#### **MARCH 2025**

# Deepfake Nudes & Young People

Navigating a new frontier in technology-facilitated nonconsensual sexual abuse and exploitation

Research conducted by Thorn in partnership with Burson Insights, Data & Intelligence



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# **Acknowledgments**

Understanding the complex intersection of technology and child sexual abuse empowers us to safeguard kids from the ever-evolving threats they face online. Without direct insights from the young people encountering these issues every day, we risk falling behind in developing valuable resources for them to navigate the digital age safely.

#### **Thank You**

We are grateful to the participants who took the time to complete the survey and especially to those who provided detailed descriptions of their lived experiences. Without their gracious participation, we could not have developed the key insights shared in this report about deepfake nudes.

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**Research team** Amanda Goharian, Thorn

Melissa Stroebel, Thorn

Sam Fitz, Burson Insights, Data & Intelligence (merged from BSG)

Sarah Gudger, Burson Insights, Data & Intelligence (merged from BSG)

Arielle Jean-Baptiste, Burson Insights, Data & Intelligence (merged from BSG)

Patrick Toomey, New River Strategies (formerly with BSG)

**Design and publication** Yena Lee, Thorn

Cassie Coccaro, Thorn

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# Introduction

Since 2019. Thorn has focused on amplifying youth voices to better understand their digital lives, with particular attention to how they encounter and navigate technologyfacilitated forms of sexual abuse and

### **CSAM**

Any visual depiction of sexually explicit conduct involving a person less than 18 years old

exploitation. Previous youth-centered research has explored topics such as child sexual abuse material (CSAM)<sup>1</sup>—including that which is self-generated ("SG-CSAM")—nonconsensual resharing, online grooming, and the barriers young people face in disclosing or reporting negative experiences.

Thorn's *Emerging Threats to Young People* research series aims to examine emergent online risks to better understand how current technologies create and/or exacerbate child safety vulnerabilities and identify areas where solutions are needed. This report, the first in the series, sheds light specifically on young people's perceptions of and experiences with deepfake nudes. Future reports in this initiative will address other pressing issues, including sextortion and online solicitations.

Drawing on responses from a survey of 1,200 young people aged 13-20, this report explores their awareness of deepfake nudes, lived experiences with them, and their involvement in creating such content. Three key findings emerged from this research:

- 1. Young people overwhelmingly recognize deepfake nudes as a form of technology-facilitated abuse that harms the person depicted. Eighty-four percent of those surveyed believe that deepfake nudes cause harm, attributing this largely to the emotional and psychological impacts on victims, the potential for reputational damage, and the increasingly photorealistic quality of the imagery, which leads viewers to perceive—and consume—it as authentic.
- 2. Deepfake nudes already represent real experiences that young people have to navigate. Not only are many young people familiar with the concept, but a significant number report personal connections to this harm-either knowing someone targeted or experiencing it themselves. Forty-one percent of young people surveyed indicated they had heard the term "deepfake nudes," including 1 in 3 (31%) teens. Additionally, among teens, 1 in 10 (10%) reported personally knowing someone who had deepfake nude imagery created of them, and 1 in 17 (6%) disclosed having been a direct victim of this form of abuse.
- 3. Among the limited sample of young people who admit to creating deepfake nudes of others, they describe easy access to deepfake technologies. Creators described access to the technologies through their devices' app stores and accessibility via general search engines and social media.

<sup>1</sup> CSAM is defined as "any visual depiction of sexually explicit conduct involving a person less than 18 years old." U.S. Department of Homeland Security. (2024). Key definitions. Know2Protect. https://www.dhs.gov/know2protect/key-definitions. Under United States federal law CSAM is referred to as "child pornography." See 18 U.S.C. § 2256(8); 18 U.S.C. § 1466A.

# **Methods & Research Design**

Research into the online experiences of young people—and how those experiences intersect with the potential for harmful sexual interactions presents unique and ever-evolving research challenges. Some of these challenges and their corresponding mitigation strategies are outlined below.

## **Challenges**

CHALLENGE: The topics covered in this research represent complex and evolving online risk areas for young people.

**Mitigation:** This research provides preliminary insights into emerging threat areas impacting young people, with particular attention to how technology misuse facilitates and exacerbates child sexual exploitation and abuse. Dedicated, in-depth survey instruments should be developed for each topic individually to achieve a more comprehensive understanding. Therefore, the findings presented in this report are intended as foundational perspectives, highlighting areas for further investigation and encouraging deeper exploration into young people's experiences.

CHALLENGE: Nuance exists across demographics and among those with different lived experiences.

**Mitigation:** This research aimed to identify trends among young people overall and within some significant subgroups—such as age and gender groups. A secondary objective was to understand

how participant experiences may manifest differently across other demographics. To this end, survey recruitment incorporated enhanced quotas of some demographic subgroups to ensure base sizes that were large enough for analysis.<sup>2</sup> Nevertheless, given sample size limitations, some data points within subgroups are most appropriately viewed as starting points for additional research.

**CHALLENGE:** Entrenched stigma and sensitivity surrounding these topics may lead to an undercounting of their scale and frequency.

**Mitigation:** Asking individuals—especially young people—to open up about delicate subjects like taking and sharing nude photos of themselves or creating nude photos of others likely activates selfreport bias. Reluctance to self-report may be especially pronounced among participants who have had negative sexual experiences and/or have been victimized as a result of child sexual abuse.3 It's critical, then, to design related survey instruments that are safe and supportive. The sequence of questions was important in our research instrument. Each sensitive question was prefaced with a note acknowledging the potential difficulty of discussing the topic, reiterating the anonymity of the responses, and reinforcing that the participant was never to blame for what may have happened to them. Some questions were written in a manner that allowed individuals to answer generally about "people they know" instead of asking point-blank about their own online experiences. Resources for additional information and referrals for real-time support were highlighted alongside every question. Expert clinicians also reviewed the final survey instrument to evaluate its flow and substance for participant safety.

<sup>2</sup> See more about this in the Research Design section.

<sup>3</sup> Hébert, M., Tourigny, M., Cyr, M., McDuff, P., & Joly, J. (2009). Prevalence of childhood sexual abuse and timing of disclosure in a representative sample of adults from Quebec. The Canadian Journal of Psychiatry, 54(9), 631-636. https://doi.org/10.1177/070674370905400908

**CHALLENGE:** Comparing research samples on technology-facilitated sexual harms is inherently difficult due to significant variability in sample composition, definitions of harm, data collection timeframes, methodologies, and cultural contexts.

Mitigation: Achieving comparability across studies on technologyfacilitated sexual abuse and exploitation requires transparency in methodologies and research instruments. Differences in findings can arise from variations in study design and sample characteristics, which means that distinct studies are not always directly comparable. This report includes a detailed research design section to ensure clarity and meaningful comparison. For any additional questions related to the methods used in this research, please reach out to research@thorn.org.

### Research Design

The resulting research focused on young people aged 13-20 in the United States.4 Research methods were designed to identify respondents' perceptions and experiences related to three specific online risk vectors: deepfake nude imagery, online solicitations, and sextortion.

#### PHASE 1 - EXPLORATORY INTERVIEWS WITH SUBJECT **MATTER EXPERTS**

The first phase of this research was dedicated to exploratory information gathering to help orient and frame the subsequent focus of the more in-depth survey instrument.

In total, 16 subject matter experts from across the child safety ecosystem were identified and consulted during this phase. Information consultations included a diverse range of backgrounds and expertise, including academics, civil society researchers, industry trust and safety professionals, law enforcement, and victim and survivor advocacy professionals. The insights generated during Phase 1 helped to scope and focus the subsequent development of the survey instrument in Phase 2.

#### PHASE 2 - QUANTITATIVE ONLINE SURVEY

In total, 1,200 young people from across the United States participated in an 18-minute online survey from September 27, 2024, to October 7, 2024. To ensure a representative sample nationwide, data was weighted by age, gender, race, and geography based on U.S. Census data. This research also incorporated an increased recruitment of participants who identified as persons of color (POC).

Specifically, the survey's sample makeup included:

| Total surveyed (n = | : 1200)                                   |     |
|---------------------|---|-----|
|                     | Ages 13-17                                | 64% |
|                     | 13  | 12% |
|                     | 14  | 12% |
|                     | 15  | 12% |
| A                   | 16  | 13% |
| Age                 | 17  | 15% |
|                     | Ages 18-20                                | 36% |
|                     | 18  | 12% |
|                     | 19  | 12% |
|                     | 20  | 12% |
|                     | Male                                      | 48% |
| Gender              | Female                                    | 48% |
|                     | Gender Minority                           | 6%  |
| Sexual              | LGBTQ+                                    | 19% |
| Orientation         | Non-LGBTQ+                                | 79% |
|                     | African American/Black/Caribbean American | 19% |
| Door 9 Ethnisity    | Hispanic/Latinx                           | 25% |
| Race & Ethnicity    | Other POC                                 | 9%  |
|                     | White                                     | 52% |
|                     |   |     |

"Gender minority" includes respondents who identified as transgender, genderqueer, nonbinary or other. "Other POC" includes respondents who identified as Asian or Pacific Islander, Native American or American Indian, Middle Eastern, or other. Respondents who selected "prefer not to say" for sex/ gender and/or sexual orientation (n=10) or identified as either male or female and identified their sexual orientation as "questioning/not sure" (n=10) or as both "straight" and "queer/other" (n=4) were not included in the either the LGBTQ+ or non-LGBTQ+ groupings.

<sup>4</sup> In the context of this report, the term "young people" refers to the full survey sample of respondents aged 13-20. The term "teens" specifies respondents aged 13-17, while "young adults" refers to those aged 18-20.

Given the unique risks that gender minority youth face, gender minorities are not disambiguated into the gender dichotomy analysis featured throughout this report. Among the gender minority cluster (n = 55) within the full sample, 22 respondents identified as trans-male, 5 respondents identified as trans-female, 6 respondents identified as trans-other, and 29 respondents identified as non-binary, genderqueer, or other.5

### **Results and Reporting**

Due to rounding, some of the figures included in this report may have columns or rows that do not add up to exactly 100%. Some questions, which have been noted, featured multiple select response options.

# **Privacy and Safety**

Ensuring the privacy and safety of those participating in this research was paramount. All participant responses were anonymized. Minor participants (aged 13-17) were recruited directly through caregivers. Caregiver consent was required for minors to participate. Adult participants (aged 18-20) provided direct consent. Help resources were provided to all participants in the event that they wanted to learn more about the survey topics or needed professional support to talk about these issues.

<sup>5</sup> Some respondents identified with multiple gender identities.

# **Background**

Deepfake nudes represent a stark evolution in image-based sexual abuse, driven by the rapid rise and accessibility of generative artificial intelligence (AI).6 These synthetic media (e.g., images, videos, audio) creations depict real people in sexually suggestive or explicit situations or activities. When the victim is a minor, this content may be more formally

# Deepfake nudes

Synthetic media creations that depict real people in sexually suggestive or explicit situations or activities

described as "AI-Generated CSAM" (AIG-CSAM).7 To ensure clarity in this report, the term "deepfake nudes" will be used exclusively to refer to deepfake nude content involving minors unless otherwise specified.

While photo manipulation tactics have long been used to create or alter child sexual abuse imagery, earlier methods were typically crude<sup>8</sup> requiring significant time, skill, and technical expertise to produce photorealistic outcomes. Generative AI has fundamentally changed this dynamic, enabling the rapid and scalable creation of highly realistic content with minimal skill or effort. Unlike traditional forms of photo manipulation software, deepfake technologies uniquely empower the creation of explicit content targeting anyone—regardless of consent, prior digital behaviors (e.g., sharing intimate imagery), or even knowledge of the content's existence.9

For young people, the threat of deepfake nudes must be understood within the broader digital risk landscape they navigate—one that includes consensual exchanges of intimate imagery, nonconsensual experiences (e.g., being recorded without consent or the redistribution of intimate imagery without consent), and deliberate targeting by bad actors. Perpetrators span a range of motivations: adults with sexual interests in children may use AI to fabricate abusive images of children they know or past victims, while others exploit deepfakes for sextortion, threatening to release fabricated images unless the victim complies with their demands. Some young people themselves may also create deepfake nudes of their peers out of sexual curiosity or peer pressure, or as a form of bullying. These overlaps underscore the need to address deepfake nudes not as an isolated threat but as part of a broader continuum of online harms.

For those working in child safety, deepfake technologies introduce significant new risks and challenges in the fight against technologyfacilitated child sexual abuse, many of which undermine the ecosystem's ability to respond and prevent abuse. These new challenges are inextricably tied to the technologies' ease of access, lack of unified implementation of available safeguards (e.g., safety-by-design principles), and capacity to produce highly photorealistic content at scale.<sup>10</sup>

While some technical solutions for detecting and triaging CSAM can be repurposed to detect AIG-CSAM, barriers remain to reliably differentiating between CSAM created using generative AI and other forms of CSAM. Further work is also needed to improve the accessibility and adoption of current tools by the frontline organizations that could benefit from

<sup>6</sup> Specifically, deep learning models, a subcategory of machine learning that use algorithms modeled off of neural networks, are used to learn patterns and features within datasets. Deep learning (and machine learning) falls under the broader umbrella of AI technologies.

<sup>7</sup> FBI. (2024). Child sexual abuse material created by generative Al and similar online tools is illegal. Public Service Announcement, https://www.ic3.gov/PSA/2024/PSA240329#fn1. Notably, while all deepfake nudes of minors qualify as AIG-CSAM, not all AIG-CSAM consists of deepfake nudes (e.g., AIG-CSAM that does not depict a child with a real identity).

<sup>8</sup> Greengard, S. (2012). On the digital trail. Communications of the ACM. https://cacm.acm.org/news/on-the-digital-trail/. Also see Steinberg, S. (2019). Changing faces: Morphed child pornography images and the First Amendment, Emory Law Journal, 68, 909. https://scholarlycommons.law.emory.edu/elj/vol68/iss5/3

<sup>9</sup> Put simply, deepfake technologies enable users to manipulate even benign images, such as photos of individuals fully clothed, and transform them into sexually explicit content (often, these technologies are also referred to as undressing or nudification technologies).

<sup>10</sup> Deepfake technologies can generate hundreds or thousands of abusive images within minutes, amplifying harm and overwhelming current systems of detection and response.

them (e.g., the National Center for Missing and Exploited Children, law enforcement). Additionally, current safeguarding standards<sup>11</sup> and detection tools<sup>12</sup> largely depend on voluntary adoption by technology companies, limiting their effectiveness to platforms that elect to adopt them.

At the same time, these technical challenges exist alongside other systemic issues, including an overreliance on victim disclosures and broader societal misconceptions about deepfake nudes. While progress has been made to advance trauma-informed responses to victim disclosures of sexual abuse and exploitation, significant barriers persist. Victims of image-based sexual abuse often experience feelings of shame, humiliation, fear of disbelief, and self-blame, which hinder their willingness to come forward.<sup>13</sup> Many online safety mechanisms, such as user-driven reporting, further rely on victims to identify and report harmful content an especially problematic requirement in the context of deepfake nudes, where victims may be unaware of the content's existence. Additionally,

for some portions of the public, there appears to be a dangerous misconception about deepfake technologies-that because the content is synthetically created, it is, therefore, harmless and "victimless." This misperception trivializes the emotional, psychological, and social harm inflicted on victims of deepfake nudes.

The growing prevalence of deepfake nudes, 14 especially in youth spaces like schools<sup>15</sup> and social media, underscores the urgency for immediate and systemic intervention. Without intentional implementation of more robust prevention resources and technical safeguards, the widespread availability of these technologies will continue to pose significant and escalating risks to young people everywhere.

<sup>11</sup> Thorn & All Tech Is Human. (2024). Safety by design for generative Al: Preventing child sexual abuse. https://info.thorn.org/hubfs/thorn-safety-by-design-for-generative-Al.pdf

<sup>12</sup> E.g., the National Center for Missing and Exploited Children's Take It Down service (see https://takeitdown.ncmec.org/).

<sup>13</sup> Kennedy, A. C., and Prock, K. A. (2018). "I Still Feel Like I Am Not Normal": A Review of the Role of Stigma and Stigmatization Among Female Survivors of Child Sexual Abuse, Sexual Assault, and Intimate Partner Violence. Trauma, Violence, & Abuse, 19(5), 512-527. https://doi.org/10.1177/1524838016673601

<sup>14</sup> Internet Watch Foundation. (2024). What has changed in the AI CSAM landscape? https://www.iwf.org.uk/media/nadlcb1z/iwf-ai-csam-report\_update-public-jul24v13.pdf

<sup>15</sup> Nickel, D. (2024). Al is shockingly good at making fake nudes—And causing havoc in schools. Politico. https://www.politico.com/news/2024/05/28/ai-deepfake-nudes-schools-states-00160183

# Intimate Imagery & SG-CSAM

For young people, technology can intersect with sexual exploration and romance, with many reporting experiences of sharing nudes with a romantic partner or visiting websites containing adult material (such as dating or pornography sites). These behaviors can quickly intersect with significant risks, such as nonconsensual image abuse, blackmail, harassment, and bullying—often leading to serious personal, emotional, and social consequences that can be difficult, if not impossible, to resolve once the images circulate.

Deepfake nude technologies add new risks to an already complex landscape by enabling the rapid creation of realistic explicit imagery of anyone. This ease of misuse not only amplifies harm but also risks normalizing the production and distribution of nonconsensual intimate content. To effectively combat these harms, efforts must address deepfake nudes within the broader context of digital abuse and exploitation young people face.

## **Exploring Apps Designed for Adults**

As seen in prior research, despite age restrictions requiring users to be at least 18, a substantial proportion of younger respondents (aged 13-17)<sup>16</sup> reported accessing platforms exclusively designed for adult users (aged 18 or older) (Figure 1a, Figure 1b).<sup>17</sup> Approximately 1 in 5 (22%) teens reported using a dating app,<sup>18</sup> 1 in 10 (10%) had accessed OnlyFans, and nearly 1 in 4 (23%) had visited pornography sites. Usage patterns among teens also highlighted notable differences by gender: teen boys reported

accessing OnlyFans and pornography sites at twice the rate of their female counterparts. This gender discrepancy among teens warrants further investigation to understand how it might intersect with other aspects of their sexual interactions and behaviors.

Usage of these sites was also higher among LGBTQ+ teen respondents compared with their non-LGBTQ+ peers likely underscoring the role that romantic and sexual applications play in enabling LGBTQ+ young people to explore their sexuality more broadly.<sup>19</sup>

Fig 1a | **Dating app and pornography site usage rates among teens**QApps. Do you use any of the following dating or adult apps?

|            |       | Any dating app | OnlyFans | Pornography |
|------------|-------|----------------|----------|-------------|
| Ages 13-17 | n=724 | 22%            | 10%      | 23%         |
| Boys       | n=373 | 23%            | 14%      | 33%         |
| Girls      | n=335 | 21%            | 7%       | 14%         |
| LGBTQ+     | n=77* | 36%            | 23%      | 40%         |
| Non-LGBTQ+ | n=633 | 20%            | 9%       | 21%         |
| Ages 13-14 | n=280 | 21%            | 9%       | 19%         |
| Boys       | n=146 | 21%            | 10%      | 24%         |
| Girls      | n=130 | 20%            | 6%       | 12%         |
| Ages 15-17 | n=444 | 23%            | 11%      | 26%         |
| Boys       | n=227 | 24%            | 16%      | 39%         |
| Girls      | n=205 | 22%            | 7%       | 14%         |

Respondents were allowed to select multiple apps. "Any dating app" includes respondent selection for Bumble, Grindr, Hinge, Tagged, Tinder, or Other. Percentages reflect a net percentage of respondents who selected "Yes, I currently use this," or "I do not currently use this, but have in the past." \*Base size <100

<sup>16</sup> Because a portion of the survey sample was aged 18 or older, Figures 1a and 1b show only teen respondent data (aged 13-17).

<sup>17</sup> The dating and adult app usage rates captured in this survey for 13- to 17-year-olds are consistent with previous findings that explored the same: see Fig. 3, pg. 11 in Thorn. (2024). Youth perspectives on online safety, 2023. https://info.thorn.org/hubfs/Research/Thorn\_23\_YouthMonitoring\_Report.pdf

<sup>18</sup> See Figure 1b within this report for a breakdown of dating app usage by individual apps.

<sup>19</sup> Robards, B., Byron, P., & D'Souza, S. (2022). LGBTQ+ communities and digital media. In D. A. Rohlinger, & S. Sobieraj (Eds.), *The Oxford handbook of sociology and digital media* (pp. 339-361). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780197510636.013.22

Fig 1b | Dating app usage rates among teens, by app

QApps. Do you use any of the following dating or adult apps?

|            |       | Tinder | Bumble | Hinge | Tagged | Grindr | Other |
|------------|-------|--------|--------|-------|--------|--------|-------|
| Ages 13-17 | n=724 | 14%    | 9%     | 7%    | 7%     | 6%     | 8%    |
| Boys       | n=373 | 15%    | 10%    | 8%    | 8%     | 10%    | 7%    |
| Girls      | n=335 | 11%    | 8%     | 5%    | 6%     | 3%     | 9%    |
| Ages 13-14 | n=280 | 13%    | 8%     | 7%    | 7%     | 6%     | 7%    |
| Boys       | n=146 | 15%    | 12%    | 11%   | 9%     | 9%     | 6%    |
| Girls      | n=130 | 10%    | 3%     | 4%    | 6%     | 2%     | 9%    |
| Ages 15-17 | n=444 | 14%    | 9%     | 6%    | 6%     | 6%     | 9%    |
| Boys       | n=227 | 15%    | 9%     | 6%    | 7%     | 10%    | 8%    |
| Girls      | n=205 | 12%    | 10%    | 6%    | 6%     | 3%     | 10%   |

Respondents were allowed to select multiple apps. Data is not shown for some standard demographic breakdowns because of small base sizes. Percentages reflect a net percentage of respondents who selected "Yes, I currently use this," or "I do not currently use this, but have in the past."

## Sharing Sexual Imagery of Themselves as Minors

Prior research has found that around 1 in 4 minors (aged 9-17) believe it is normal for people their age to share nudes, with closer to 1 in 3 (31%) teens believing the behavior is normal.<sup>20</sup> That research also found that 1 in 6 (17%) teens reported they had shared nude photos of themselves.<sup>21</sup>

Respondents of the current survey were asked about their experiences sharing sexual imagery of themselves while under 18 (Figure 2), with 1 in 6 (18%) reporting they had. Among teens, 1 in 8 (13%) reported having shared sexual imagery of themselves, with limited variation between

younger teens (12%) and older teens (14%); however, LGBTQ+ teens reported notably higher rates (29%).

While not explored within this research, prior research has established that minors who share their own nude imagery do so within a variety of contexts and with a variety of people. While a strong majority report sharing the imagery with someone they know offline, they also report sharing the content with other users who they only know online.<sup>22</sup> Additionally, past research has established that minors who share their nude imagery report doing so with other people across a spectrum of ages, including other minors, adults, and people whose ages they don't know.23

# Online Solicitations for Sexual Imagery from **Online-Only Contacts**

While 1 in 8 teens reported they had shared nudes of themselves, many more, roughly 1 in 3 (36%) young people reported they had been asked to share sexual imagery of themselves while they were under the age of 18 by someone they had met online (Figure 3), demonstrating the relative commonness of being approached with solicitations in online environments. Rates of the experience appeared to increase with age.<sup>24</sup> LGBTQ+ respondents (53%) and women and girls (41%) were the most likely to report having this experience.

<sup>20</sup> See Fig. 10, pg. 18, in Thorn. (2024). Youth perspectives on online safety, 2023.

<sup>21</sup> See Fig. 8, pg. 17, in Thorn. (2024). Youth perspectives on online safety, 2023.

<sup>22</sup> See Fig. 11, pg. 18, in Thorn. (2024). Youth perspectives on online safety, 2023.

<sup>23</sup> See Fig. 12, pg. 19, in Thorn. (2024). Youth perspectives on online safety, 2023.

<sup>24</sup> The increase in reported experiences between the teen and young adult groups may reflect various factors; young adults might feel more comfortable disclosing past experiences, or they may lack precise recall of their age at the time, leading to some degree of recall bias.

#### Fig 2 | Experiences sharing SG-CSAM

Q011. Have you ever sent or shared a sexual photo or video of yourself either directly with someone else or with your social media followers [IF 18-20: while you were under the age of 18]?

|                 |        | Yes | Prefer<br>not to say | No  |
|-----------------|--------|-----|----------------------|-----|
| All Respondents | n=1200 | 18% | 3%                   | 79% |
| Men & boys      | n=547  | 16% | 1%                   | 83% |
| Women & girls   | n=595  | 20% | 3%                   | 77% |
| LGBTQ+          | n=224  | 34% | 7%                   | 59% |
| Non-LGBTQ+      | n=952  | 15% | 2%                   | 83% |
| Ages 13-17      | n=724  | 13% | 1%                   | 85% |
| Boys            | n=373  | 14% | 1%                   | 86% |
| Girls           | n=335  | 12% | 2%                   | 86% |
| LGBTQ+          | n=77*  | 29% | 3%                   | 68% |
| Non-LGBTQ+      | n=633  | 11% | 1%                   | 88% |
| Ages 13-14      | n=280  | 12% | 1%                   | 87% |
| Boys            | n=146  | 13% | 1%                   | 87% |
| Girls           | n=130  | 11% | 1%                   | 88% |
| Ages 15-17      | n=444  | 14% | 1%                   | 85% |
| Boys            | n=227  | 14% | 1%                   | 85% |
| Girls           | n=205  | 13% | 2%                   | 85% |
| Ages 18-20      | n=476  | 27% | 5%                   | 68% |
| Men             | n=174  | 21% | 2%                   | 77% |
| Women           | n=260  | 34% | 7%                   | 59% |
| LGBTQ+          | n=147  | 37% | 10%                  | 53% |
| Non-LGBTQ+      | n=319  | 23% | 3%                   | 74% |

This question is similar to a question asked of minors in Thorn's Youth Monitoring research (see Fig. 8 in Thorn. (2024). Youth perspectives on online safety, 2023). Percentages for "Yes" reflect a net precentage of respondents who selected the response options "Yes, on purpose" or "Yes, on accident." \*Base size <100

Fig 3 | Experiences being solicited to send sexual imagery as a minor

Q05. Has anyone you only know online asked you to share sexual photos or videos of yourself [IF 18-20: while you were under the age of 18]?

|                 |        | Yes | Prefer<br>not to say | No  |
|-----------------|--------|-----|----------------------|-----|
| All Respondents | n=1200 | 36% | 3%                   | 61% |
| Men & boys      | n=547  | 29% | 3%                   | 68% |
| Women & girls   | n=595  | 41% | 3%                   | 57% |
| LGBTQ+          | n=224  | 53% | 3%                   | 43% |
| Non-LGBTQ+      | n=952  | 33% | 2%                   | 65% |
| Ages 13-17      | n=724  | 31% | 2%                   | 67% |
| Boys            | n=373  | 27% | 2%                   | 71% |
| Girls           | n=335  | 33% | 2%                   | 65% |
| LGBTQ+          | n=77*  | 56% | 2%                   | 42% |
| Non-LGBTQ+      | n=633  | 28% | 2%                   | 70% |
| Ages 13-14      | n=280  | 25% | 1%                   | 74% |
| Boys            | n=146  | 23% | 1%                   | 75% |
| Girls           | n=130  | 25% | 1%                   | 74% |
| Ages 15-17      | n=444  | 35% | 3%                   | 62% |
| Boys            | n=227  | 29% | 3%                   | 68% |
| Girls           | n=205  | 38% | 3%                   | 59% |
| Ages 18-20      | n=476  | 46% | 4%                   | 50% |
| Men             | n=174  | 34% | 5%                   | 62% |
| Women           | n=260  | 56% | 4%                   | 41% |
| LGBTQ+          | n=147  | 51% | 5%                   | 44% |
| Non-LGBTQ+      | n=319  | 43% | 3%                   | 53% |

<sup>\*</sup>Base size <100

# **Perceptions & Lived Experiences**

In 2023, Thorn's annual youth monitoring research surveyed minors (aged 9–17) about their awareness of peers using AI tools to generate nudes of other children. Among the 1,040 respondents, 11% reported believing their friends or classmates had engaged in this behavior, while an additional 10% selected "prefer not to say." These preliminary findings highlighted a pressing need to better understand how young people encounter, perceive, and navigate this emerging technology-facilitated harm. 26

The following section examines the findings from Thorn's most recent research into young people's experiences with deepfake nudes, exploring their awareness, perceptions, and experiences with this growing threat.

#### **Awareness**

Overall, 41% of young people surveyed indicated they had heard of the term deepfake nudes, with another 9% indicating they weren't sure if they had (Figure 4). Men and boys were more likely to have heard the term than their female counterparts (+9%). LGBTQ+ young people were also more likely to have heard the term than their non-LGBTQ+ peers (+20%).

Awareness was higher among young adults than teens. Among teens, nearly 1 in 3 (31%) indicated they had heard of the term, while another 10% were uncertain. In comparison, more than half of young adults (57%) reported they had heard the term, with

Nearly
1 in 3
teens have heard of
"deepfake nudes."

both men (65%) and LGBTQ+ young adults (67%) being much more likely than their counterparts (+19% and +13%, respectively) to have heard it.

Respondents reported that their peers were encountering a mixture of experiences with deepfake nudes while under the age of 18—both being

targeted with abusive images and as people involved in creating or redistributing those images (Figure 5a, Figure 5b).

Fig 4 | Awareness of deepfake nudes

QD1. Have you ever heard of the term "deepfake nudes"?

|                 |        | Yes | Not sure | No  |
|-----------------|--------|-----|----------|-----|
| All Respondents | n=1200 | 41% | 9%       | 51% |
| Men & boys      | n=547  | 44% | 8%       | 49% |
| Women & girls   | n=595  | 35% | 9%       | 56% |
| LGBTQ+          | n=224  | 57% | 9%       | 34% |
| Non-LGBTQ+      | n=952  | 37% | 8%       | 55% |
| Ages 13-17      | n=724  | 31% | 10%      | 59% |
| Boys            | n=373  | 33% | 9%       | 58% |
| Girls           | n=335  | 29% | 10%      | 62% |
| LGBTQ+          | n=77*  | 43% | 13%      | 44% |
| Non-LGBTQ+      | n=633  | 30% | 9%       | 61% |
| Ages 13-14      | n=280  | 32% | 9%       | 59% |
| Boys            | n=146  | 34% | 8%       | 58% |
| Girls           | n=130  | 28% | 11%      | 61% |
| Ages 15-17      | n=444  | 31% | 10%      | 59% |
| Boys            | n=227  | 32% | 9%       | 58% |
| Girls           | n=205  | 29% | 9%       | 62% |
| Ages 18-20      | n=476  | 57% | 7%       | 35% |
| Men             | n=174  | 65% | 5%       | 30% |
| Women           | n=260  | 46% | 9%       | 45% |
| LGBTQ+          | n=147  | 67% | 6%       | 27% |
| Non-LGBTQ+      | n=319  | 54% | 7%       | 39% |

<sup>\*</sup>Base size <100

<sup>25</sup> See Fig. 16A, pg. 21, in Thorn. (2024). Youth perspectives on online safety, 2023.

<sup>26</sup> For additional reporting on this topic, see Internet Matters. (2024). The new face of digital abuse: Children's experiences of nude deepfakes. <a href="https://www.internetmatters.org/wp-content/uploads/2024/11/Childrens-experiences-of-nude-deepfakes-research.pdf">https://www.internetmatters.org/wp-content/uploads/2024/11/Childrens-experiences-of-nude-deepfakes-research.pdf</a>

Does not personally know someone

Fig 5a | Awareness of people they personally know with deepfake nude experiences as minors

QD2. As you may already know, deepfake nudes are when technology is used to produce realistic-looking nude photos or videos of a real person. Do vou know anvone personally (not including yourself) who, while under the age of 18, has...?

All Respondents n=1200 17% 83% 17% Men & boys n=547 83% Women & girls n=595 17% 83% LGBTO+ n=224 20% 80% Non-LGBTQ+ n=952 17% 83% Ages 13-17 n=724 16% 84% 17% 83% Boys n=373 Girls n=335 15% 85% LGBTO+ n=77\* 24% 76% Non-LGBTQ+ 15% 85% n=633 Ages 18-20 n=476 19% 81% 17% Men n=174 83% Women n=260 22% 78% LGBTQ+ n=147 17% 83% Non-LGBTO+ n=319 19% 81%

Personally knows someone

#### Fig 5b | Awareness of people they personally know with deepfake nude experiences as minors, based on experience type

QD2. As you may already know, deepfake nudes are when technology is used to produce realistic-looking nude photos or videos of a real person. Do you know anyone personally (not including yourself) who, while under the age of 18, has...?

|                 |        | Targeted<br>by tech | found out deepfake<br>nudes of themselves<br>were being shared<br>or reshared by other<br>people | had deepfake nudes<br>of themselves created<br>by another person | Used<br>tech to<br>create or<br>distribute | reshared a deepfake<br>nude of another<br>person under the<br>age of 18 | created deepfake<br>nudes of another<br>person under the<br>age of 18 | created deepfake<br>nudes of themselves<br>under the age of 18 |
|-----------------|--------|---------------------|--|--|--|---|---|--|
| All Respondents | n=1200 | 13%                 | 11%  | 10%  | 12%  | 10%   | 7%  | 7%   |
| Men & boys      | n=547  | 13%                 | 11%  | 9%   | 13%  | 10%   | 8%  | 7%   |
| Women & girls   | n=595  | 14%                 | 12%  | 11%  | 12%  | 9%  | 6%  | 7%   |
| LGBTQ+          | n=224  | 15%                 | 12%  | 12%  | 15%  | 12%   | 11%   | 9%   |
| Non-LGBTQ+      | n=952  | 13%                 | 11%  | 9%   | 12%  | 9%  | 7%  | 7%   |
| Ages 13-17      | n=724  | 12%                 | 11%  | 10%  | 13%  | 10%   | 7%  | 8%   |
| Boys            | n=373  | 12%                 | 11%  | 10%  | 13%  | 11%   | 7%  | 9%   |
| Girls           | n=335  | 12%                 | 11%  | 9%   | 12%  | 9%  | 6%  | 7%   |
| LGBTQ+          | n=77*  | 18%                 | 14%  | 15%  | 23%  | 22%   | 15%   | 17%  |
| Non-LGBTQ+      | n=633  | 12%                 | 11%  | 9%   | 12%  | 9%  | 6%  | 7%   |
| Ages 18-20      | n=476  | 15%                 | 12%  | 9%   | 12%  | 8%  | 8%  | 5%   |
| Men             | n=174  | 15%                 | 13%  | 6%   | 12%  | 9%  | 8%  | 5%   |
| Women           | n=260  | 17%                 | 13%  | 13%  | 13%  | 9%  | 7%  | 7%   |
| LGBTQ+          | n=147  | 13%                 | 11%  | 10%  | 10%  | 4%  | 8%  | 4%   |
| Non-LGBTQ+      | n=319  | 16%                 | 12%  | 10%  | 13%  | 10%   | 8%  | 6%   |

Percentages reflect total percentage of respondents who selected the response options "Yes, I know at least one person" or "Yes, I know two or more people." "Targeted by tech" is a net percentage of respondents who indicated they personally knew someone who had "found out deepfake nudes of themselves were being shared or re-shared by other people" and/or "had deepfake nudes of themselves created by another person." "Used tech to create or distribute" is a net percentage of respondents who indicated they personally knew someone who had "reshared a deepfake nude of another person under the age of 18," "created deepfake nudes of another person under the age of 18," and/or "created deepfake nudes of themselves under the age of 18." \*Base size <100

<sup>&</sup>quot;Personally knows someone" is a net percentage of respondents who selected "Yes, I know at least one person" or "Yes, I know two or more people" to at least one of the available response options outlined in Figure 5b. \*Base size <100

In total, 1 in 6 (17%) respondents reported knowing someone who had encountered at least one of the five experiences explored,<sup>27</sup> with around 1 in 8 indicating they personally knew someone who had been the target of deepfake nudes (13%) and/or someone who had used the technologies to create or redistribute deepfake nudes of minors (12%). While the comparative base size was small, LGBTQ+ teens were much more likely than their peers to indicate that they personally knew someone impacted; 18% reported knowing someone targeted by the technologies, and 23% reported knowing someone who used the technologies to create or distribute the content of others.

#### Perception of Harm

Overwhelmingly, respondents (84%) identified that they believed the person depicted in deepfake nudes was harmed by the content (Figure 6). The biggest gulf in the perception of harm was among

84%

of young people believe deepfake nudes cause harm to the person depicted.

younger teen boys and girls (aged 13-14), which showed that girls were more likely than boys to think the person depicted in the imagery was harmed by it (+8%).

By comparison, 1 in 6 (16%) respondents believed deepfake nudes either were not harmful to the person depicted or that their perception of harm depended on the situation. Among those who believed the harm caused by deepfake nudes was context dependent (7%), younger teen girls (aged 13–14) were the least likely to believe the harm caused was context dependent (2%).

Respondents who indicated they thought deepfake nudes were harmful (n = 988) were subsequently asked an open-ended follow-up question asking them, in their own words, to describe the perceived harm caused (Figure 7). The top three reasons identified were the emotional and

psychological impact on the victim(s) (31%), the potential for reputational damage (30%), and the role of deception inherent to the level of photorealism in the imagery that leads viewers to believe or assume the content is authentic (25%).

Fig 6 | Perceived harm for victims of deepfake nudes

QD14. Do you think that deepfake nudes of real people cause harm to the person shown in the photo or video?

|                 |        | Yes | It depends | No  |
|-----------------|--------|-----|------------|-----|
| All Respondents | n=1200 | 84% | 7%         | 9%  |
| Men & boys      | n=547  | 81% | 9%         | 9%  |
| Women & girls   | n=595  | 85% | 6%         | 9%  |
| LGBTQ+          | n=224  | 86% | 7%         | 7%  |
| Non-LGBTQ+      | n=952  | 84% | 7%         | 9%  |
| Ages 13-17      | n=724  | 84% | 7%         | 9%  |
| Boys            | n=373  | 81% | 9%         | 10% |
| Girls           | n=335  | 86% | 5%         | 9%  |
| LGBTQ+          | n=77*  | 82% | 7%         | 12% |
| Non-LGBTQ+      | n=633  | 84% | 7%         | 9%  |
| Ages 13-14      | n=280  | 86% | 5%         | 9%  |
| Boys            | n=146  | 82% | 7%         | 10% |
| Girls           | n=130  | 90% | 2%         | 8%  |
| Ages 15-17      | n=444  | 83% | 8%         | 9%  |
| Boys            | n=227  | 81% | 10%        | 10% |
| Girls           | n=205  | 84% | 7%         | 9%  |
| Ages 18-20      | n=476  | 84% | 8%         | 8%  |
| Men             | n=174  | 81% | 10%        | 8%  |
| Women           | n=260  | 84% | 7%         | 9%  |
| LGBTQ+          | n=147  | 88% | 7%         | 4%  |
| Non-LGBTQ+      | n=319  | 82% | 8%         | 9%  |

<sup>\*</sup>Base size <100

<sup>27</sup> Creating a deepfake nude of themselves, discovering that a deepfake nude of them was being shared/reshared, creating a deepfake nude of another minor, resharing a deepfake nude of a minor, or having a deepfake nude made of them.

#### Fig 7 | Reasoning for believing deepfake nudes cause harm

Among respondents who believe deepfake nudes of real people cause harm to the person depicted

QD18. You answered that you do think deepfake nudes cause harm to the person shown in the photo or video. In your own words, please finish the following sentence: I think deepfake nudes harm the person shown in the photo or video because...

|                                       | All Respondents<br>n=988 | Men & boys<br>n=434 | Women & girls<br>n=502 | LGBTQ+<br>n=188 | Non-LGBTQ+<br>n=784 | <b>Ages 13-17</b><br>n=600 | <b>Ages 18-20</b> n=388 |
|---------------------------------------|--------------------------|---------------------|------------------------|-----------------|---------------------|----------------------------|-------------------------|
| Emotional & psychological impact      | 31%                      | 33%                 | 28%                    | 33%             | 30%                 | 30%                        | 31%                     |
| Reputational damage                   | 30%                      | 31%                 | 30%                    | 27%             | 31%                 | 29%                        | 33%                     |
| People believe they're real           | 25%                      | 24%                 | 26%                    | 22%             | 25%                 | 26%                        | 22%                     |
| Violation of privacy                  | 16%                      | 17%                 | 14%                    | 19%             | 15%                 | 16%                        | 16%                     |
| Impact on future                      | 11%                      | 6%                  | 13%                    | 16%             | 9%                  | 8%                         | 14%                     |
| Potential for bullying and harassment | 9%                       | 7%                  | 9%                     | 17%             | 7%                  | 8%                         | 12%                     |
| Suicidal thoughts & self-harm         | 5%                       | 5%                  | 5%                     | 5%              | 5%                  | 5%                         | 6%                      |
| Impact on other relationships         | 5%                       | 3%                  | 6%                     | 8%              | 4%                  | 4%                         | 7%                      |
| Physical safety issues                | 4%                       | 3%                  | 3%                     | 12%             | 2%                  | 2%                         | 8%                      |
| Long-lasting digital footprint        | 3%                       | 3%                  | 3%                     | 4%              | 3%                  | 3%                         | 3%                      |
| Legality concerns                     | 2%                       | 2%                  | 1%                     | 3%              | 2%                  | 3%                         | 2%                      |
| General, wrong to do/harmful          | 7%                       | 9%                  | 6%                     | 5%              | 8%                  | 8%                         | 5%                      |
| Other                                 | 3%                       | 3%                  | 3%                     | 2%              | 3%                  | 3%                         | 3%                      |
| Nothing/Don't know/Refused            | 1%                       | 1%                  | 1%                     | 0%              | 1%                  | 1%                         | 1%                      |

Question was open end and qualitatively coded. Some responses received multiple codes.

It makes their image look bad to their loved ones and not many people know how to tell the difference.

13, MALE, HISPANIC OR LATINX, NORTHEAST

I think deepfake nudes harm the person shown in the photo or video because even though it's not real, they have no way to prove that and they can't just deny it because their face is most likely on it.

15, FEMALE, AFRICAN AMERICAN/BLACK/CARIBBEAN AMERICAN, NORTHEAST

It dehumanizes the person as you use them for pleasure without consent.

18, MALE, ASIAN OR PACIFIC ISLANDER, SOUTH

It is almost like the new generation of nudes being leaked. They affect someone the same way as normal ones.

19, FEMALE, MULTI-RACIAL, SOUTH

Everyone will see it, they will be embarrassed and it will never go away.

13, MALE, WHITE, MIDWEST

By comparison, for the 9% of respondents (n = 102)who indicated that they do not think deepfake nudes of real people cause harm, the leading reason for their Nearly young people do not believe deepfake nudes harm the person depicted.

perception was because the imagery itself was fake and/or not real (28%), followed by distinguishing that no physical harm is involved (7%), generally implying that emotional harm is a lesser form of it compared to physical harm (Figure 8).

...as soon as everyone knows it's a deep fake, all feelings of panic and fear are gone. It's not actually you, so there's no pressure. It's a little stressful but it's not actually their body.

16, FEMALE, WHITE, MIDWEST

It doesn't cause physical harm it only causes emotional harm.

19, FEMALE, MULTI-RACIAL, NORTHEAST

You control what offends you. Of course it's wrong to make deepfake nudes but ultimately it's fake.

13, MALE, MULTI-RACIAL, SOUTH

For those who believed deepfake nudes do not cause harm or perceived that the harm was context dependent (n = 194), an additional follow-up

question was asked to clarify what factors might make them more likely to perceive harm (Figure 9). Among this group, the most compelling factor in persuading them that deepfake nudes were harmful was if the viewer/consumer of the content believed the deepfake nude to be real (40%). Additionally, around 1 in 3 of the subsample reported they would be more likely to perceive harm if the image could not be removed from the internet (33%) and/or if it had been shared more broadly—whether with people known to the person depicted (29%) or on a digital platform (29%). Notably, one-third (32%) of respondents were unsure about what would make them more likely to recognize deepfake nudes as harmful.

Feedback like this from young people can inform the development of deepfake awareness and prevention campaigns. The factors they identified as influencing their perception of harm are, in fact, the realities that deepfake nude victims currently face: deepfake nudes are increasingly photorealistic, are frequently distributed in some capacity, and, if shared, are often challenging to remove from the internet.

#### Fig 8 | Reasoning for believing deepfake nudes do not cause harm Among respondents who do not believe deepfake nudes of real people cause harm to the person depicted

QD17. You answered that you **do not** think deepfake nudes cause harm to the person shown in the photo or video. In your own words, please finish the following sentence: I do NOT think deepfake nudes harm the person shown in the photo or video because...

Question was open end and qualitatively coded. Some responses received multiple codes. "Acknowledged some harm" captures respondents whose open-ended answers acknowledged that some harm may be caused.

#### **All Respondents** n=102 They're fake or not real 28% 7% No physical harm involved Autonomy or control over what harms you 5% Availability of legal and reporting solutions 5% When permission or consent is obtained 2% 2% Depends on if they're shared with others Lack of knowledge 2% 1% Indifference, don't care General (no specific reason given) 4% Other 16% Nothing/Don't know/Refused 26% 7% Acknowledged some harm

#### Fig 9 | Factors likely to increase young people's perception of harm

Among respondents who do not believe deepfake nudes of real people cause harm to the person depicted, or think it depends

QD19. What considerations would make you more likely to think deepfake nudes of real people cause harm to the person shown in the photo or video?

|  | All Respondents<br>n=194 | Men & boys<br>n=105 | Women & girls<br>n=84* | <b>Ages 13-17</b><br>n=119 | <b>Ages 18-20</b><br>n=75* |
|--|--------------------------|---------------------|------------------------|----------------------------|----------------------------|
| People who see the deepfake nude think it is real                          | 40%                      | 45%                 | 34%                    | 39%                        | 43%                        |
| The deepfake nude could NOT be permanently removed from the internet       | 33%                      | 38%                 | 27%                    | 34%                        | 31%                        |
| The deepfake nude was shared online with people they know offline          | 29%                      | 33%                 | 21%                    | 29%                        | 30%                        |
| The deepfake nude was shared on a website or platform                      | 29%                      | 34%                 | 21%                    | 28%                        | 30%                        |
| The deepfake nude was shared online with people they don't know            | 28%                      | 29%                 | 24%                    | 29%                        | 27%                        |
| The deepfake nude was uncovered as part of a law enforcement investigation | 18%                      | 25%                 | 8%                     | 19%                        | 16%                        |
| Not sure   | 32%                      | 30%                 | 37%                    | 31%                        | 35%                        |

Question was multiple select. "Not sure" was an exclusive response option. Data is not shown for some standard demographic breakdowns because of base sample sizes. A response option "other" was also available, however no respondents in the subsample selected it. \*Base size <100.

#### Perception of Legality

Minors often do not perceive sexually explicit content involving themselves or their peers as CSAM, particularly in situations where an image may have been shared consensually between similarly aged peers.<sup>28</sup> Instead, they view it simply as "nude" or "sexual" imagery. When the imagery is AI generated, confusion around the fact that this content is considered CSAM and thus is illegal extends to the broader public.<sup>29</sup> Thorn's research sought to understand young people's general perceptions of the legality of deepfake nudes depicting minors.

Respondents were presented with three different scenarios involving a minor creating deepfake nudes: of themselves, of someone else under the age of 18, and of someone else aged 18 or older (Figure 10). In total, most

young people recognized the behavior as illegal across each scenario explored, regardless of whether the content was made of themselves or someone else or the age of the person depicted. Respondents were slightly more likely to believe that creating an image of themselves was legal (23%) than of someone else (19%).

Interestingly, some respondents indicated they thought the legality of certain scenarios was context dependent, with 1 in 9 (11%) thinking it *could* be legal for a minor to make deepfake nudes of themselves and 1 in 14 (7%) thinking it *could* be legal for a minor to make them of an adult. There was comparatively less belief that such content *could* be legal if deepfake nudes of another minor were made (2%).

<sup>28</sup> See pg. 33 in Thorn. (2021). Responding to online threats: Minors' perspectives on disclosing, reporting, and blocking. https://info.thorn.org/hubfs/Research/Responding%20to%200nline%20 Threats\_2021-Full-Report.pdf

<sup>29</sup> While U.S. federal law prohibits deepfake nudes of minors, recognizing the material as CSAM, it does not currently prohibit or criminalize Al-generated nonconsensual intimate imagery, including deepfake nudes of adults (aged 18 or older). Also see Richer, A. (2024). Law enforcement cracking down on creators of Al-generated child sexual abuse images. PBS. <a href="https://www.pbs.org/newshour/nation/law-enforcement-cracking-down-on-creators-of-ai-generated-child-sexual-abuse-images">https://www.pbs.org/newshour/nation/law-enforcement-cracking-down-on-creators-of-ai-generated-child-sexual-abuse-images</a>

Fig 10 | Perceived legality of creating deepfake nudes

QD20. Do you think it is legal for someone under the age of 18 to make deepfake nudes of ...?

|                 | themselves |       |            | someone else under the age of 18 |       |            | someone else aged 18 or older |       |            |         |
|-----------------|------------|-------|------------|----------------------------------|-------|------------|-------------------------------|-------|------------|---------|
|                 |            | Legal | It depends | Illegal                          | Legal | It depends | Illegal                       | Legal | It depends | Illegal |
| All Respondents | n=1200     | 23%   | 11%        | 66%                              | 19%   | 2%         | 80%                           | 19%   | 7%         | 73%     |
| Men & boys      | n=547      | 22%   | 8%         | 70%                              | 19%   | 2%         | 80%                           | 20%   | 6%         | 74%     |
| Women & girls   | n=595      | 23%   | 12%        | 65%                              | 21%   | 1%         | 78%                           | 19%   | 8%         | 73%     |
| LGBTQ+          | n=224      | 27%   | 20%        | 53%                              | 15%   | 2%         | 83%                           | 21%   | 11%        | 68%     |
| Non-LGBTQ+      | n=952      | 22%   | 9%         | 69%                              | 19%   | 1%         | 79%                           | 18%   | 7%         | 75%     |
| Ages 13-17      | n=724      | 24%   | 9%         | 67%                              | 20%   | 2%         | 78%                           | 21%   | 6%         | 74%     |
| Boys            | n=373      | 24%   | 7%         | 70%                              | 21%   | 2%         | 75%                           | 22%   | 3%         | 75%     |
| Girls           | n=335      | 23%   | 11%        | 66%                              | 21%   | 1%         | 77%                           | 19%   | 8%         | 73%     |
| LGBTQ+          | n=77*      | 34%   | 19%        | 47%                              | 15%   | 4%         | 81%                           | 26%   | 5%         | 68%     |
| Non-LGBTQ+      | n=633      | 23%   | 8%         | 70%                              | 21%   | 1%         | 78%                           | 19%   | 6%         | 75%     |
| Ages 18-20      | n=476      | 21%   | 14%        | 65%                              | 16%   | 1%         | 82%                           | 16%   | 11%        | 73%     |
| Men             | n=174      | 19%   | 11%        | 70%                              | 14%   | 1%         | 84%                           | 15%   | 12%        | 73%     |
| Women           | n=260      | 23%   | 14%        | 64%                              | 19%   | 2%         | 79%                           | 19%   | 6%         | 75%     |
| LGBTQ+          | n=147      | 22%   | 21%        | 57%                              | 16%   | 1%         | 84%                           | 17%   | 14%        | 68%     |
| Non-LGBTQ+      | n=319      | 21%   | 10%        | 69%                              | 16%   | 1%         | 83%                           | 15%   | 9%         | 76%     |

<sup>\*</sup>Base size <100

### **Lived Experiences**

Overall, 1 in 17 (6%) respondents reported they had been the target of someone using technology to create deepfake nudes of them (Figure 11), including 6% of teen 1 in 17 teens report they have

been the target of someone using technology to create deepfake nudes of them.

respondents.<sup>30</sup> Within specific cohorts, this experience was most prevalent among younger teen boys and young adult women, with 1 in 10 (10%) in each group reporting this form of victimization. In the context of child safety, the rates of experience for younger boys (aged 13-14) warrant further investigation to gain more insight into the context of their experiences.

#### **Responding to Deepfake Nude Victimization**

A portion of this research sought to examine how young people attempted to respond to their experiences. Prior studies of online sexual interactions indicate that young people—especially minors—often rely on online tools like blocking and reporting rather than seeking offline support from parents or trusted adults.<sup>31</sup> This tendency is associated with several underlying factors, such as fear of judgment, shame and a sense of personal blame, concerns about not being believed, and fear of consequences (e.g., losing internet privileges, getting "grounded").

While sample sizes were small (n = 82), among the respondents who had experienced deepfake nude victimization (regardless of whether

<sup>30</sup> The researchers recognize that not all victims may be aware of the deepfake nudes that have been made of them or are not yet ready to disclose their experience, likely resulting in underreporting. 31 Thorn. (2023). Responding to online threats: Minors' perspectives on disclosing, reporting, and blocking in 2021. https://info.thorn.org/hubfs/Research/Thorn\_ROT\_Monitoring\_2021.pdf

it happened while they were a minor or young adult at the time of victimization), the majority (84%) sought some form of support, using either online safety tools or seeking offline forms of support (Figure 12). However, as with other online harms, disclosure was not guaranteed, with around 1 in 6 (16%) deepfake nude victims indicating they did not

seek support at all-either because they ignored it or were unsure in their response. This rate is similar to rates observed in previous studies looking at minors' responses to potentially harmful online sexual interactions.32

deepfake nude victims did not seek support.

Fig 11 | Prevalence of deepfake nude victimization

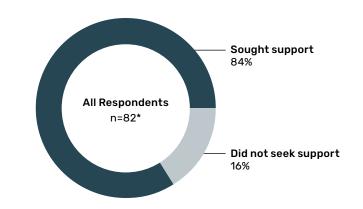
QD11. To the best of your knowledge, has anyone ever used technology to create deepfake nudes of you?

| , , , , , , , , , , , , , , , , , , , |        | Yes | Prefer not to say | No  |
|---------------------------------------|--------|-----|-------------------|-----|
| All Respondents                       | n=1200 | 6%  | 1%                | 92% |
| Men & boys                            | n=547  | 7%  | 1%                | 92% |
| Women & girls                         | n=595  | 7%  | 2%                | 91% |
| LGBTQ+                                | n=224  | 7%  | 3%                | 90% |
| Non-LGBTQ+                            | n=952  | 6%  | 1%                | 93% |
| Ages 13-17                            | n=724  | 6%  | 1%                | 93% |
| Boys                                  | n=373  | 7%  | 0%                | 93% |
| Girls                                 | n=335  | 5%  | 2%                | 94% |
| LGBTQ+                                | n=77*  | 8%  | 2%                | 90% |
| Non-LGBTQ+                            | n=633  | 5%  | 1%                | 94% |
| Ages 13-14                            | n=280  | 7%  | 0%                | 93% |
| Boys                                  | n=146  | 10% | 0%                | 90% |
| Girls                                 | n=130  | 4%  | 1%                | 95% |
| Ages 15-17                            | n=444  | 5%  | 2%                | 94% |
| Boys                                  | n=227  | 5%  | 1%                | 95% |
| Girls                                 | n=205  | 5%  | 2%                | 92% |
| Ages 18-20                            | n=476  | 8%  | 2%                | 90% |
| Men                                   | n=174  | 6%  | 2%                | 92% |
| Women                                 | n=260  | 10% | 3%                | 87% |
| LGBTQ+                                | n=147  | 7%  | 3%                | 90% |
| Non-LGBTQ+                            | n=319  | 8%  | 2%                | 90% |

<sup>\*</sup>Base size <100

Fig 12 | Responses to deepfake nude victimization Among respondents who've had deepfake nudes created of them by someone else

QD13. You indicated that to the best of your knowledge, someone has created deepfake nudes of you. Did you do any of the following in response to learning someone had created deepfake nudes of you?



|               |        | Sought support | Did not seek support |
|---------------|--------|----------------|----------------------|
| Men & boys    | n=40** | 87%            | 13%                  |
| Women & girls | n=40** | 82%            | 18%                  |
| Ages 13-17    | n=45** | 97%            | 3%                   |
| Ages 18-20    | n=37** | 67%            | 33%                  |

Question was multiple select. Data is not shown for some standard demographic breakdowns because of small base sizes. "Did not seek support" represents a net percentage of respondents who only selected the response options of "ignored it" or "unsure." "Sought support" represents a net percentage of respondents who selected any other response. See Figure 14 for a breakdown of available response options. \*Base size <100, \*\*Base size <50

<sup>32</sup> See Fig. 17, pg. 23, in Thorn. (2024). Youth perspectives on online safety, 2023.

Digging into how victims sought support, over half (60%) used at least one online tool, such as platform-based blocking or reporting features, as part of their response, and more than half (57%) sought at least one form of offline support, by telling someone about what had happened to them, whether it be a parent, school authority, friends, or police (Figure 13). Often, for victims who tried to take action as part of their response, the actions they took involved both online and offline components.

Like young victims of other online sexual interactions, blocking technologies were the most commonly utilized online tool, with nearly half (48%) of victims choosing to block the offending user, compared with 35% who reported the user. In fact, blocking the other user emerged as the most frequently reported response type, followed by reporting the user and telling a parent or other trusted family member (34%). The variable use of online blocking features compared with reporting tools should be

Fig 13 | Actions taken in response to deepfake nude victimization Among respondents who've had deepfake nudes created of them by someone else

QD13. You indicated that to the best of your knowledge, someone has created deepfake nudes of you. Did you do any of the following in response to learning someone had created deepfake nudes of you?

|  | All Respondents | Men & boys | Women & girls | Aged 13-17 | Aged 18-20 |
|--|-----------------|------------|---------------|------------|------------|
|  | n=82*           | n=40**     | n=40**        | n=45**     | n=37**     |
| Used at least one online tool as part of their response      | 60%             | 68%        | 53%           | 64%        | 55%        |
| block the person online                                      | 48%             | 48%        | 49%           | 49%        | 47%        |
| report the person to any apps or platforms they shared it on | 35%             | 39%        | 31%           | 39%        | 31%        |
| Only used online tools in their response                     | 12%             | 14%        | 11%           | 10%        | 15%        |
| Sought at least one form of offline support                  | 57%             | 62%        | 54%           | 76%        | 32%        |
| tell your parents/guardians or a trusted family member       | 34%             | 38%        | 31%           | 48%        | 15%        |
| report the person to any relevant school authorities         | 23%             | 30%        | 18%           | 34%        | 10%        |
| tell your friends that you know offline                      | 23%             | 28%        | 18%           | 37%        | 5%         |
| report the person to the police                              | 21%             | 25%        | 19%           | 30%        | 11%        |
| Only sought offline support in their response                | 12%             | 8%         | 17%           | 20%        | 2%         |
| Ignored it   | 17%             | 21%        | 15%           | 21%        | 13%        |
| Tell friends you only know online                            | 21%             | 14%        | 29%           | 19%        | 23%        |
| Something else   | 2%              | 0%         | 2%            | 0%         | 5%         |

Question was multiple select. Data is not shown for some standard demographic breakdowns because of small base sizes. This table only shows a breakdown of responses among respondents to QD13 who indicated they took some form of action in response to their deepfake nude experience. The percentages associated with "ignored it" represent the portion of respondents who selected this option AND another response indicating additional action. Response options for "tell someone else offline" and "look for advice online" were also available, however no respondents in the subsample selected them. \*Base size <100, \*\*Base size <50

further investigated within the context of how young people attempt to respond to harmful online sexual interactions. Learning more about this distinction is important given the different functions the two features serve: blocking restricts immediate contact between users while reporting initiates a stronger safety review protocol.

The help-seeking behaviors observed among young people victimized by deepfake nudes share similarities with how young people respond to online sexual interactions more broadly. In both cases, many young people do not disclose their experiences online or offline. Among those who do seek help, online safety tools are a dominant form of response, with blocking tools being used far more frequently than reporting tools. However, notable differences in behavior emerged that warrant further exploration.

Fewer teen respondents who took action in response to a deepfake nude reported using an online safety tool (64%) compared with those who used such tools in response to a broader range of potentially harmful online sexual interactions identified in previous studies (77%).33 Conversely, teen respondents targeted by deepfake nudes were more likely to seek a form of offline support (76%) than teens addressing other forms of technologyfacilitated sexual interactions (46%).34

While these studies are not directly comparable, the data suggests that young people may approach seeking help for deepfake nude-related abuse differently than they do for other technology-facilitated sexual harms. These differences may highlight the need for further investigation to better understand how young people perceive and navigate distinct forms of abuse.

#### Response vs. Anticipated Response

Broader research on technology-facilitated sexual harms has shown that young people who have not yet had an online sexual interaction often anticipate they would respond in ways that are different from the actual responses of young people who have such experiences.<sup>35</sup> Similar to these previous findings, a notable gap

young people who have experienced deepfake nude victimization told a parent or other trusted family member as part of their response.

emerged between the anticipated responses of nonvictims and the actual responses of deepfake nude victims (Figure 14). Among nonvictims, the most likely anticipated response was to tell a parent or trusted adult (62%), while only 1 in 3 (34%) actual deepfake victims sought this form of support, reflecting a sizable gap (-28%), which was particularly pronounced for women and girls (-34%). Other notable discrepancies appeared in a decreased likelihood for victims to report the offender to the police (-32%) or to the platform where the content is being shared (-22%). Alternatively, victims were more inclined to ignore the experience (+12%) or confide in online friends (+8%) when compared to nonvictims' anticipated responses.

These findings reveal critical intervention opportunities and highlight the need for further research to understand why actual responses diverge from anticipated ones. For instance, there is a pressing need to explore what prevents victims of deepfake nudes from confiding in a trusted adult and why they may choose not to report their experience to the platform where the content is shared. Such insights could guide the development of strategies for improving preferred disclosure pathways and for strengthening the accessibility and effectiveness of additional support systems and resources.

<sup>33</sup> See Fig. 19, pg. 24, in Thorn. (2024). Youth perspectives on online safety, 2023.

<sup>34</sup> See Fig. 19, pg. 24, in Thorn. (2024). Youth perspectives on online safety, 2023.

<sup>35</sup> See Thorn. (2023). Responding to online threats: Minors' perspectives on disclosing, reporting, and blocking in 2021.

Fig 14 | Responses to deepfake nude victimization: What respondents think they would do vs. what they actually did Among respondents who have not had a deepfake nude created of them and those who have

QD12. You indicated that to the best of your knowledge, no one has created deepfake nudes of you. What do you think you would do if you found out someone had made a deepfake nude image or video of you? // QD13. You indicated that to the best of your knowledge, someone has created deepfake nudes of you. Did you do any of the following in response to learning someone had created deepfake nudes of you?

|           |  | All Respondents   |                 | Men & boys Wor    |                 | Women             | Women & girls   |                   | Ages 13-17      |                   | Ages 18-20      |  |
|-----------|--|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|--|
|           |  | Say they<br>would | Actually<br>did |  |
|           |  | n=1103            | n=82*           | n=504             | n=40**          | n=543             | n=40**          | n=673             | n=45**          | n=430             | n=37**          |  |
|           | tell your parents/guardians<br>or a trusted family member    | 62%               | 34%             | 60%               | 38%             | 65%               | 31%             | 72%               | 48%             | 44%               | 15%             |  |
|           | report the person to the police                              | 53%               | 21%             | 50%               | 25%             | 57%               | 19%             | 51%               | 30%             | 58%               | 11%             |  |
| Offline   | report the person to any relevant school authorities         | 42%               | 23%             | 41%               | 30%             | 45%               | 18%             | 45%               | 34%             | 37%               | 10%             |  |
|           | tell your friends that you know offline                      | 26%               | 23%             | 20%               | 28%             | 29%               | 18%             | 24%               | 37%             | 31%               | 5%              |  |
|           | tell someone else offline                                    | 1%                | 0%              | 1%                | 0%              | 1%                | 0%              | 1%                | 0%              | 0%                | 0%              |  |
|           | report the person to any apps or platforms they shared it on | 57%               | 35%             | 52%               | 39%             | 59%               | 31%             | 55%               | 39%             | 59%               | 31%             |  |
| Online    | block the person online                                      | 56%               | 48%             | 53%               | 48%             | 59%               | 49%             | 56%               | 49%             | 57%               | 47%             |  |
| O.I.I.I.C | tell your friends you only know online                       | 13%               | 21%             | 12%               | 14%             | 13%               | 29%             | 13%               | 19%             | 14%               | 23%             |  |
|           | look for advice online                                       | 1%                | 0%              | 0%                | 0%              | 1%                | 0%              | 0%                | 0%              | 1%                | 0%              |  |
| Other     | ignore it  | 11%               | 23%             | 14%               | 21%             | 9%                | 27%             | 9%                | 21%             | 15%               | 26%             |  |
|           | something else   | 0%                | 2%              | 1%                | 0%              | 0%                | 2%              | 0%                | 0%              | 1%                | 5%              |  |
|           | unsure   | 5%                | 10%             | 5%                | 13%             | 4%                | 6%              | 4%                | 3%              | 6%                | 19%             |  |

Questions were multiple select. Data is not shown for some standard demographic breakdowns because of small base sizes. "Unsure" was an exclusive response option. \*Base size <100, \*\*Base size <50

# Case Study: Young People as Deepfake **Nude Creators**

As with other forms of technology-facilitated sexual abuse, deepfake nudes represent not only a risk of victimization but also the potential for perpetration—where young people themselves engage in creating the content of peers and even adults.

Among the full sample of young people surveyed, 2% indicated they had used technology to create deepfake nudes of another person (Figure 15). Given the emergent nature of this threat, researchers prioritized exploring this subset of admitted of young people reported they have used technology to create deepfake nudes of someone else.

creators in more depth. While the sample size is small (n = 24), it offers an initial snapshot into the practices and motivations of young people involved in creating deepfakes.

In the context of these self-reported numbers, it's important to consider the potential role of self-report bias. Consequently, the data on young deepfake creators explored in this section should be viewed as directional, underscoring the urgent need for more nimble and comprehensive research on young people's role in perpetrating this abuse.

#### **Victims Targeted**

Among the subsample, deepfake creators reported being most likely to have created deepfake nude imagery of an adult (62%), with roughly 1 in 3 (36%) indicating they had made deepfake nude imagery of a minor (Figure 16). Some creators (8%) reported they had made content of people whose age(s) they were uncertain of. Creators of deepfake nudes also overwhelmingly said they created the content of females (74%) (Figure 17).

Fig 15 | Experiences creating deepfake nudes of other people

QD3. Have you ever used technology to create deepfake nudes of **someone else**?

|                 |        | Yes | Prefer<br>not to say | No  |
|-----------------|--------|-----|----------------------|-----|
| All Respondents | n=1200 | 2%  | 1%                   | 97% |
| Men & boys      | n=547  | 2%  | 1%                   | 97% |
| Women & girls   | n=595  | 2%  | 1%                   | 97% |
| LGBTQ+          | n=224  | 3%  | 2%                   | 95% |
| Non-LGBTQ+      | n=952  | 1%  | 1%                   | 98% |
| Ages 13-17      | n=724  | 1%  | 1%                   | 98% |
| Boys            | n=373  | 2%  | 0%                   | 98% |
| Girls           | n=335  | 1%  | 1%                   | 98% |
| LGBTQ+          | n=77*  | 4%  | 2%                   | 94% |
| Non-LGBTQ+      | n=633  | 1%  | 1%                   | 98% |
| Ages 18-20      | n=476  | 2%  | 2%                   | 96% |
| Men             | n=174  | 2%  | 1%                   | 96% |
| Women           | n=260  | 3%  | 2%                   | 95% |
| LGBTQ+          | n=147  | 2%  | 2%                   | 96% |
| Non-LGBTQ+      | n=319  | 2%  | 1%                   | 96% |
| *Page cize <100 |        |     | •                    | :   |

<sup>\*</sup>Base size <100

#### Fig 16 | Age of the person depicted in the deepfake nude Among respondents who've made deepfake nudes of other people

QD3a. Thinking about when you have done this, what was the age of the person (or people) you created deepfake nudes of? If you have made deepfake nudes of more than one person, please select all that apply.

|                                 | All Respondents |
|---------------------------------|-----------------|
|                                 | n=24**          |
| A minor                         | 36%             |
| age 12 or younger               | 7%              |
| age 13-17 years old             | 33%             |
| An adult                        | 62%             |
| Someone whose age I didn't know | 8%              |

Question was multiple select. \*\*Base size <50

#### Fig 17 | Gender of the person depicted in the deepfake nude Among respondents who've made deepfake nudes of other people

QD4. And what was the gender of the person you made deepfake nudes of? If you have made deepfake nudes of more than one person, please select all that apply.

|   | All Respondents<br>n=24** |
|---|---------------------------|
| Female  | 74%                       |
| Male  | 25%                       |
| Transgender or Non-binary                     | 10%                       |
| Question was multiple select. **Base size <50 |                           |

#### **Motivations**

Respondents indicated varied and individualized reasons when asked about their motivations for creating deepfake nudes, such as sexual curiosity, pleasure-seeking, revenge, or creating the content as a result of pressure or influence from friends.36

To get revenge on them for bullying me.

14, MALE, WHITE, NORTHEAST

Because I was dared to.

18, FEMALE, HISPANIC OR LATINX, WEST

Just to see what it would look like. Curiosity basically.

15, MALE, HISPANIC OR LATINX, MIDWEST

I was horny. WASN'T thinking straight.

18, MALE, ASIAN OR PACIFIC ISLANDER, NORTHEAST

#### Technologies Used

Understanding the specific technologies young people use to create deepfake nudes—alongside how they discover and access these tools—is critical, given technology's central role in enabling and facilitating this form of nonconsensual intimate image abuse. By asking the subsample of self-identified creators about their methods, this research undertook an initial attempt to uncover the pathways that lead to the use of deepfake technology and the ease with which young people can access such tools.

The subsample of deepfake creators was asked how they learned about the websites, platforms, or apps they used to create the content (Figure 18). Their responses revealed multiple, highly accessible pathways to discover relevant technologies, including both social media platforms (71%), such as Facebook, Instagram, Snapchat, TikTok, and YouTube, and search engines (53%), such as Google and Bing.

Self-reported creators were asked to identify the websites, platforms, or apps they used to create the deepfake nude content.<sup>37</sup> Their responses described several technologies involved in some way in the creation

#### Fig 18 | How deepfake nude technologies were discovered Among respondents who've made deepfake nudes of other people

QD7. How did you learn about the websites, platforms, or apps that you used to create the deepfake nude content?

|                                      | All Respondents<br>n=24** |
|--------------------------------------|---------------------------|
| Via a social media platform          | 71%                       |
| Via a search engine                  | 53%                       |
| Someone shared a direct link with me | 25%                       |
| Don't remember/Not sure              | 5%                        |

Question was multiple select. "Via a search engine" is a net percentage of respondents who selected Google and/or "another search engine, such as Bing." "Via a social media platform" is a net percentage of respondents who selected Facebook, Instagram, Snapchat, TikTok, YouTube, and/or "found it on another social media platform." "Don't remember/not sure" was an exclusive response option. A response option "other" was also available, however no respondents in the subsample selected it. \*\*Base size <50

<sup>36</sup> The corresponding survey question was an open-ended response that asked "Thinking about the time(s) you created deepfake nudes of someone else, what was your motivation for making the deepfake nude content?" Given the small sample size (n = 24) and qualitative nature of the question, respondents' answers are described qualitatively rather than presented within a data table.

<sup>37</sup> The corresponding survey question was an open-ended response that asked "Which websites, platforms, or apps did you use to create the deepfake nude content?" Given the small sample size (n = 24) and qualitative nature of the question, respondents' answers are described qualitatively rather than presented within a data table.

of deepfake nudes. Sometimes they identified specific apps publicly advertised as creating generative AI content (e.g., DeepFaceLab38, AnimeGenius<sup>39</sup>). In other cases, respondents identified general-purpose technologies for image editing (e.g., Photoshop, Canva) or image sharing more broadly (e.g., Snapchat, OnlyFans, PornHub). These responses highlight that creating deepfake nudes often involves more than just the generative AI technology—it involves sourcing benign images to seed the deepfake and leveraging platforms to distribute the resulting content.

This research further asked respondents how they accessed the technologies they used to create deepfake nudes. A majority (70%) of respondents in this group said they downloaded the app they used from their device's app store (e.g., Apple's App Store or Google's Play Store). Roughly one in three creators (30%) indicated they didn't have to download the technology they used to create the content.

#### Sharing the Deepfakes They've Created

Self-reported creators were asked if they had shared the deepfake nude content they made of someone else; more than half (65%) indicated they had shared it in some capacity (Figure 19). Specifically, around 1 in 4 admitted to sharing it with online-only contacts (29%) or the targeted victim (26%), and nearly 1 in 3 (30%) admitted to sharing the content with peers at their school. Notably, 27% of creators reported they never shared the content with anyone else, potentially implying the deepfake nudes they created were solely for their personal consumption. This form of private creation and consumption further reinforces a reality that reported victimization rates likely underestimate the prevalence of this behavior—not only because of challenges victims face in disclosure but also because of their lack of awareness that the content exists.

#### Fig 19 | Experiences sharing the deepfake nudes of other people that they created

Among respondents who've made deepfake nudes of other people

QD9. Did you share the deepfake nude content you made of someone else with...?

|   | All Respondents<br>n=24** |
|---|---------------------------|
| Total shared  | 65%                       |
| friend(s)/people at your school                         | 30%                       |
| friend(s)/people you know online only                   | 29%                       |
| the person/people you made it of                        | 26%                       |
| friend(s)/people who don't go to your school            | 17%                       |
| people you don't know (like by posting it to a website) | 7%                        |
| someone else  | 0%                        |
| Tnever shared it with anyone else                       | 27%                       |
| Prefer not to say                                       | 8%                        |

Question was multiple select. "I never shared it with anyone else" and "prefer not to say" were exclusive response options. \*\*Base size <50

<sup>38</sup> DeepFaceLab is described as "the world's leading software for creating deepfakes." https://sourceforge.net/projects/deepfacelab.mirror/

<sup>39</sup> AnimeGenuis is described as "creating your own stunning anime AI arts for free." https://animegenius.live3d.io/

# **Discussion**

By establishing a concrete baseline of young people's experiences, this report underscores that deepfake nude technologies are highly accessible and amplify the risks young people face in digital spaces. While more research is necessary to fully understand the impacts of deepfake nudes on young people, the findings in this report highlight immediate opportunities to strengthen intervention strategies that can prevent these harms and better mitigate their effects when they occur.

# Young people overwhelmingly recognize deepfake nudes as a form of technology-facilitated abuse that harms the person depicted.

#### Recommendation: Align societal messaging around the harm of deepfake abuse

The message is loud and clear: deepfake nudes are harmful. Young people recognize the tangible emotional, psychological, and social harms inflicted by deepfake nudes, and they emphasize that the violation lies not in how the content is created but in its existence and consumption. Moreover, young people highlight how the inability of viewers to discern whether the content is "real" is a quality that further contributes to victims' feelings of shame, fear, and loss of autonomy.

Yet, societal misconceptions persist. Ongoing debates over whether deepfake nudes are "real" or "fake" trivialize their impact, perpetuate inaction, and serve to normalize nonconsensual abuse. This leaves victims without acknowledgment or support and society without a unified response. Addressing these misconceptions requires embedding clear and coordinated messaging into public discourse.

Messaging must frame deepfake nudes as part of the broader spectrum of nonconsensual harms, emphasizing that any nonconsensual creation or sharing of sexual content is unequivocally harmful. At the same time, this messaging must situate deepfake nude victimization alongside other forms of nonconsensual image abuse, reinforcing the importance of support for victims across a wide spectrum of harms: victims of deepfake nudes deserve support not because they "never took a photo" but because they have suffered a profound violation of their autonomy and dignity.

By aligning societal messaging with the reality young people already recognize, prevention- and intervention-focused education, campaigns, and support systems can begin to address deepfake abuse with the urgency and empathy it requires. This clarity is essential for ensuring victims receive meaningful support, discouraging the continued evolution of nonconsensual behaviors, and laying the groundwork for systemic action to mitigate this abuse.

Deepfake nudes already represent real experiences that young people have to navigate. Not only are many young people familiar with the concept, but a significant number report personal connections to this harm-either knowing someone targeted or experiencing it themselves.

### Recommendation: Establish and socialize community responses for deepfake nude experiences

The high level of familiarity young people have with deepfake nudes, coupled with the significant number reporting personal connections to this harm, signals how quickly this form of technology-facilitated abuse has infiltrated youth culture. Without immediate intervention, deepfake nudes risk becoming an entrenched digital threat young people must endure. While societal messaging provides a critical foundation for acknowledging harm, the responsibility for raising awareness, establishing policies, and supporting victims must be shared across caregivers, youthserving organizations, and schools. Together, these stakeholders are uniquely positioned to create environments to raise awareness, establish policies, and support victims in real time.

Schools and youth-serving organizations in particular interact directly with young people daily and are often the first to encounter these issues in peer-to-peer contexts. Initial data reveals that over half of the young people targeted by deepfake nudes sought offline support, often from parents and school authorities. This trust underscores the urgency of

equipping both schools and youth-serving organizations with tools, training, and trauma-informed protocols for ensuring sensitive and effective responses while reinforcing social norms against nonconsensual image abuse. Without such resources, these institutions risk eroding young people's confidence in seeking help offline and inadvertently perpetuating cycles of harm.40

To meet this challenge, youth-serving organizations and schools must be equipped with clear, actionable protocols for recognizing harm, documenting incidents, and connecting victims to critical resources, such as psychological support, content removal tools, legal aid, and helplines. Staff training should emphasize empathy and clarity, empowering trusted adults to respond decisively while minimizing further harm. By working together, schools and youth-serving organizations can not only provide immediate support for deepfake nude disclosure and recovery but also normalize seeking help for other nonconsensual harms. Through these efforts, they can foster a culture of accountability and support, creating safer environments where young people feel validated and empowered, while reinforcing resilience and meaningful change.

<sup>40</sup> Belanger, A. (2024). Explicit deepfake scandal shuts down Pennsylvania school. Ars Technica. https://arstechnica.com/tech-policy/2024/11/school-failed-to-report-ai-nudes-of-kids-for-months-nowparents-are-suing/

Among the limited sample of young people who admit to creating deepfake nudes of others, they describe easy access to deepfake technologies. Creators describe access to the technologies through their devices' app stores, as well as accessibility via general search engines and social media.

### Recommendation: Implement technical safeguards to minimize and prevent misuse

Young people who admit to creating deepfake nudes describe simple and straightforward access to the technologies through app stores, search engines, and social media platforms. Addressing this interconnected network of accessibility is crucial to curbing misuse and preventing harm.

For technology companies, reducing the misuse of generative Al technologies to create nonconsensual deepfake nudes requires a multipronged technical approach, informed by a safety-by-design framework and developed in collaborative partnership with external experts specializing in human rights and child safety. 41 This framework embeds safeguards against misuse throughout the technology lifecycle, addressing how generative AI models are developed, distributed, promoted, and monitored, as well as how the abusive content they produce is shared and circulated. Importantly, while regulatory requirements are debated and take time to implement, technology companies can—and should—act immediately by voluntarily adopting these proactive safety measures.

Implementing responsible AI principles to mitigate misuse of generative AI models and reinforce accountability can include clear terms of service

that prohibit harmful use cases, alongside scalable enforcement mechanisms, such as user authentication requirements. Platforms that host or promote these technologies, such as app stores and search engines, can actively limit access to tools designed for creating deepfake nudes. This includes removing or restricting such apps and enforcing stricter advertising and search filtering guidelines. Social media platforms, in turn, play a vital role in curbing the distribution of abusive content and can do so by strengthening detection mechanisms, improving moderation tools, and streamlining current user reporting systems.

By voluntarily adopting these measures and engaging with external experts to assess human rights and child safety implications, technology companies can immediately reduce the misuse of generative Al technologies, set a precedent for responsible innovation, and build momentum for long-term regulatory frameworks. Without these interventions, the spread of deepfake nudes will continue to outpace efforts to control the misuse of generative AI for these purposes, further normalizing the creation and distribution of nonconsensual content at scale. Limiting the accessibility of tools designed or misused for abuse is not about restricting innovation but ensuring these technologies are developed, deployed, and used responsibly.

<sup>41</sup> Thorn & All Tech Is Human. (2024). Safety by design for generative Al: Preventing child sexual abuse. Partnership on Al. (2023). PAI's Responsible Practices for Synthetic Media: A framework for collective action. https://partnershiponai.org/wp-content/uploads/2023/02/PAI\_synthetic\_media\_framework.pdf

# **Final Thoughts**

This report highlights a critical moment in the fight against technology-facilitated abuse. Deepfake nudes, once a niche technological novelty, have rapidly evolved into a tangible threat, particularly for young people. The increasing mainstream adoption of generative AI technologies has amplified the ease with which abusive behaviors can be carried out, normalizing the creation and distribution of explicit imagery even without direct access to victims. These technologies intersect with long-standing vulnerabilities in child safety, enabling harm at an unprecedented scale and complicating societal clarity about the unequivocal harms of image-based sexual abuse. Yet, as has often been the case with emerging technologies, safeguards against misuse have lagged behind deployment, leaving gaps in prevention and response.

Addressing these behaviors and their facilitation by technology requires a unified and forward-looking approach. By aligning societal understanding with the reality young people already recognize—that deepfake nudes are unequivocally harmful—we can dismantle harmful misconceptions and foster greater accountability. Empowering schools and youth-serving organizations to act as frontline responders creates a coordinated pathway for disrupting harm, ensuring young people have access to trusted, trauma-informed support systems while fostering environments that reinforce accountability and promote help-seeking behaviors for image-based harms. Meanwhile, technology companies can play a pivotal role by implementing technical safeguards that reduce the accessibility and misuse of generative AI technologies. Together, these strategies build a comprehensive framework for prevention, response, and recovery, reinforcing safer norms and accountability in digital spaces.

With a clear commitment to addressing both abusive behaviors and their technological enablers, we can prevent the normalization of deepfake abuse, ensure victims receive the support they deserve, and create a future where technology serves as a force for empowerment rather than exploitation. By acting decisively now, we address not only the immediate challenges posed by deepfake abuse but also establish a model for how emerging technologies can be harnessed responsibly to protect young people and society at large.

> I just wanna say to anyone who is being [stalked] or blackmailed stuff such as deepfakes, please tell someone about it immediately. Do not let it go unnoticed. Remember that someone who has the intention of spreading deepfakes and making your life miserable, can also go and make other peoples lives miserable through the same process, hence why its important to tell someone of something wrong.

18, TRANSGENDER/NON-BINARY, WHITE, SOUTH

# Resources

If you or someone you know has been a victim of deepfake nudes, resources are available for immediate support. Remember, being the victim of any form of sexual abuse, including deepfake nudes and other forms of nonconsensual image-based abuse, is never your fault and you are never alone.

If you or the person you know is under 18, report the material to the National Center for Missing and Exploited Children's (NCMEC) CyberTipline. You can also submit the content to NCMEC's Take it Down service, which helps remove the content from the internet.

If you or the person you know is 18 or over, you can submit the content to StopNCII.org, a project operated by the Revenge Porn Helpline and dedicated to supporting take-down efforts.

The Cyber Civil Rights Initiative (CCRI) also offers an image-abuse helpline (844.878.2274) in addition to a step-by-step guide for what to do if you find yourself the victim of deepfake nudes.

If you are a parent or guardian and are interested in talking with the young people in your life about deepfake nudes, check out the following resource to support that dialogue: Navigating Deepfake Nudes: A Guide to Talking to Your Child About Digital Safety (Thorn).

# THORN 1

thorn.org | info@thorn.org