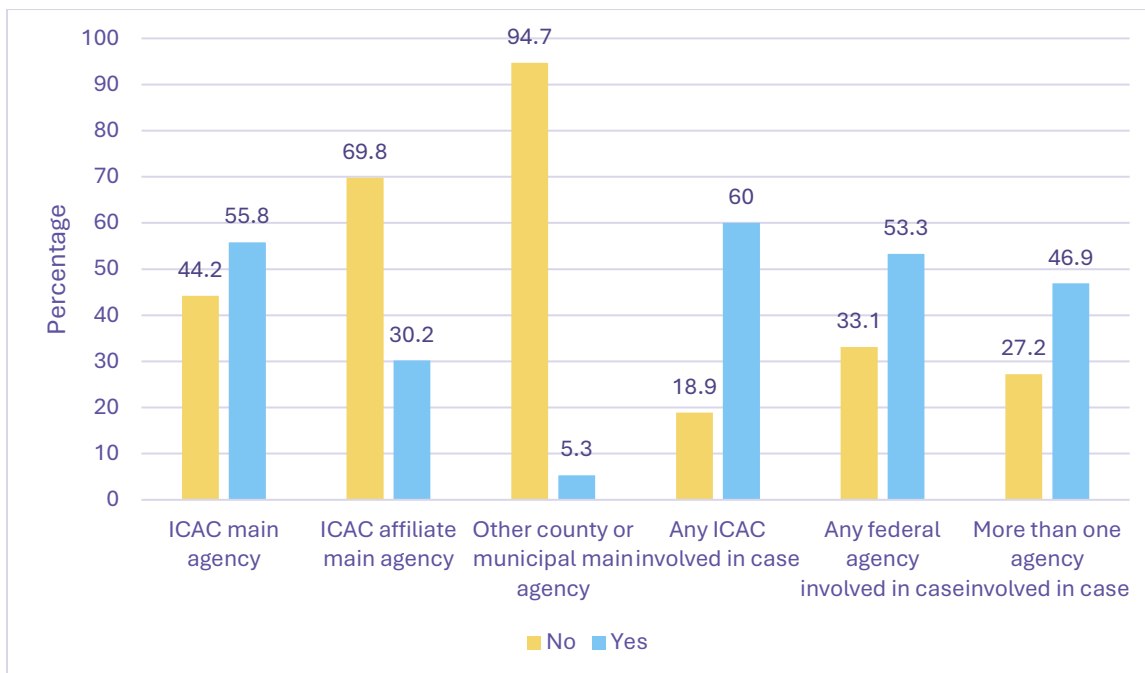


Figure 5. Submitting CSAM to NCMEC by type of agency involvement. All comparisons are significant at $p < .001$ as detailed below.

Other steps to stop the dissemination of CSAM included the involvement of the National Center for Missing & Exploited Children (NCMEC), specifically submitting images to

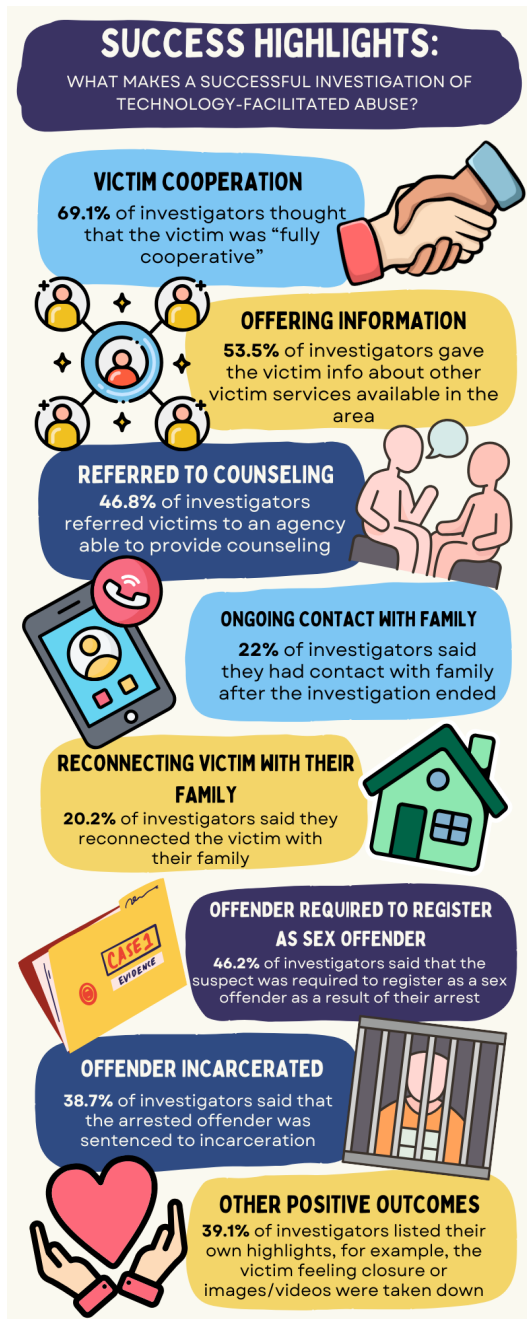
NCMEC for further investigation of their existence. This was done in 44.5% (n=161) of the 362 arrest cases that involved CSAM (10.2% of respondents were not sure and in 29.8% of cases this information was not available). This was less common in the non-arrest cases that involved youth-produced sexual images with 5.7% of respondents saying they submitted the CSAM to NCMEC (4.1% were not sure and 55.5% of cases this information was not available).

In arrest cases, the likelihood of the CSAM being submitted to NCMEC varied by the type of agency involved. In **Figure 5**, submission of CSAM to NCMEC varied based on the type of agency either leading the case or otherwise involved. Submitting to NCMEC varied based on whether the main responding agency was a ICAC Task Force (55.8%), an ICAC affiliate agency (30.2%) or other county or municipal agency (5.3%) ($p<.001$) with submission most common when an ICAC Task Force is leading the investigation. When an ICAC had any role in the case, the CSAM was referred to NCMEC in 60% of cases compared to those with no ICAC involvement (18.9%, $p<.001$). This was also true if a federal agency was involved in the case (53.3% vs 33.1% with no federal agency, $p<.001$). Submission of images to NCMEC was also significantly more likely if more than one agency was involved in the case (46.9%) versus one agency (27.2%, $p<.001$).

Topic 11: Use of Innovative Approaches to Investigations and Positive Outcomes

This study identified several different ways of defining a “successful” investigation, ranging from those that focus on the wellbeing of the victim to those that relate to offender charging and sentencing. These include:

1. Police having ongoing contact with the family
2. Police determined positive outcomes which coded from an open-ended question into the following categories:
 - Crime/exploitation stopped
 - Minor no longer living in abusive situation
 - Minor no longer had contact w/ suspect
 - Minor felt justice was served
 - Suspect faced consequences
 - Minor received treatment/services
 - Minor learned from the incident
 - Family relationships improved
 - Minor felt closure
 - Images/videos were taken down
 - Minor’s life improved overall
 - Minor/family had positive experience w/ police
3. Reconnection between victims and their families
4. Victim given information about...
 - Children’s Advocacy Center
 - NCMEC help page
 - Advice about having images removed
 - Financial restitution
 - Mental health programs
5. Victim fully cooperated with investigation
6. Victim referred to an agency for counseling or support
 - Victim advocate or victim service agency
 - Children’s Advocacy Center
 - Sexual assault support agency
 - Mental health services
7. Suspect had to register as a sex offender
8. Suspect pled guilty
9. Suspect was sentence to incarceration



Infographic 13. What makes an investigation successful?

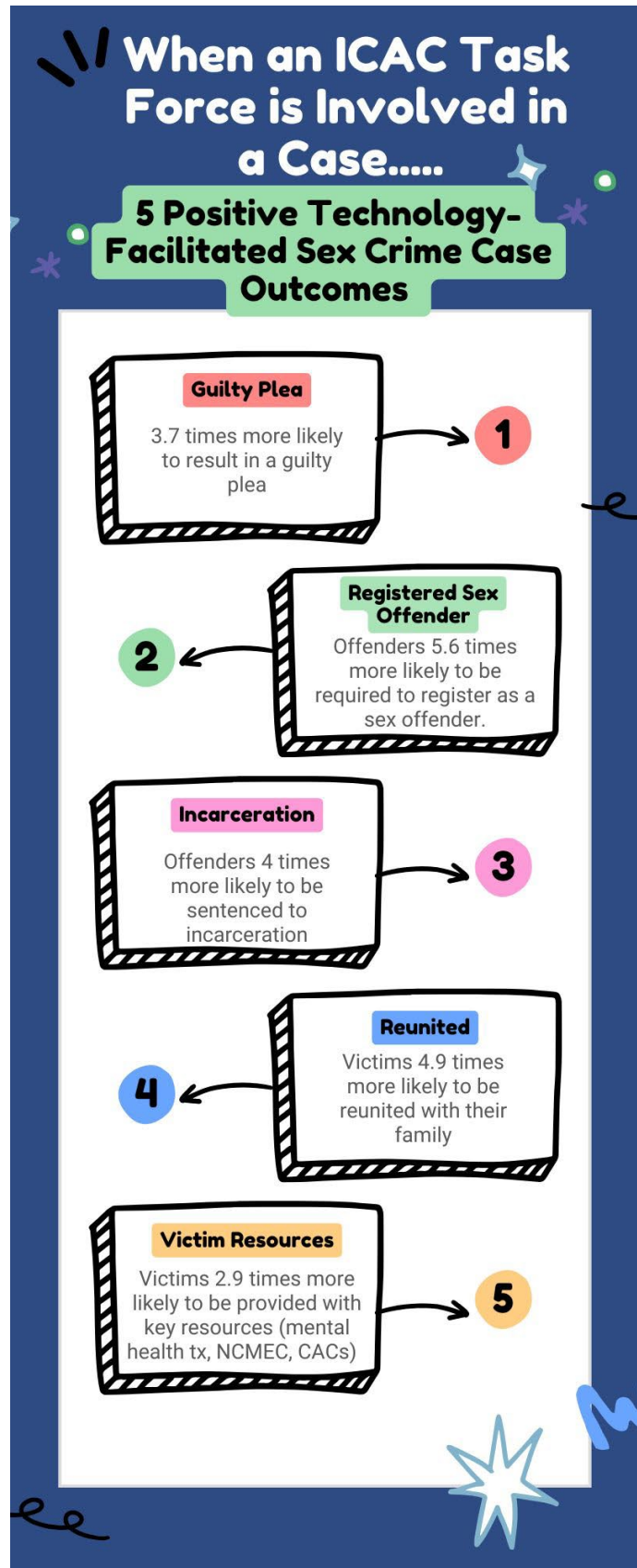
How use of innovative approaches relates to successful case outcomes

- Victim 8.03 times more likely to be given information about resources (e.g., CAC, NCMEC,) with use of at least one innovative approach ($p < .001$)
- Police 3.16 times more like to say the case had a positive outcome with the use of at least one innovative approach ($p = .01$)
- Victim 6.0 times more likely to be reconnected with family with the use of at least one innovative approach ($p < .01$)
- Victim 7.4 times more likely to be referred for counseling or support with use of at least one innovative approach ($p < .001$)

(Note. The above analyses involved bivariate logistic regressions with valid responses only for case outcomes.)

Infographic 14. Links between ICAC Task Force involvement and positive case outcomes

ICAC Task Forces play an important role in how cases are resolved, with their involvement being significantly related to several different types of positive case outcomes. When ICACs were involved, the case is 3.7 times ($p<.001$) more likely to result in the offender pleading guilty, 5.6 times more likely to require that the offender registers as a sex offender ($p<.001$), 4.0 times more likely to sentence the offender to incarceration ($p<.001$), 2.8 times more likely to end in outcomes that police considered positive ($p=.02$), 4.9 times more likely that the victim and family are reconnected or reunited ($p=.001$), and 2.9 times more likely for the victim to be provided with resources aimed at improving wellbeing ($p=.002$).



Topic 12: What a multidisciplinary response looks like in these cases

Children's Advocacy Centers (CACs) are the community agencies designed to ensure that investigations of crimes against children are conducted in a child-sensitive fashion, minimizing the negative impact of justice system involvement, and providing therapeutic and family services that can reduce the trauma of abuse and its aftermath. As of December 2020, there were 924 Children's Advocacy Centers across all 50 states recognized as members of the National Children's Alliance (NCA), the membership organization and accrediting body for CACs (Lounsbury, 2021). In 2019, these CACs served over 371,000 child victims of abuse; the majority (243,000) experiencing sexual abuse. (National Children's Alliance, 2020).

Sixty-one percent (n=200) of cases involving identified victims involved a victim being referred to an agency that could provide them with counseling and support. Of these, 48.5% (n=97) were referred to a CAC specifically. CACs were sometimes involved with the investigation itself with 16.5% (n=130) of these cases having direct CAC involvement and another type of multi-disciplinary team involved in 9.9% (n=78) of cases.

As depicted in **Figure 6**, having a CAC or other MDT involved in the case was significantly related to some successful case outcomes. Indeed, cases involving MDTs were: 1) 6.1 times more likely than those that did not to have resources given to victims (i.e., CAC, NCMEC, advice on having images removed, financial restitution, mental health programs) ($p < .001$); 2) 1.9 times more likely to have ongoing contact between police and the family ($p = .04$); and 3) 8.6 times more likely to have victims referred to an agency of counseling or support (e.g., victim advocate or victim service agency, CAC, sexual assault support agency, mental health services) ($p < .001$). Other positive case outcomes were not significantly related to a multidisciplinary response.

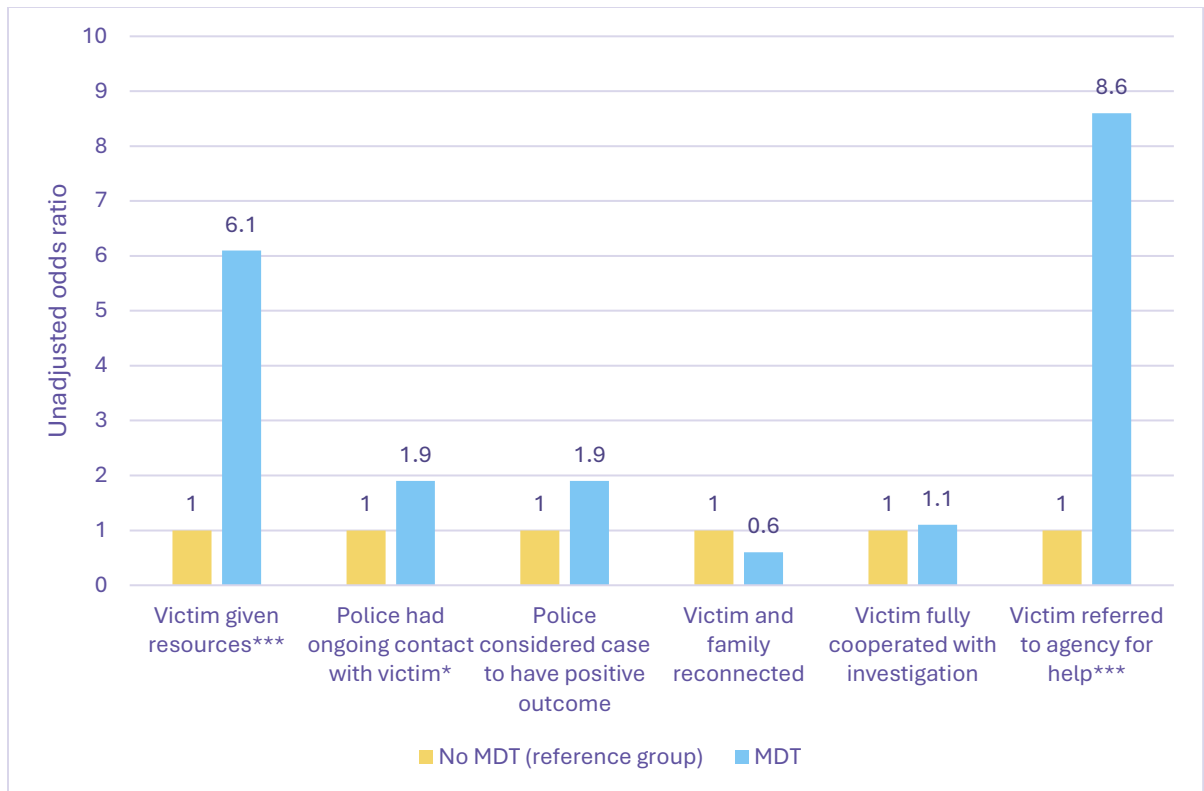


Figure 6. Unadjusted logistic regression analyses examining the relationship between MDT involvement in case and different positive case outcomes.

*** $p < .001$, * $p < .05$.

Note. Cases with missing data were dropped from each regression analysis. MDT = multi-disciplinary team

Topic 13: When teens are arrested for producing sexual images

Another study aim was to include more information about case dynamics when youth-produced images are involved. In prior waves of this study, particularly NJOV-3, investigators reported that young people were beginning to use technology to send sexual images to each other without an adult's involvement. This type of case introduces new, different questions regarding investigative dynamics and outcomes. Cases involving an adult grooming a minor or exchanging CSAM are illegal, which makes decisions regarding arrest and prosecution of adults involved in technology-facilitated crimes clearer cut. But when the youth is producing and distributing images they generated, these decisions may be handled differently depending on the circumstances.

The present study found that minors are still sometimes arrested for producing sexual content. However, of the 405 cases involving youth-produced images, less than 10% (n=39) ended in an arrest. We sought to understand the factors in cases that ended in arrest versus those that did not. **Table 17** outlines these differences, showing factors present in all youth-produced images cases (n=405) and then comparing non-arrest cases (n=366) to those that ended in arrest of a minor (n=39).

Significant differences emerge when images show sexual contact between two minors. These cases represented a minority of all youth-produced image cases (13.7% overall), but these cases more often ended in arrest (30.6%, OR=3.32). Most of these cases involved nudity or semi-nudity (82.4%), but more often did not end in arrest (84.5%, OR=0.37). Another factor that made arrest significantly more likely was a commercial element, which was rare overall (only 8.8% of all cases involved a commercial element), but was far more likely to end in arrest (57.1%, OR=18.55).

Cases involving deceit or coercion also more frequently ended in arrest, suggesting that these aggravating factors may lead to harsher treatment of the minor offender. While 17.9% of all cases involved any form of deceit, about a third of them ended in arrest (31.3%, OR=2.39).

Table 17. Youth produced sexual image details associated with a minor being arrested					
	All (n=405)	No arrest (n=366)	Arrest (n=39)	OR (95% CI)	P value
<u>2 or more images</u>	101 (54.3)	90 (55.2)	11 (47.8)	0.74 (0.31,1.78)	.51
Not sure	65 (16.1)	58 (15.9)	7 (18.9)	---	---
Missing	152 (37.7)	145 (39.6)	7 (18.9)	---	---
<u>2 or more videos</u>	26 (17.0)	22 (17.5)	4 (14.8)	0.82 (0.26,2.61)	.74
Not sure	41 (10.2)	35 (9.6)	6 (16.2)	---	---
Missing	209 (51.9)	205 (56.0)	4 (10.8)	---	---
<u>Showed sexual contact with adult</u>	5 (1.3)	4 (1.1)	1 (2.6)	---	---
Not sure	8 (2.0)	8 (2.2)	0	---	---
Missing	3 (0.7)	3 (0.8)	0	---	---
<u>Showed sexual contact with other minors</u>	47 (13.7)	36 (11.7)	11 (30.6)	3.32 (1.51,7.32)	.003
Not sure	12 (3.0)	12 (3.3)	0	---	---
Missing	49 (12.1)	46 (12.6)	3 (7.7)	---	---
<u>Included violence</u>	2 (0.7)	1 (0.4)	1 (3.1)	---	---
Not sure	9 (2.2)	8 (2.2)	1 (2.6)	---	---
Missing	88 (21.7)	82 (22.4)	6 (15.4)	---	---
<u>Showed nudity or semi-nudity</u>	253 (82.4)	229 (84.5)	24 (66.7)	0.37 (0.17,0.78)	.01
Not sure	33 (8.1)	32 (8.7)	1 (2.6)	---	---
Missing	65 (16.1)	63 (17.2)	2 (5.1)	---	---
<u>Showed minor with suggestive posing</u>	62 (27.6)	55 (28.1)	7 (24.1)	0.81 (0.33,2.02)	.66
Not sure	50 (12.3)	46 (12.6)	4 (10.3)	---	---
Missing	130 (32.1)	124 (33.9)	6 (15.4)	---	---
<u>Involved webcam to transmit CSAM</u>	27 (12.9)	22 (12.4)	5 (16.1)	1.36 (0.47,3.92)	.57
Not sure	13 (3.2)	13 (3.5)	0	---	---
Missing	183 (45.2)	175 (47.8)	8 (20.5)	---	---
<u>Minor paid or given items to pose for or exchange for CSA</u>	15 (8.8)	11 (6.7)	4 (57.1)	18.55 (3.68,93.45)	<.001
Not sure	20 (4.9)	20 (5.5)	0	---	---
Missing	214 (52.8)	182 (49.7)	32 (82.1)	---	---
<u>Deceit</u>					
Taken with hidden camera	13 (3.2)	10 (2.7)	3 (7.7)	2.97 (0.78,11.27)	.11
Tricked into pictures	11 (2.7)	9 (2.5)	2 (5.1)	2.14 (0.45,10.30)	.34
Pictures taken by surprise	11 (2.7)	9 (2.5)	2 (5.1)	2.14 (0.45,10.30)	.34
Involved other deceit	28 (6.9)	22 (6.0)	6 (15.4)	2.84 (1.08,7.51)	.03
Any of above forms of deceit	46 (17.9)	36 (16.0)	10 (31.3)	2.39 (1.04,5.46)	.04
Not sure	9 (2.2)	7 (1.9)	2 (5.1)	---	---
Missing	139 (34.3)	134 (36.6)	5 (12.8)	---	---

Table 17. Youth produced sexual image details associated with a minor being arrested					
	All (n=405)	No arrest (n=366)	Arrest (n=39)	OR (95% CI)	P value
<u>2 or more minors in CSAM</u>	68 (19.4)	47 (15.0)	21 (56.8)	7.43 (3.61,15.27)	<.001
Not sure	10 (2.5)	9 (2.5)	1 (2.6)	---	---
Missing	45 (11.1)	44 (12.0)	1 (2.6)	---	---
<u>1 or more adult in CSAM</u>	12 (3.4)	11 (3.5)	1 (2.7)	0.77 (0.10,6.18)	.81
Not sure	13 (3.2)	13 (3.5)	0	---	---
Missing	37 (9.1)	35 (9.6)	2 (5.1)	---	---
<u>Threats and coercion</u>					
Involved blackmail	31 (7.7)	26 (7.1)	5 (12.8)	1.92 (0.69,5.33)	.21
Involved coercion	27 (6.7)	20 (5.5)	7 (17.9)	3.78 (1.49,9.63)	.005
Involved threats	32 (7.9)	27 (7.4)	5 (12.8)	1.85 (0.67, 5.11)	.24
Asked to self-harm	0	0	0	---	---
Any of the above threats or coercion	59 (14.6)	50 (13.7)	9 (23.1)	1.23 (0.53,2.87)	.63
Not sure	22 (5.4)	19 (5.2)	3 (7.7)	---	---
Missing	324 (80.0)	297 (81.1)	27 (69.2)	---	---
<u>CSAM was distributed</u>	295 (87.3)	269 (87.9)	26 (81.3)	0.60 (0.23,1.54)	.29
Not sure	21 (5.2)	18 (4.9)	3 (7.7)	---	---
Missing	46 (11.4)	42 (11.5)	4 (10.3)	---	---

Note. Missing data was dropped from the logistic regression analyses.

Topic 14: The diversity of cases that involve youth-produced images but do not result in an arrest

As mentioned previously when comparing youth-produced images cases ending in arrest to those that do not, many elements of youth-produced image cases can change the trajectory of investigations and outcomes. This study found that most youth-produced image cases did not end in arrest (n=366), indicating that law enforcement used different approaches when minors produce and disseminate CSAM. Our data showed that youth often create and exchange sexual images of themselves as a part of sexual experimentation. However, there are still some cases which involve aggravating elements like reckless misuse of devices or media, exchanging images with intent to harm someone else, or as a part of an inappropriate relationship with an adult. Understanding the differences between experimental and aggravated youth-produced image cases can inform law enforcement, parents, and school officials about risks associated with these behaviors and how they impact youth and families involved. It also demonstrates the important roles of families and school officials in bringing these cases to police attention and working with them toward positive outcomes.

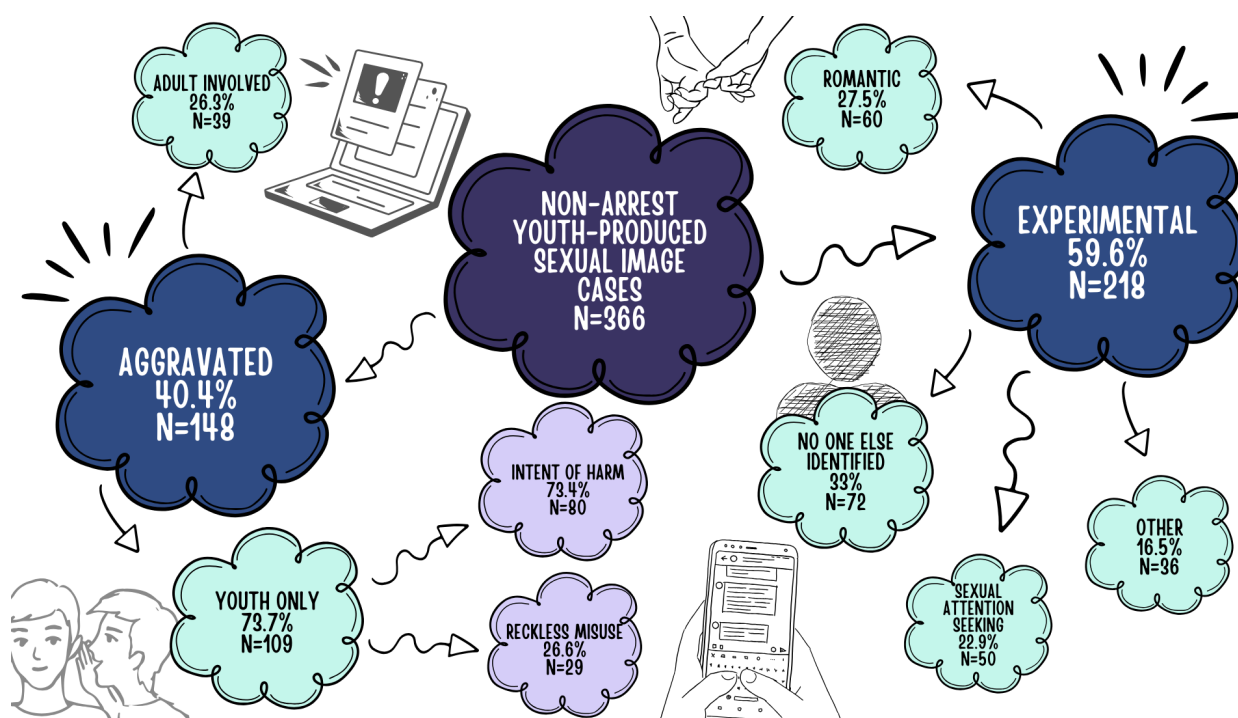
This section describes the typologies of youth-produced images in the present study that do not end in arrest and offers some narrative examples of how these cases unfold. It also covers details about investigations, characteristics of youth involved, and case outcomes. To better understand elements of youth-produced images, we categorized these cases into discrete typologies, like arrest cases mentioned earlier in this report. Infographic 15 outlines each typology and offers descriptive statistics on how frequently each type occurred in the present study.

The first distinction between types of youth-produced images was experimental behavior versus aggravating behavior. Experimental types of cases were more common, accounting for over half of all youth-produced image cases (59.6%, n=218). Within this typology, we formed three sub-types depending on the type of experimentation involved. The largest category of cases involved only one youth who created images or videos, where the other party involved was not identified. This made up about a third of the experimental cases (33%, n=72). The next most common sub-type was romantic experimentation with another youth, which accounted for almost an additional third of experimental cases (27.5%, n=60). Some youth produced image cases involved a form of sexual attention seeking from peers, making up almost a quarter of all cases (22.9%, n=50). Finally, we reserved an “Other” category for cases which did not include any aggravating factors but did not fit neatly into any of the existing sub-types. Sixteen and a half percent (n=36) of all experimental cases fell into this sub-type.

The second main youth-produced image case type involved aggravating factors, often involving riskier, more harmful behaviors. A little less than half of all youth-produced image cases contained such factors (40.4%, n=148). We broke down aggravated cases into two second-level types depending on whether an adult was involved. Just over a quarter of all aggravated cases involved an adult in the exchange of images (26.3%, n=39). Most aggravated cases involved only youth, making up 73.7% (n=109) of aggravated cases.

Further, we noticed differences in the elements of cases involving aggravated factors and youth only. The first and larger sub-type associated with youth only aggravated factors was intent of harm, which accounts for 73.4% (n=80) of all youth only aggravated types. The other sub-type is reckless misuse, which refers to image production or dissemination that is not necessarily done with an intent to harm someone else, but as a result of using technology in a careless manner. This accounted for only 26.6% (n=29) of all aggravated, youth only cases.

Infographic 15. Typology of non-arrest youth produced sexual image cases



Below, we offer more case summaries written by our trained interviewers. As mentioned earlier in this report, these summaries provide a narrative description of the core elements of cases. They can clarify the characteristics of and distinctions between different typologies described above. Of course, each case included in our study is unique, and the differences in elements involved, youth characteristics, and outcomes can vary widely. Therefore, no case summary can possibly represent all case details. Rather, they provide

illustrative examples of each sub-type discussed above to offer readers greater perspective and details about the factors associated with sub-types.

Aggravated – adult involved

First, we describe some of the aggravated cases involving an adult. Some of these cases involve a teen who has a romantic or sexual relationship with a young person who is legally considered an adult:

This case involved a missing juvenile. The mother had reported her 16-year-old daughter missing. She was eventually found with her 18-year-old boyfriend. Police found that the minor and adult male were exchanging nude photos of themselves. The mother of the minor was initially going to press charges against the adult male but then changed her mind. She didn't allow the police to seize her daughter's phone, maybe due to fear that her daughter would get into legal trouble and she didn't want anyone else to see the pictures. The mother told police that she intended to take her daughter to counseling and the case was closed.

Other cases, like the one below, involve adults engaging in behavior similar to enticement, but the youth met the offender online and lacked any long-standing romantic connection to the adult. The case below represents an example of what some call “sextortion,” the act of using a youth-produced image to threaten or coerce youth into offering more content or money:

A juvenile male and adult female were video chatting over Facebook Messenger and the adult female recorded it and threatened to post the video unless the juvenile gave her money.

Sometimes, cases involve youth engaging in sexual exchanges online with several different adults, like in the case below:

This case is about a 14-year-old girl who lived with her grandparents. The minor was being monitored closely by her grandparents and her CPS worker because she had been a victim of sexual assault in the past before moving to the area. The minor's phone was taken away and she had 20 images of herself naked. The minor was communicating with a 19-year-old male at the same time, but police could not find evidence that they were exchanging the CSAM.

Another adult was also interviewed as the minor was also communicating with him. Snapchat wasn't able to provide much information. There was no arrest in this case. The juvenile was referred to CPS for services.

Finally, the case below outlines a youth's arrangement of a sexual encounter in person with an adult male, noting that the case details did not clarify whether the adult was arrested:

An officer from this agency found two people engaged in sexual activity in a parked car. The couple recently met through Tinder/Snapchat. The female was 15 years old but had told the male that she was 19. Believing she was 19, the 19-year-old male agreed to meet with her. The male was from another state and traveled to the female. The report notes that the female was a foster child and had engaged in this behavior before, claiming to be an adult and meeting with adult men for sex. The female told the officer that she had told the male that she was 19 years old and there was some corroborating evidence that this was true. The female also produced nude photos of herself that she sent to the male. The female was returned to her foster home, and her social worker was contacted. It is unclear if the male was arrested. It notes that the police report was forwarded to the DAs office for potential prosecution for second degree sexual assault of a child and distribution of CSAM.

Aggravated – youth involved – intent to harm

Moving onto case summaries regarding youth only, these offer examples of youth only cases where there was intent to harm. This can occur when two teens in a relationship break up and argue, using nude photos to try to get revenge on the ex-partner:

Juvenile victims sports coach reported that there was an incident with the juvenile victim and her ex-boyfriend. The juvenile victim had reported that her ex-boyfriend was threatening to send photos of her in the nude after a fight after they had broken up. There was no arrest but there was an investigation into if this was true or not. There was no evidence to prove this was true, but both the suspect and the victim had gone to the justice center.

Other examples involve youth forcing other youth to engage in sexual behavior, then record/and or disseminate images taken during the assault. In this sense, the intent to harm lies in both the assault itself and the threats to distribute the photos and/or videos taken of the youth during their exploitation:

Police received a report of a juvenile being harassed into sending nude photos of themselves to the suspect. The suspect would force the juvenile victim to perform oral sex on them, or they threatened to leak the nude photos. Suspect would offer the victim money in exchange for oral sex but always lied about paying them. Police could not locate the phone in which the original nude photos were taken. Suspect allegedly has a video of the juvenile performing oral sex on them on his phone that he threatens to expose. No record of suspect being arrested.

The next example involves a youth who met someone online and shared photos of herself to them but was then threatened to share the photos if she did not continue sending more. This is another example of sextortion similar to the one in the previous group of case summaries, but this one demonstrates that youth can also act as sextortion offenders:

A 15-year-old female reported that she received a message on Snapchat from an unknown person. The subject said hi, used her name, stating that he was an old friend. The following day he sent her a picture of herself wearing only her underwear and telling her that if she didn't send him more pictures, he would send it to her family and friends. The minor victim told police she sent the picture to a male she knows in TX a couple of years prior. They met on Kik and then communicated through Instagram. She broke off contact with him because she felt guilty for sending him pictures of herself. She believed it was him sending her these messages. She told this person she was going to go to the police, and he said he was only 15 and asked her not to. The minor female's phone was placed in evidence at her request.

Sometimes, investigators uncovered networks or “rings” of youth who engage in sextortion seemingly with multiple youth to generate and collect CSAM:

This case was a sex extortion ring. An unknown suspect posed as a 12-year-old boy, requested CSAM from girls at a local school and then blackmailed them to send more images/videos or he would "expose them". Police wrote search warrants to Instagram and WhatsApp and the results indicated that the suspect was in Pakistan.

Aggravated – youth involved – reckless misuse

Finally, the examples below illuminate some of the ways reckless misuse of technology can result in youth produced images being shared or disseminated. The example below describes a youth who chose to upload a naked video of himself on YouTube, which was caught and reported by a Google reviewer:

Prepubescent male posted an over 15-minute-long video on YouTube of him taking off his clothes and talking to the camera until he was fully nude. There was a 10-minute countdown and when it finished this is when he took off his clothes and started doing poses. Google Reviewer submitted a tip to the National Center of Missing and Exploited Children. The case was suspended after the mother of the boy refused to cooperate with an interview multiple times due to scheduling conflict.

Sometimes, youth engage in risky behaviors using technology that are not proven to be made specifically to cause harm to certain youth but result in reports to school officials and police. For example:

The SRO at the middle school was made aware of a student who had recorded another student in the bathroom without their knowledge.

Reckless misuse also occurs in romantic relationships, where one party non-consensually records sexual acts and sends videos of the incident to others:

This case is about 2 minors who were in a romantic relationship. The boy is a 14-year-old African American male, and the girl is a 14-year-old white Hispanic female. The kids were having consensual sex, but the boy had propped up his phone and recorded a video of the sexual act without her knowing. Later, the boy shared the video with a couple of his friends using Snapchat. The girl found out that the boy recorded and shared the video many months later and she reported it to the School Resource Officer. When the police got involved, the video had been deleted. This case was handled internally by the school and the victim was pleased with the result. The boy was suspended for 10 days. The boy lived with his single grandmother as his parents were not involved in his life. The boy had a record for running away before, during and after this case.

Finally, the case below involves a youth producing and attempting to make profit off images and videos she took of herself. In this case, like others mentioned above, involved intervention and reporting by classmates and school officials:

This case is about a 16-year-old female high school student who had an account on sugar baby websites and sold videos and images of herself either posing nude or performing sexual acts. The minor used Venmo for the transactions. 2 schoolmates reported to the school counselor. The district attorney decided not to charge the minor. The phone was dumped and "bleached of obscenities"

Aggravated – experimental – romantic

Below are several examples of experimental types of cases, which do not involve aggravated factors. The most common type was romantic experimentation which involves youth-produced images, which involves two youth in a relationship. Often, families find out about the nude/sexual content and end up reporting it to law enforcement:

This is a sexting case involving a girl and a boy who are in a relationship, both were 10 years old and white. The girl sent the boy a picture of her bare chest by text message. The boy's mother found the picture on his phone and reported it to the police. Both children were given civil citations which require them to admit to committing the violation, sign the citation, and attend a class on sexting and its dangers. The police took both phones, deleted the image and did a factory reset on them.

These examples show that sharing nude or sexual photos becomes more common as youth gain more access to technology. Below are a few more examples of youth sending and requesting photos and then reported by a parent or school resource officer (SRO) for this behavior:

An 11-year-old girl and 12-year-old boy were in a relationship. The boy sent the girl an explicit picture, asked her for one in return but she did not send one. The girl's mother found the picture and reported it.

This was a YPI case involved two 16-year-olds, a male and female. They had been in a relationship but were no longer in one at the time of the investigation. While together, they exchanged nude photos of themselves. The mother of the female minor found sexually explicit messages between her daughter and someone else on her daughter's laptop and reported it to the police. The police talked to the female minor and she said the photos were of her ex-boyfriend. She reported that she also sent him nude photos of herself. Police talked to the male minor, and he said he no longer had the photos of his ex-girlfriend. He deleted them. Both were issued juvenile sexting citations, and the photos were deleted from the female's device. The sexting citation is like a traffic ticket. They have options like completing a day long online cyber safety course or paying a fine. They can have no other criminal history, and they have to stay out of trouble. If there is another offense the initial one could result in a misdemeanor and the new offense could be a felony.

This case is about 2 middle schoolers with intellectual disabilities who were in a relationship and one of the parents found nude images, sent and received, in one of the kids' phones. The SRO took their phones and was planning on explaining to them the consequences of the felony. The DA didn't want to pursue charges.

Aggravated – experimental – sexual attention seeking

Finally, some of the experimental cases do not exactly involve youth who are engaged in a relationship, rather, they involve youth experimenting simply to get attention from peers or people online. Sometimes, youth do this with friends because they think it's funny, without explicitly sexual intentions:

This case is about a 15-year-old Hispanic male who as a joke pulled his pants down, took a picture of his penis, and sent it to his friend. He was taken to the principal's office, his grandmother picked him up, the SRO searched his phone and didn't find evidence of other CSAM. The student was suspended for 2 days for his behavior.

This case started as a CyberTip and it's a YPI case. It involves 2 boys that are siblings and were being "knuckleheads", one boy videoed the other naked, his penis and anus were exposed, and they uploaded the video to YouTube. The kids were not identified and contacted because they seemed to have moved away, and nobody returned the phone calls that the detective made.

This case started as CyberTip from NCMEC to an ICAC task force to the PD, and it involves a male juvenile who sent a picture of his penis to another male juvenile as a joke. The male who received the CSAM wasn't identified and there's no arrest in this case. The boy used Instagram to send the CSAM.

Other times, youth engage in sexual image experimentation without intending to be funny or joking, but to get attention from someone they like:

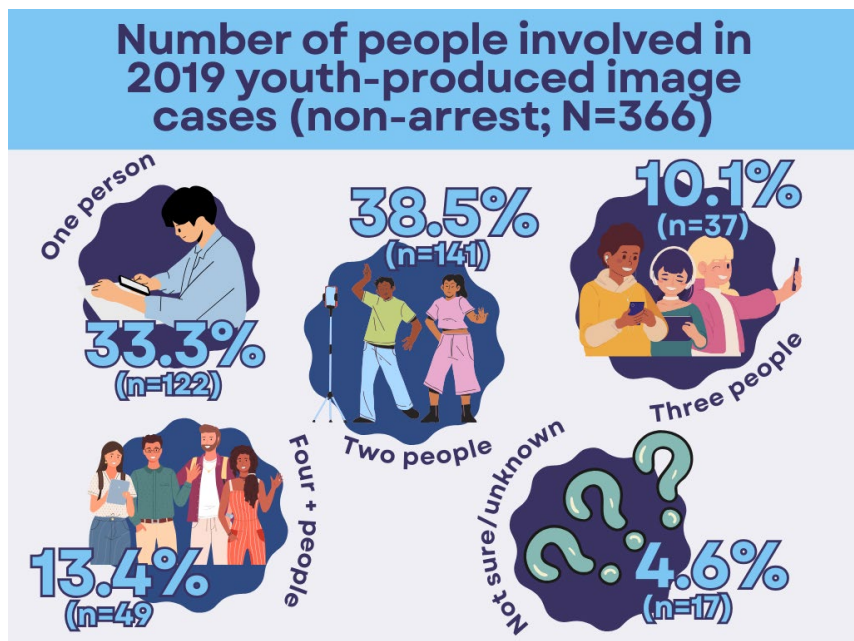
This case is about a middle school student who created a video of herself naked and sent it to other kids in school. The juvenile was a 13-year-old white female who wanted to have a relationship with a boy. During the interview the girl told the police that she had met the boy over the summer, and he asked her to create the video. The police were unable to get in touch with the boy. No charges pursued.

A 10-year-old girl in 5th grade sent a nude image of herself to a 10-year-old boy through a gaming platform while playing Fortnite. The boy told his friends about it. The image was never recovered. The boy didn't distribute the image. This is a "rumor" type of case.

Number of people involved in youth-produced image cases

Infographic 16. Number of people involved in non-arrest YPI cases

Our interview section for youth-produced image cases differed from arrest by collecting details about multiple youth involved, rather than just one primary minor and primary offender. However, most cases involved 2 people or fewer. About one third involved one person (33.3%, n=122), while over a third involved 2 people (38.5%, n=141). Three people were involved in only 10.1%



(n=37) of all youth-produced image cases. Just over a tenth (13.3%, n=49) involved four or more people. A total of 4.6% (n=17) of cases did not include any information about exactly how many people were involved in the case. Infographic 16 outlines these descriptive statistics regarding the number of people involved in cases.

When multiple people were involved in these cases, we asked investigators how many of the people involved they could offer details about. A total of 332 cases offered details about at least one, primary minor involved. We only had details about a primary minor in 175 cases, while 82 offered information about 2 people. Details about 3 people were offered in 75 cases. Finally, there were 17 cases for which we knew how many people were involved, but we did not have any further details about those people.

Characteristics of primary minor

Table 18 shows the characteristics of the person identified as the primary minor involved in youth-produced image cases. The primary minor was the one who investigators considered “most central” to the case. We required this person be a minor, even if there was an adult involved in the case. First, we outline demographic characteristics of primary victims identified in youth-produced image cases. Most of the people involved were female (70.5%), but a little under one third were male (28.6%). Regarding race and ethnicity, only 10.8% of primary victims were confirmed to be Hispanic, but this information was unknown in almost half of all cases (47%). Over half of the victims in these cases were white (54.8%), while a small minority were Black (8.7%) or American Indian or Alaska Native (0.9%). However, as with the question regarding ethnicity, information on race was unknown or unavailable in nearly 40% (35.8%) of all youth-produced image cases. The largest percentage of primary minors fall between ages 13 and 15, accounting for almost half of all youth-produced image cases (42.5%). The smallest portion of primary minors were age 9 or younger, accounting for 6% (n=20) of all youth-produced image cases.

Minors’ roles in cases

Our youth-produced image section also contained information about what type of role each minor played in the incident. Most cases, almost three-quarters (74.7%) involved a minor taking and/or sending photos of themselves. The second largest percentage of primary minors received CSAM that someone else produced (15.7%). Other roles which were less common included producing sexual material of another minor (6.9%), a minor depicted in sexual images or videos that someone else produced (9%), or distributed CSAM that someone else produced (15.7%).

Minors’ background and history

While information about the minor’s family background was missing in about a third of cases (30.7%), the highest percentage of primary minors lived with both parents (21.7%). Only 17.5% of primary minors lived with a single parent. Interestingly, 15.1% of primary minors in youth-produced image cases lived with another person who was involved in the case.

When it comes to minors’ involvement in the criminal justice system prior to the case, only a small minority had a prior juvenile record (6.3%) or received a status offense (4.2%). Only 5.7% of primary minors had evidence of mental health issues, while 5.1% had a history of problems with drugs and alcohol. These findings suggest that the youth involved in non-arrest youth-produced image cases may not have other risk factors such as mental illness, substance use issues, or criminal justice/social services involvement.

Investigations and outcomes

Most of the primary minors involved in non-arrest youth-produced image cases cooperated fully (55.1%) or partially (10.5%). A similar percentage of families were said to

have cooperated fully (61.1%) or partially (5.5%). This suggests that most of the time, minors and families work well with police who investigate these incidents.

While almost half of cases lacked information about referrals to other agencies to support youth, we found that almost a fourth of the primary minors involved (25%) were referred to a mental health agency. Only 5.7% of minors' images were submitted to the Child Victim Identification Program. However, again, information was missing regarding this aspect of the case in over half of the youth-produced image cases in this study. We see similar patterns emerge regarding other agencies informed about youth-produced image incidents; half of cases (50%) did not provide any information about agencies' involvement aside from law enforcement. However, in 21% of cases where this information was known, the investigator or police record informed us that there were no other agencies involved. Among the agencies we asked about, the most involved one was a child protective services agency. Still, the percentage of cases involving CPS was small, accounting for only 12.8% of all youth-produced image cases.

These findings suggest that law enforcement officials or records of incidents often lack information about referrals offered to minors involved in youth-produced image cases. Much remains unknown about what types of services these youth receive, but this information may help inform the best practices for treating minors involved. Therefore, few conclusions can be definitively drawn regarding outside referrals that police may offer after their involvement in these types of incidents.

Table 18. Primary person in YPI non-arrest case	
	All (n=332) n (%)
<u>Sex</u>	
Male	95 (28.6)
Female	234 (70.5)
Not sure	1 (0.3)
Missing	2 (0.6)
<u>Hispanic or Latino</u>	
No	119 (35.8)
Yes	36 (10.8)
Not sure	21 (6.3)
Missing	156 (47.0)
<u>Race</u>	
White	182 (54.8)
Black	29 (8.7)
American Indian or Alaska Native	3 (0.9)
Asian or Pacific Islander	0
Not sure	15 (4.5)
Missing	104 (31.3)
<u>Age</u>	

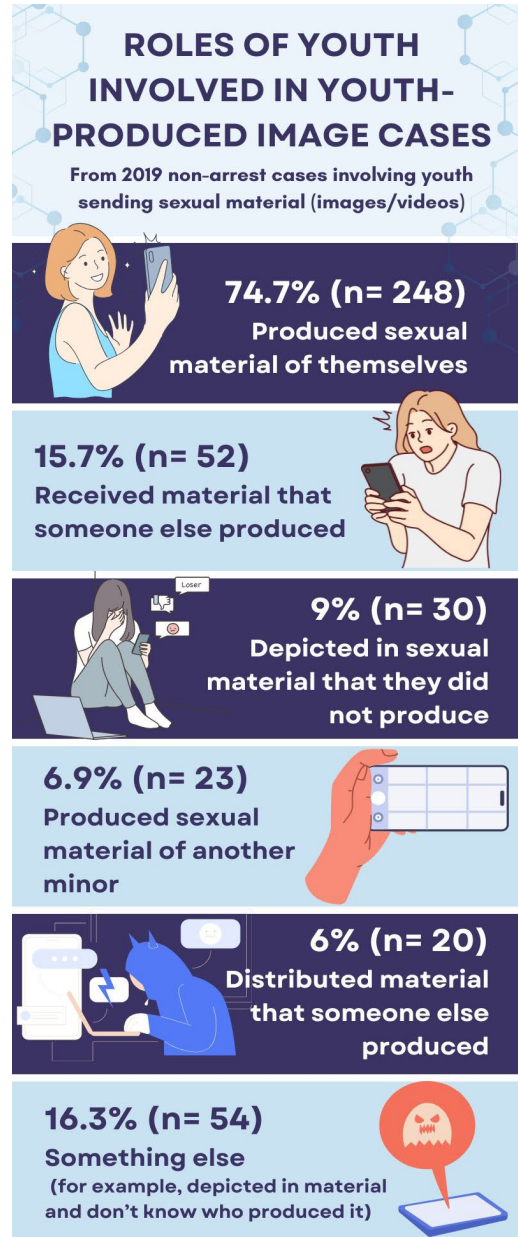
Table 18. Primary person in YPI non-arrest case	
	All (n=332) n (%)
9 or younger	20 (6.0)
10-12	45 (13.5)
13-15	141 (42.5)
16-17	64 (19.3)
18-21	6 (1.8)
Missing	56 (16.9)
<u>Role in case</u>	
Produced sexual material of self	248 (74.7)
Produced sexual material of (another) minor	23 (6.9)
Depicted in sexual material (didn't produce it)	30 (9.0)
Distributed CSAM someone else produced	20 (6.0)
Received the CSAM someone else produced	52 (15.7)
Something else	54 (16.3)
<u>Who lived with</u>	
Both parents	72 (21.7)
Parent and stepparents	17 (5.1)
Single parent only	58 (17.5)
Foster parent or legal guardian	16 (4.8)
Someone else involved in case	50 (15.1)
Alone or on the street	1 (0.3)
Not sure	48 (14.5)
Missing	102 (30.7)
<u>Minor's history</u>	
Arrests or juvenile record	21 (6.3)
Status offenses (e.g., runaway, truancy)	14 (4.2)
Problems with drugs or alcohol	17 (5.1)
Diagnosed mental illness	6 (1.8)
Evidence of other mental health issues	19 (5.7)
Gang activity	2 (0.6)
Social service involvement	17 (5.1)
Child abuse investigations	6 (1.8)
History of suicide attempts	3 (0.9)
History of being a victim of bullying	9 (2.7)
Not sure	30 (9.0)
<u>How much minor cooperated with investigation</u>	
Not at all	11 (3.3)
Very little	12 (3.6)
Partially	35 (10.5)

Table 18. Primary person in YPI non-arrest case	
	All (n=332) n (%)
Fully	183 (55.1)
Not sure	14 (4.2)
Missing	77 (23.2)
<u>How much the minors' family cooperated with investigation</u>	
Fully	203 (61.1)
Partially	18 (5.4)
Very little	7 (2.1)
Not at all	2 (0.6)
Family not involved	9 (2.7)
Not sure	17 (5.1)
Missing	76 (22.9)
<u>Minor was referred to mental health agency</u>	
No	48 (14.5)
Yes	83 (25.0)
Not sure	29 (8.7)
Missing	172 (51.8)
<u>Images submitted to Child Victim Identification Program</u>	
No	127 (34.7)
Yes	21 (5.7)
Not sure	15 (4.1)
Missing	203 (55.5)
<u>Who was interviewed about incident</u>	
Primary minor	282 (77.1)
Parent of minor (Person 1)	252 (68.9)
Other minor that lived in household	5 (1.4)
Teacher or other school personnel	48 (13.1)
Other minors	60 (16.4)
Someone else	54 (14.7)
No one interviewed	10 (2.7)
Not sure	5 (1.4)
Missing	13 (3.5)
<u>Agencies notified</u>	
Victim/witness advocate	19 (5.2)
Children's Advocacy Center	26 (7.1)
Another multi-disciplinary team	13 (3.5)
Child protective services agency	47 (12.8)
Some other agency	29 (7.9)
No agencies notified	77 (21.0)
Not sure	11 (3.0)
Missing	183 (50.0)

Table 18. Primary person in YPI non-arrest case	
	All (n=332) n (%)
<u>School consequences for minors involved in incident</u>	
No	99 (27.1)
Yes	36 (9.8)
Not sure	33 (9.0)
Missing	198 (54.1)
<u>Any consideration of legal charges being filed at any point during investigation</u>	
No	79 (21.6)
Yes	105 (28.7)
Not sure	18 (4.9)
Missing	164 (46.2)



Infographic 17. Characteristics of youth involved in youth-produced sexual image cases



Infographic 18. Roles of youth involved in youth-produced sexual image cases

Comparing case types

Table 19 compares different factors of youth-produced image cases across the main two case types discussed previously in this section: Experimental (n=218) and aggravated (n=148). Starting with numbers of images and videos, about 20% of all youth-produced image cases involved just one image, and an additional 15.6% involved 2-5 images. Less than 5% involved 11 or more, indicating that fewer images are more common in these cases. Similarly, among cases involving videos, about a fourth (24.3%) involved only one, while only 2.7% involved or more. However, the percentages of unknown or missing data were high among these questions; over half of responses regarding both the number of images and number of videos were unclear or missing.

Most cases involved images or videos depicting only one minor (72.7%). Less than one third of (27.3%) depicted more than one minor. About three quarters of all cases (74.3%) did not show sexual contact between two or more minors. Over half of all cases (62.6%) involved nudity or semi-nudity.

The next section of the table includes factors which only occurred in aggravated cases, which is why they were not compared with experimental cases. The most common aggravated factor involved was the intent to harm, which existed in 32.4% of aggravated cases. Threats were used in aggravated cases as well, occurring in 18.2% of aggravated cases. The least common aggravating factors were having images or videos taken while a minor was under the influence of drugs or alcohol and creating the material specifically to create conflict or get revenge, which each only occurred in 2.7% of aggravated cases. Images were distributed in most cases overall (73.5%), more commonly occurring in experimental cases than aggravated ones (although this difference was not statistically significant).

When drawing comparisons between the types of cases, we found hardly any statistically significant differences. The only ones were related to missing data regarding blackmail, coercion, and threats involved in cases. Experimental cases had significantly more missing data about these potentially aggravating factors (52.3%) compared to cases that fell into the aggravated type (29.7%). This indicates that perhaps some aggravating factors exist in experimental cases but went unreported or were not central to the case dynamics. Otherwise, the types of cases do not differ vastly in characteristics, indicating that they share many of the same elements aside from aggravating features.

Table 19. Characteristics of youth-produced image cases				
	All (n=366)	Experimental (n=218)	Aggravated (n=148)	P value
Number of still images				
One	73 (19.9)	45 (20.6)	28 (18.9)	.43
2 – 5	57 (15.6)	35 (16.1)	22 (14.9)	
6 – 10	16 (4.4)	12 (5.5)	4 (2.7)	

Table 19. Characteristics of youth-produced image cases				
	All (n=366)	Experimental (n=218)	Aggravated (n=148)	P value
11 or more	17 (4.6)	8 (3.7)	9 (6.1)	
Not sure	58 (15.9)	38 (17.4)	20 (13.5)	
Missing	145 (39.6)	80 (36.7)	65 (43.9)	
<u>Number of videos</u>				
One	89 (24.3)	43 (19.7)	46 (31.1)	.05
2 – 5	27 (7.4)	17 (7.8)	10 (6.8)	
6 or more	10 (2.7)	4 (1.8)	6 (4.1)	
Not sure	35 (9.6)	20 (9.2)	15 (10.1)	
Missing	205 (56.0)	134 (61.5)	71 (48.0)	
<u>Number of minors featured</u>				
One	266 (72.7)	154 (70.6)	112 (75.7)	.29
More than one	100 (27.3)	64 (29.4)	36 (24.3)	
<u>Images/videos show sexual contact between 2+ minors</u>				
No	272 (74.3)	164 (75.2)	108 (73.0)	.63
Yes	36 (9.8)	18 (8.3)	18 (12.2)	
Not sure	12 (3.3)	8 (3.7)	4 (2.7)	
Missing	46 (12.6)	28 (12.8)	18 (12.2)	
<u>Images/videos featured nudity or semi-nudity</u>				
No	42 (11.5)	25 (11.5)	17 (11.5)	.14
Yes	229 (62.6)	127 (58.3)	102 (68.9)	
Not sure	32 (8.7)	22 (10.1)	10 (6.8)	
Missing	63 (17.2)	44 (20.2)	19 (12.8)	
<u>Images/videos involve suggestive poses of minors</u>				
No	141 (38.5)	77 (35.3)	64 (43.2)	.23
Yes	55 (15.0)	30 (13.8)	25 (16.9)	
Not sure	46 (12.6)	30 (13.8)	16 (10.8)	
Missing	124 (33.9)	81 (37.2)	43 (29.1)	
<u>Evidence sexual material was taken with...</u>				
Hidden camera	10 (2.7)	0	10 (6.8)	---
Tricked	9 (2.5)	0	9 (6.1)	---
By surprise	16 (4.4)	0	16 (10.8)	---
Other way that suggested lack of knowledge or compliance	22 (6.0)	0	22 (14.9)	---
Not sure	7 (1.9)	3 (1.4)	4 (2.7)	.36
Missing	134 (36.6)	90 (41.3)	44 (29.7)	.02
<u>Were minors depicted...</u>				
Blackmailed	26 (7.1)	0	26 (17.6)	---
Coerced or manipulated	20 (5.5)	0	20 (13.5)	---
Threatened	27 (7.4)	0	27 (18.2)	---

Table 19. Characteristics of youth-produced image cases				
	All (n=366)	Experimental (n=218)	Aggravated (n=148)	P value
Not sure	19 (5.2)	13 (6.0)	6 (4.1)	.42
Missing	158 (43.2)	114 (52.3)	44 (29.7)	<.001
<u>Minor under influence of drugs or alcohol when images were taken</u>				
No	89 (24.3)	55 (25.2)	34 (23.0)	.09
Yes	4 (1.1)	0	4 (2.7)	
Not sure	60 (16.4)	38 (17.4)	22 (14.9)	
Missing	213 (58.2)	125 (57.3)	88 (59.5)	
<u>Intent to harm</u>				
No	110 (30.1)	80 (36.7)	30 (20.3)	---
Yes	48 (13.1)	0	48 (32.4)	
Not sure	24 (6.6)	15 (6.9)	9 (6.1)	
Missing	184 (50.3)	123 (56.4)	61 (41.2)	
<u>Reason for creating material</u>				
Romance/existing relationship	92 (25.1)	60 (27.5)	32 (21.6)	.20
Bullying/harassment	5 (1.4)	0	5 (3.4)	---
Prank or joke	11 (3.0)	7 (3.2)	4 (2.7)	.78
Blackmail, coercion, threats	15 (4.1)	0	15 (10.1)	---
Conflict or revenge	4 (1.1)	0	4 (2.7)	---
Trying to start relationship	21 (5.7)	13 (6.0)	8 (5.4)	.82
Get noticed by someone	33 (9.0)	23 (10.5)	10 (6.8)	.21
Excitement	32 (8.7)	20 (9.2)	12 (8.1)	.72
Something else	54 (14.7)	27 (12.4)	27 (18.2)	.12
Not sure	32 (8.7)	20 (9.2)	12 (8.1)	.72
Missing	123 (33.6)	81 (37.2)	42 (28.4)	.08
<u>Images/videos distributed</u>				
No	37 (10.1)	22 (10.1)	15 (10.1)	.37
Yes	269 (73.5)	166 (76.1)	103 (69.6)	
Not sure	18 (4.9)	8 (3.7)	10 (6.8)	
Missing	42 (11.5)	22 (10.1)	20 (13.5)	
<u>Consideration of legal charges</u>				
No	79 (21.6)	54 (24.8)	25 (16.9)	.17
Yes	105 (28.7)	53 (24.3)	52 (35.1)	
Not sure	18 (4.9)	11 (5.1)	7 (4.7)	
Missing	164 (44.8)	100 (45.9)	64 (43.2)	
<u>School consequences for minors involved</u>				
No	99 (27.1)	57 (26.1)	42 (28.4)	.58
Yes	36 (9.8)	22 (10.1)	14 (9.5)	
Not sure	33 (9.0)	24 (11.0)	9 (6.1)	
Missing	198 (54.1)	115 (52.7)	83 (56.1)	

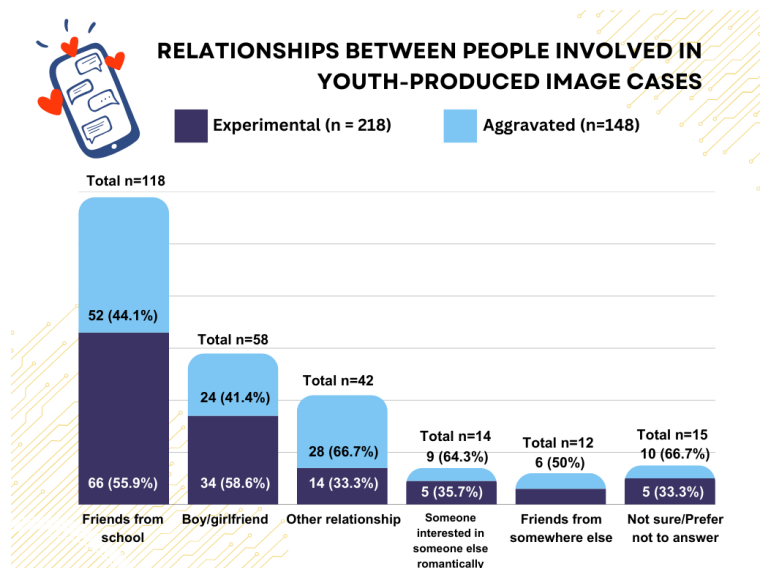
Note. Bolded constructs were used to define aggravated cases and thus no statistical comparisons were conducted.

Table 20 compares characteristics of people involved in youth-produced image cases across aggravated and experimental types. Across both case types, over half only involved one person (33.3%) or two people (38.5%). Experimental cases were significantly more likely to involve 1 person (40.4% compared to 23% of aggravated cases) while aggravated cases were more likely to involve two people (49.3% compared to 31.2%). When looking at the total number of people involved, aggravated cases were generally more likely to involve multiple people. Almost three quarters of aggravated cases (73.7%) involved multiple people compared to just over half (54.1%) of experimental cases.

The only significant differences which emerged regarding the type of relationship were people who met online and the “other relationship” category. A larger portion of aggravated cases involved parties who met online (12.8%) versus experimental (4.2%). About a quarter of all aggravated cases (25.7%) fell into our “other relationship” category compared to only 11.9% of experimental cases. These findings suggest that minors may face greater risk of aggravated factors involving people met online. Further, perhaps the type of relationship in experimental cases is easier for law enforcement to determine compared to aggravated cases, which might include people with less clearly evident connections to each other.

Table 20. People involved in YPI cases				
	All (n=366)	Experimental (n=218)	Aggravated (n=148)	P value
<u>Number of people involved</u>				
1 person	122 (33.3)	88 (40.4)	34 (23.0)	.004
2 people	141 (38.5)	68 (31.2)	73 (49.3)	
3 people	37 (10.1)	22 (10.1)	15 (10.1)	
4 or more people	49 (13.4)	28 (12.8)	21 (14.2)	
Not sure	11 (3.0)	7 (3.2)	4 (2.7)	
Missing	6 (1.6)	5 (2.3)	1 (0.7)	
<u>Relationship with people involved</u>				
Friends from school	118 (52.0)	66 (55.9)	52 (47.7)	.21
Friends from somewhere else	12 (5.3)	6 (5.1)	6 (5.5)	
Someone who wanted sex w/ someone else	1 (0.4)	0	1 (0.9)	---
Someone interested in someone else romantically	14 (6.2)	9 (7.6)	5 (4.6)	.34
Neighbors	1 (0.4)	1 (0.9)	0	---
Someone met online	19 (8.4)	5 (4.2)	14 (12.8)	.02
Boy/girlfriend	58 (25.5)	34 (28.8)	24 (22.0)	.24
Other relationship	42 (18.5)	14 (11.9)	28 (25.7)	.007
Not sure	8 (3.5)	5 (4.2)	3 (2.7)	.54
Missing	7 (3.1)	5 (4.2)	2 (1.8)	.30
<u>Multiple people involved in case</u>	227 (62.0)	118 (54.1)	109 (73.7)	<.001

Infographic 19. Relationships between people involved in YPI cases



Reasons why there was no arrest and whether there was any consideration of legal charges

As seen in **Table 19**, police considered legal charges in 28.7% (n=105) of these cases (in 4.9% of cases the investigator was unsure and in 44.8% this information about whether legal charges were considered was not available). Open-ended responses as to why there was ultimately no arrest were grouped into the categories shown in **Infographic 20**.



Infographic 20. Reasons for no arrest in YPI cases

CONCLUSIONS AND RECOMMENDATIONS

Technology-facilitated crimes against children are some of the most difficult crimes that law enforcement agencies must investigate. Much of the criminal activity occurs online, requiring the involvement of multiple jurisdictions. The technology that is used to facilitate the crimes and efforts that perpetrators use to hide the activity is complex and changes frequently, requiring constant updates to investigation strategies. These crimes also involve some of society's most vulnerable victims. Both the number and breadth of these crimes is expanding: Prior NJOV studies found that arrests for these crimes tripled from 2000 to 2009¹. The current NJOV study found that cases of technology-facilitated abuse crimes have now expanded so much that many law enforcement agencies were not able to provide the research team with counts that were accurate enough to create reliable national estimates.

Despite this challenge, the data collected through the Fourth National Juvenile Online Victimization (NJOV-4) study provided rich case-level information on 1,155 investigations of technology-facilitated sex crimes against children in the U.S. The arrest cases (n=789) varied extensively in the type of crime involved: 30.9% of cases involved the production of child sexual abuse material (CSAM); 56.5% involved the possession of CSAM; and 27% involved online enticement or grooming of a child or youth for sex. Twenty-four percent of cases involved undercover work by a law enforcement agency, highlighting the active undercover efforts that are used to identify suspects seeking to use online communication to commit child-victim crimes.

Victims of these crimes varied demographically: most victims were young adolescents (13-15, 47.5%), but substantial percentages involved older adolescents (16-17, 25%), pre-adolescents (10-12, 12.7%) and children 9 or younger (14.9%). Victims were mostly girls (85.8%), and mostly white (64.2%), although it is important to keep in mind that these were cases that came to police attention and included an arrest: crimes against other demographic groups could be under-identified by police. Notably, offenders were most typically known to victims: 39.2% were acquaintances of the youth and 22.1% of cases involved a family-member offender. In only 24.1% of cases the offender was a stranger to the youth or someone they only knew online.

The study collected extensive information on how cases were reported to police, on investigation procedures in these cases, and on outcomes. Most typically, it was a family member of the minor who reported the crime to police (22.3%). Almost half the cases ended up involving multiple law enforcement agencies (46.1%). ICAC Task Forces were involved in 31.9% of the cases in our sample, highlighting their active work on these crimes.

Case characteristics, investigation procedures, and case outcomes all varied substantially across different types of technology facilitated crimes in ways that are detailed in the different sections of this report. These differences and other study results have important implications for how law enforcement agencies might approach these cases and improve investigative procedures. Below we summarize **four key recommendations** for law enforcement based on from study findings:

Recommendation 1: Improvements are needed to law enforcement record-keeping protocols in ways that can assist the identification of technology-facilitated crimes against children.

The inability of the study to calculate reliable rates of these serious crimes is an important finding of the study, highlighting the need to improve law enforcement record keeping and the documentation of technology-facilitated crimes against children. Agencies had a difficult time searching their information systems for these crimes, and many had to use memory or search files by hand. This was further complicated by the fact that cases often involved multiple agencies and jurisdictions.

Improving the justice response to these crimes requires good information on what law enforcement is encountering. An inability to identify these cases efficiently impedes the ability to study changes in case characteristics over time, identify which investigation strategies are used with what success, and examine how changes in technology positively or negatively impacts investigations. Investigation approaches may be skewed or biased if they rely on random or highly salient case studies versus reliable summary statistics data. Without reliable, accurate, and generalizable data on these types of crimes, researchers cannot offer prevalence estimates which could help inform law enforcement about the extent to which their current approaches are working to reduce technology-facilitated abuse.

Many police information systems did not have options for cross-referencing internet-based crime and child victim crimes. Guidance and recommendations on enhancing these systems and programs such as the National Incidence Based Reporting Systems (NIBRS) could improve knowledge about these crimes. Systems could add fields that would allow agencies to more efficiently identify cases in their system.

Additionally, training programs should emphasize the need for more complete data entry. There was substantial information missing from case data files. For example, documentation of commercial exchange in these cases was scattered. There was also substantial missing data in undercover cases: A full third of undercover cases had missing data on whether the suspect was a registered sex offender. Complete documentation of these kinds of details aids the work by prosecutors and agencies seeking further protective efforts for children.

Recommendation 2: Research findings highlight the variety of technology-facilitated crimes against children that are coming to police attention. Law enforcement agencies need to be prepared to recognize and respond to this variability.

One of the primary study findings is the variety of cases that are included under the umbrella of technology-facilitated crimes against children. Law enforcement training and investigation protocols and procedures need to account for this variety. Below we highlight implications for investigation procedures based on case data collected by the study.

Perpetrator-victim relationships

A key finding from cases with identified victims was that the crimes most typically involve a suspect that is known by the victim. This was particularly the case for CSAM production crimes ending in arrest: 47.6% of suspects in these cases were acquaintances of the youth and an additional 34% were family members. When production was combined with enticement there was a roughly even split in perpetrator-victim relationship with the majority of cases involving either an acquaintance (38.8%) or a family member (10.5%) with 43.3% involving someone the minor met online. For enticement only cases, a slightly higher percentage were individuals met online (42.2%) compared to combination of acquaintance (27.5%) and family offenders (12.7%).

There are high profile cases in the media of online groomers enticing youth through social media or games for purposes of sextortion or grooming. While these cases existed among those investigated by participating agencies, more typically the cases involved peers, neighbors, community members and family members. This is important information for crime prevention efforts. It means that law enforcement who work these cases need to prepare for the complexity of a technology-facilitated crime that has similar dynamics to an in-person child sexual abuse case. There are complex emotional and traumatic responses that victims experience when abused by known offenders that can complicate an investigation if not handled with sensitivity and expertise in child development. Interviews by trained child forensic interviewers are recommended and the involvement of a multi-disciplinary team (MDT), like a Children's Advocacy Center (CAC) can help ensure that a trauma-informed approach is used.

CSAM cases

Cases involving CSAM comprised the largest percentage of cases of technology-facilitated abuse that law enforcement agencies in our sample were investigating: a third of cases involved the production of child sexual abuse material (CSAM) and over half involved the

possession of CSAM. There were significant differences between cases of CSAM production and possession. Production cases were more likely to involve adolescents versus younger children compared to possession cases, and more likely to depict girls. CSAM producers were more likely to spend time with children or have direct access to minors than CSAM possessors. Most CSAM producers took pictures openly – but some used covert methods. There was a wide variety of types of CSAM in terms of explicitness.

The study also collected data on efforts that law enforcement made to remove CSAM and stop further dissemination. Such efforts were conducted by police in 64% of CSAM production cases. Images were submitted to the National Center for Missing and Exploited Children (NCMEC) in 44.5% of CSAM cases. However, these efforts were much more common in cases being led by an ICAC Task Force or affiliate agency.

Law enforcement training should prompt investigators to always consider possibility of CSAM in cases of child sexual abuse. The presence of images may mean additional considerations are needed, such as helping the family access resources to remove images. Additionally, images can provide concrete evidence that a crime has been committed and corroborate victim testimony. The presence of CSAM may aid in investigations and prosecutions that otherwise are relying fully on victim statements.

Additionally, when CSAM is identified, it is important that investigators take measures to stop future dissemination of the materials. Although we found evidence that this was happening, it was rarer in cases being led by county or municipal agencies.

Cases involving commercial elements

The study found an overlap between commercial sexual exploitation (CSE) of youth and technology-facilitated crimes against children. Internet technology has facilitated access to CSAM by offenders, but also commercial exchange. The NJOV study found that only about 5% of cases documented commercial exchange. There was, however, extensive missing data in case files on this element and it is possible that many more cases involved commercial exchange than was captured in the data that we collected.

The lack of information on this element is concerning. The low percentages of confirmed commercial elements coupled with the high percentages of missing data show that much remains unknown about the relationship between CSE and technology. Understanding this relationship could offer benefits to investigations, such as amplified charges for suspects or more CSE-specific service referrals for minors involved.

It is recommended that training protocols for technology-facilitated crimes against children include collecting information on possible commercial exchanges and improved documentation.

Cases involving youth-produced images

Finally, the study highlighted the frequency that cases involving youth-produced images (YPI) came to police attention. Arrest in these cases was rare: Only 13.7% of YPI cases involved an arrest. YPI cases where there was an arrest were more likely to have commercial elements and involve deceit or coercion.

However, the majority of YPI cases that came to police attention did not result in any arrest and these varied in dynamics: 59.6% fell into a category we defined as “experimental” and included YPI occurring in romantic relationships or as a part of sexual attention seeking; 40.4% were cases we defined as “aggravated” and included either an adult or intent of harm or reckless misuse of the image by another youth.

As schools, families, and communities struggle to identify the best options for handling cases of YPI, it is likely there will continue to be regular referrals to law enforcement agencies. It is not clear that agencies have identified a consistent protocol for responding. This identifies a need for best practices guidelines informed by research and child development experts. Our typology distinguishing experimental and aggravated cases could help inform protocols by identifying case elements in a systematic way with implications for impactful and sensitive response.

Recommendation 3: Undercover investigations continue to be an important and effective approach to identifying and prosecuting offenders sexually interested in minors.

Twenty-seven percent of the technology-facilitated child abuse cases included in the study were undercover operations designed to proactively identify suspects seeking to groom and entice minors online or exchange CSAM with other offenders. Law enforcement investigators were posing online as minors in most of these cases (63.8%), or monitoring peer-to-peer networks (27.1%). The operations were mostly occurring on social networking sites, but also on Craigslist, bulletin boards and chatrooms.

The undercover cases included in the sample are ones that successfully resulted in an arrest of an offender, but the fact that they made up over one-quarter of all the cases of technology-facilitated sex crimes, highlights the prominent role that they are playing in law enforcement work in this area. The suspect asked for pictures in over half the cases, and a face-to-face meeting was arranged in almost three-quarters of the cases.

The suspects arrested through undercover operations tended to be older and were more likely to be married than suspects arrested in cases with identified victims. However, 28.7% of suspects in undercover operations had direct access to minors, in 31.1%, there

was evidence of ongoing sexual interest in children, and in 7.4% of cases there was a prior arrest for a sexual offense committed against a minor. Undercover operations were just as likely to result in guilty pleas and incarceration and cases with identified victims.

The extensive work by law enforcement in undercover operations in these cases appears to be successful and an important tool for law enforcement who are working to reduce technology-facilitated crimes against children.

Recommendation 4: Multi-jurisdictional and multi-disciplinary collaboration and expertise are critical to technology-facilitated abuse cases. ICAC taskforce expertise is highly valuable for these cases and improves criminal justice and victim outcomes.

Technology-facilitated sex crimes against children are complex. Findings from the study highlighted the frequency of collaborations among jurisdictions, task forces, multi-disciplinary teams (MDTs), and CACs on these cases. Almost half of the cases (46.1%) involved multiple law enforcement agencies. ICAC Task Forces assisted in about a third of cases (31.9%) and over half of CSAM possession cases (50.3%). School resource officers were involved in about 10% of cases and 20% of cases involving an identified victim. Child Advocacy Centers were involved in 48.5% of cases and directly involved in the investigation in 16.5% of cases.

Findings support the value of incorporating specialized expertise and multi-disciplinary investigations into these crimes. When ICAC Task Forces were involved, the case was 3.7 times more likely to result in a guilty plea, and 4 times more likely to be sentenced to incarceration. Offenders were 5.6 times more likely to be required to register as a sex offender. Victims were 2.9 times more likely to be provided with supportive resources like mental health services. When CACs were involved, victims were more likely to be given resources, referred to an agency and have ongoing contact with law enforcement as the case progressed if an MDT or CAC was involved.

Findings suggest that ICAC Task Forces are a critical resource for technology-facilitated crimes against children and that they should be involved in as many cases of technology-facilitated abuse as possible. Findings also highlight the value of MDTs and CACs for these cases and suggest that these teams should be included as often as possible and as early as possible in the investigation. Additionally, findings from the study highlight the need for collaborative protocols, and increased law enforcement training on how to conduct multi-jurisdictional and multi-disciplinary investigations.

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