OLD DRAFT

Social Media Industrial Scale Harms: Statistics

An ongoing open-source review posted and curated by <u>Jonathan Haidt</u> (NYU-Stern), <u>Zach Rausch</u> (NYU-Stern), and Anum Aslam. You can cite this document as:

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NOTE: This document is still in progress. If you find any errors, please let us know by requesting comment access and sending a message to Zach.

Introduction to This Document:

This work in progress collects statistics and quotes on specific harms perpetrated by Instagram, TikTok, and Snapchat. For each social network, there are 11 sections for 11 types of general harms identified

- The top level organization is at the social media platform level
- Each category of specific harm is a subheading under each social media platform name
- The next heading is the specific conclusions drawn from the sources (this was kept as "Heading 4" to maintain consistency with the 1 - Platform Usage Metrics document)
- The final top level heading is a "General" category to capture any other useful stats about specific harms which did not fit anywhere else (i.e., they mentioned more than one platform, or social media impacts more generically)

Every "Heading 4" (which is in purple text) is a specific conclusion about specific harms drawn from the sources. Below each purple Heading 4 are quoted statistics (or quotes) from which the overall conclusion/claim is drawn

How to navigate the document:

Look at the table of contents on the next page

- Read through each Heading 4 in there to get an overview of each conclusion drawn from the sources
- If you navigate to any of these conclusions, you will find underneath them the cited statistics and/or quotes that are used to explain the claim
- Every cited quote or statistic has footnotes so the information can be found again (and later when put into an article, fully cited in whichever citation format)
- Most cited quotes and stats are also followed by text in green, if some exposition about the source makes it easier to understand (i.e., mentioning which year a stat came out in, to make it easier to compare between sources/quotes next to each other, mentioning a research source is internal and thus the info is likely only available from that one report)

Note that some sections have a [none] Heading 4 (have no conclusions listed); this is because different platforms perpetrated different types of harms at different rates; if most of the content about a particular harm related to one platform, we focused on just the one platform and left the corresponding section(s) for the other platform(s) blank.

Key to Fonts and Color Coding

A conclusion drawn from direct quotes/stats

Relevant information from a source about things like the year info was collected in is in green Not a stat but info worth documenting (chiefly, internal quotes)

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1. Instagram

1.1 Adult Content

1.1.1 Harm: Teens Are Recommended Adult Content Within Minutes of Setting Up Accounts, Including if They're <13

CLAIM OF HARM DRAWN FROM:

- SOURCE: WSJ, Jun 2024: "Instagram regularly recommends sexual videos to accounts for teenagers that appear interested in racy content, and does so within minutes of when they first log in, according to tests by The Wall Street Journal and an academic researcher."
- SOURCE: WSJ, Jun 2024: "Separate testing by the Journal and Laura Edelson, a
 computer-science professor at Northeastern University, used similar methodology,
 involving setting up new accounts with ages listed as 13. The accounts then watched
 Instagram's curated video stream, known as Reels.

Instagram served a mix of videos that, from the start, included moderately racy content such as women dancing seductively or posing in positions that emphasized their breasts. When the accounts skipped past other clips but watched those racy videos to completion, Reels recommended edgier content.

Adult sex-content creators began appearing in the feeds in as little as three minutes. After less than 20 minutes watching Reels, the test accounts' feeds were dominated by promotions for such creators, some offering to send nude photos to users who engaged with their posts."

1.1.2 Harm: Teens See More Adult Content Than Adults (3X as much as nudity)

CLAIM OF HARM DRAWN FROM:

• SOURCE: WSJ, Jun 2024: "Internal tests and analysis by Meta employees have identified similar problems, according to current and former staffers and documents viewed by the Journal that are part of previously undisclosed company research into young teens' harmful experiences on Instagram. In 2021, company safety staff ran tests similar to those of Edelson and the Journal, and came up with comparable results, former employees said.

A separate 2022 internal analysis reviewed by the Journal found that Meta has long known that Instagram shows more pornography, gore and hate speech to young users than to adults. Teens on Instagram reported exposure to bullying, violence and

unwanted nudity at rates exceeding older users in company-run surveys, and the company's statistics confirmed that the platform was disproportionately likely to serve children content that violated platform rules.

Teens saw three times as many prohibited posts containing nudity, 1.7 times as much violence and 4.1 times as much bullying content as users above the age of 30, according to the 2022 internal analysis. Meta's automated efforts to prevent such content from being served to teens was often too weak to be effective, the document said. "

1.2 Sextortion, CSAM, Predation

1.2.1 Harm: 13% to 24% of 13-15 Y/Os Receiving Unwanted Sexual Advances in a 7 Day Period

CLAIM OF HARM DRAWN FROM:

• SOURCE: Arturo Bejar Congressional Testimony, pg. 3: "Thereafter, I detailed the staggering levels of abuse that teens aged 13-15 were experiencing every week. The initial data from the research team indicated that as many as 21.8% of 13-15 year olds said they were the target of bullying in the past seven days, 39.4% of 13-15 year old children said they had experienced negative comparison, in the past seven days, and 24.4% of 13-15 year old responded said they received unwanted advances, all in the prior seven days. Later, the research team revised the survey results to state that the likely number of 13-15 year old children receiving unwanted sexual advances in the past seven days was likely only 13 percent, still a shocking number. Obviously, an even higher percentage of these children are receiving unwanted sexual advances on a monthly basis."

[NOTE FROM ANUM: from the source it seems Bejar was reporting this in 2021 to executives]

• **SOURCE:** Arturo Bejar Congressional Testimony, pg. 4: "One key fact I told company leaders, for example, was that based on carefully-crafted and vetted surveys, we had identified the disturbing fact that 13% of Instagram users aged 13-15 self reported having received unwanted sexual advances via the platform within the previous seven days. That is an awful statistic. Looked at over time, it is likely the largest-scale sexual harassment of teens to have ever happened, and one that clearly calls for action."

[NOTE FROM ANUM: from the source it seems Bejar was reporting this in 2021 to executives]

1.2.2 Harm: "Stranger Danger": 93.8% of Unwanted Sexual Advances on Instagram from Strangers

CLAIM OF HARM DRAWN FROM:

SOURCE: Arturo Bejar BEEF Survey, Slide 14: "93.8% of unwanted sexual advances
are from people the respondent doesn't know, the highest percentage of the 12 issues;
negative social comparison has the lowest, at 64.9%."

[NOTE FROM ANUM: from the source, the data was a week covering end of June/beginning of July 2021; it's on the first page of the source.]

Relationship between respondent and antagonist

Issues are largely caused by strangers, with negative social comparison (15.5%) and bullying target (14.6%) having the highest rates of known instigators.

If respondents experienced an issue, they were then asked, "What's your relationship with the account that posted this?" (This follow-up question wasn't asked for issues that wouldn't make sense, like commerciality or over-enforcement.)

The content labeled an issue by the respondent was usually posted by someone they don't know. 93.8% of unwanted sexual advances are from people the respondent doesn't know, the highest percentage of the 12 issues; negative social comparison has the lowest, at 64.9%.

Conversely, the highest rates of issues instigated by someone the respondent knows offline were negative comparison (15.5%) and bullying target (14.6%). No other issue is above 10%. The lowest is unwanted sexual advances, with only 2.1% from people the respondent knows offline.

	I know them offline/ in real life	I know them, but only online	I don't know them
Negative comparison	15.5%	19.6%	64.9%
Bullying target	14.6%	16.0%	69.4%
Impersonation	9.9%	21.1%	69.0%
Drugs	9.7%	12.3%	78.0%
Self harm	9.5%	19.2%	71.3%
Political posts	8.9%	16.2%	75.0%
Bullying witness	6.4%	17.6%	76.0%
Violence	5.1%	13.7%	81.2%
Hate witness	4.6%	14.3%	81.1%
Misinfo	4.5%	9.7%	85.8%
Nudity	3.7%	9.1%	87.1%
Unwanted sexual advances	2.1%	4.2%	93.8%

An expanded table with 95% confidence intervals can be found $\underline{\text{here.}}$

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1.2.3 Harm: "Stranger Danger": 68.6% of Unwanted Fake Account DMs Were for Sexual Advances

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Arturo Bejar BEEF Survey, Slide 13: "DM/chat has the two highest rates of issues across surfaces [When respondents experienced fake account contact in the last 7 days]: 73.1% of the time for fake account contact, and 68.6% of the time for unwanted sexual advances."

[NOTE FROM ANUM: from the source the data was from a week covering end of June beginning of July 2021 it's on the first page of the source.]

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Issue rates by surface

DM/chat has the two highest rates of issues across surfaces: 73.1% of the time for fake account contact, and 68.6% of the time for unwanted sexual advances.

If a respondent experienced an issue, they were asked where in Instagram it happened. The question allowed for multiple responses, so the rows will add up to more than 100%. Higher numbers are shaded in darker reds, and the highest number per issue/row is in bold.

A few patterns are clear–first, some surfaces are more likely to have issues occur than others, but no app surfaces are immune to bad experiences. Surface comparisons, however, should be taken with a grain of salt–people spend more time on some surfaces than others, so we'd expect differences just because of that.

Second, specific issues happen more often on specific surfaces. When respondents experienced fake account contact in the last 7 days, they said it occurred via DM/chat 73.1% of the time; the next highest is someone's profile, at 14.6%. By contrast, when respondents reported seeing self harm in the last 7 days, it was spread across various surfaces: witnessed in post comments 12.6% of the time, and Feed/Stories 31.9% of the time.

In the last 7 days, where in Instagram did you see this? Please select all that apply.

	DM/ Chat	Feed/ Stories	Comment on my post	Explore/ Search	Hashtag/ Location Page	Reels	Someone's Profile	Somewhere else	I don't remember
fake accounts	73.1%	7.6%	10.5%	4.9%	4.2%	3.6%	14.6%	10.3%	16.0%
unwanted advances	68.6%	9.2%	7.4%	9.2%	5.5%	6.0%	16.7%	10.6%	12.9%
bully target	60.1%	17.6%	18.5%	12.1%	12.0%	10.2%	20.5%	15.2%	17.7%
impersonation 1st	26.0%	23.0%	21.9%	24.0%	21.3%	19.5%	35.4%	27.2%	35.8%
nudity	23.4%	26.4%	7.9%	37.6%	18.1%	22.7%	37.0%	12.8%	18.6%
usability action	20.8%	46.6%	11.1%	14.5%	8.9%	17.0%	16.4%	13.6%	30.6%
usability passive	20.7%	49.7%	7.5%	21.4%	7.6%	19.9%	15.6%	12.2%	29.1%
acct security	18.4%	24.0%	11.2%	15.1%	12.5%	12.6%	18.0%	16.2%	55.2%
misinfo	18.2%	37.3%	6.4%	38.3%	11.5%	17.4%	24.1%	13.3%	21.2%
bully witness	17.8%	30.6%	10.1%	24.4%	13.3%	16.7%	40.8%	17.2%	23.2%
self harm	14.9%	31.9%	12.6%	25.3%	14.4%	19.1%	29.4%	13.8%	26.9%
drugs	14.8%	34.8%	11.7%	22.5%	17.6%	16.4%	26.6%	13.5%	28.3%
perceived control	13.7%	37.9%	5.8%	37.8%	12.2%	25.9%	13.0%	9.6%	25.5%
data privacy	13.5%	26.3%	5.8%	21.7%	10.3%	11.9%	11.9%	14.3%	46.8%
violence	11.3%	34.0%	7.2%	34.5%	16.2%	20.2%	29.7%	11.2%	23.1%
transparency	10.1%	28.4%	7.5%	14.5%	10.4%	11.2%	35.6%	11.5%	34.5%
hate witness	9.5%	31.0%	9.9%	31.3%	17.5%	20.2%	39.4%	19.6%	21.9%
audience limitation	9.3%	44.4%	9.2%	13.0%	10.9%	9.9%	13.0%	7.3%	41.3%
negative comparison	8.7%	40.9%	6.4%	36.3%	12.3%	24.7%	34.8%	9.0%	22.4%
over enforcement	7.0%	35.7%	6.5%	12.1%	9.6%	11.6%	42.7%	11.2%	29.7%
commerciality	6.9%	64.7%	5.0%	20.6%	10.2%	17.1%	8.9%	7.4%	23.4%
political posts	6.2%	44.4%	6.6%	34.0%	16.3%	20.0%	23.7%	10.4%	27.8%

An expanded table with 95% confidence intervals can be found here.

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1.2.4 Harm: FBI Investigating Prevalence of Sextortion on Instagram

CLAIM OF HARM DRAWN FROM:

SOURCE: KPBS, Sep 2024: "According to the FBI, scammers are targeting teens
through gaming platforms and popular social media apps such as Instagram. And it
happens faster than you think."

1.3 "Challenges"

[none]

1.4 Suicidal Ideation and Self-Harm

1.4.1 Harm: 6% of U.S. and 13% of British Suicidal Teens Traced the Thoughts to Instagram

CLAIM OF HARM DRAWN FROM:

SOURCE: WSJ, Sep 2021: "Among teens who reported suicidal thoughts, 13% of British
users and 6% of American users traced the desire to kill themselves to Instagram, one
presentation showed."

[NOTE FROM ANUM: article references an internal research presentation from 2019]

• SOURCE: Ajita Abraham V. Meta pg. 37 para. 114: "114. In an internal Meta survey in or about 2021, 6% of teen girls in the U.S. and 13% of teen girls in the U.K. 'traced their desire to self-harm/commit suicide to Instagram.' Fifteen percent of Instagram users told Meta that they thought the platform made thoughts of suicide or self-injury worse, and in February 2019, an internal Meta research presentation noted that 'those with lived experiences of SSI [suicide and self-injury] say they limit their time on Instagram when they're in a crisis [and] rather than using Instagram as a source of support during a crisis, users pull back from the app, saying it is stressful[,] overwhelming[, and] triggering.'"

1.4.2 Harm: 15% of Instagram Users Say Platform Makes Thoughts of Suicide / Self-Harm Worse

CLAIM OF HARM DRAWN FROM:

• SOURCE: Ajita Abraham V. Meta pg. 37 para. 114: "114. In an internal Meta survey in or about 2021, 6% of teen girls in the U.S. and 13% of teen girls in the U.K. 'traced their desire to self-harm/commit suicide to Instagram.' Fifteen percent of Instagram users told Meta that they thought the platform made thoughts of suicide or self-injury worse, and in February 2019, an internal Meta research presentation noted that 'those with lived experiences of SSI [suicide and self-injury] say they limit their time on Instagram when they're in a crisis [and] rather than using Instagram as a source of support during a crisis, users pull back from the app, saying it is stressful[,] overwhelming[, and] triggering."

1.4.3 Harm: 13.5% of Teen Girls on Instagram Say Platform Makes Thoughts of Suicide and Self-Harm Worse

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Ajita Abraham V. Meta pg. 17-18 para. 49: "[49.] Meta also knows that 13.5% of teen girls on Instagram say the platform makes thoughts of suicide and self-injury worse, that 17% of teen girls on Instagram say the platform makes eating issues worse, and that Meta makes body image issues worse for one in three teen girls."

1.4.4 Harm: 30% (Up from 19%) of HS Girls Seriously Considered Suicide in 2021; in 10 Years of Instagram, 30% Increase in HS Girls' Suicides; Other Jumps in Suicide Rate Due to Instagram

CLAIM OF HARM DRAWN FROM:

• **SOURCE**: People of the State of California v. Meta Platforms, Inc. pg. 91-93 para. 522-527: "522. Beginning with Instagram's rise in popularity in 2012, however, the rates of suicides, self-poisonings, major depressive episodes, and depressive symptoms among girls and young women jumped demonstrably.[29]¹

[Figure]

523. Particularly concerning is the rise of suicidal ideation among girls over the time period that Instagram has surged. According to the CDC's Youth Risk Behavior Survey, in 2011, 19% of high school girls seriously considered attempting suicide. By 2021, that figure reached 30%:[30]²

[Figure]

524. This increase in suicidal ideation among girls has been matched by an increase in suicide attempts. In just the one decade of Instagram's rising popularity, there was a 30% increase in the rate of high school girls who attempted suicide: [31]³

[Figure]

525. Increased rates of suicidal ideation and attempts have led to an overall higher rate of completed suicide among young girls. Indeed, in 2013 alone—the year after Instagram's surge in popularity among young users—the suicide rate for 13-year-old girls jumped by around 50%.[32]⁴

526. This youth mental health crisis fueled by social media platforms like Instagram only stands to worsen. The COVID-19 pandemic has exacerbated excessive social media use. The increase in consumption of digital and social media by young users during this time is linked to an increase in 'ill-being' and media addiction.[33]⁵ [redacted]

527. Meta is not only fully aware that the worsening youth mental health crisis is fueled

[NOTE FROM ANUM: direct link: https://pubmed.ncbi.nlm.nih.gov/36101887/]

[NOTE FROM ANUM: para. 316 is redacted, note 14 is given on pg. 86 of the PDF link and says: "See, e.g., Jonathan Haidt & Jean Twenge, Social Media and Mental Health: A Collaborative Review (unpublished manuscript, on file with New York University), available at tinyurl.com/SocialMediaMentalHealthReview (last visited Oct. 23, 2023); Jacqueline Nesi et al., Handbook of Adolescent Digital Media Use and Mental Health, Cambridge Univ. Press (2022)."]

¹ Jean Twenge, *Increases in Depression, Self-Harm, and Suicide Among U.S. Adolescents After 2012 and Links to Technology Use: Possible Mechanisms*, 2 Psychiatric Res. Clinical Prac. 19 (2020).

² Youth Risk Behavior Survey, supra note 27.

³ Id.

⁴ Haidt & Twenge, supra note 14, at 316.

⁵ Laura Marciano et al., *Digital Media Use and Adolescents' Mental Health During the Covid-19 Pandemic: A Systematic Review and Meta-Analysis*, 9 Front Pub. Health 793868 (2021).

by social media platforms, but has long known that its Platforms are directly contributing to this crisis."

1.4.5 Harm: Hospital Visits for 12-17 Y/O Suicidal Ideation / Attempts Went from 0.66% in 2008 to 1.82% in 2015

CLAIM OF HARM DRAWN FROM:

• SOURCE: People of the State of California v. Meta Platforms, Inc. pg. 89 para. 119: "519. Over this same time period, there has also been an increase in youth hospitalization rates for suicidal ideation and suicide attempts. In 2008, prior to the rise of Instagram, hospital visits for suicidal ideation and attempts represented only 0.66% of visits among all age ranges. By 2015, as Instagram's popularity grew, that share had almost doubled, with suicidal ideation and attempts accounting for 1.82% of all visits, with the highest rates of increase among youth ages 12 to 17 years old.28"

1.4.5 Harm: Instagram Normalizes and Sensationalizes Deliberate Self-Harm

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Ajita Abraham V. Meta pg. 33-34 para. 104: "104. Instagram has also been associated with deliberate self-harm (DSH) by underage users.[26]⁶ Many children who engage in DSH use Instagram to find community among like-minded individuals (which is, according to Meta's advertising, the app's intended use).[27]⁷ However, researchers have found that Instagram's algorithm can cause children who engage in DSH to be flooded with DSH content, which can normalize and then sensationalize self-harm.[28]⁸ In one study, nearly 50% of adolescent users who eventually engaged in DSH reported viewing DSH-related accounts for several months before self- harming.[29]⁹ Therefore,

[NOTE FROM ANUM: direct link: https://pubmed.ncbi.nlm.nih.gov/35996859/]

[NOTE FROM ANUM: direct link: https://pubmed.ncbi.nlm.nih.gov/28705261/]

[NOTE FROM ANUM: direct link: https://pmc.ncbi.nlm.nih.gov/articles/PMC6278213/]

[NOTE FROM ANUM: direct link:

https://www.researchgate.net/publication/340814567 | just finally wanted to belong somewhere-Qualitative Analysis of Experiences With Posting Pictures of Self-Injury on Instagram]

⁶ Carla Moss et al., *Assessing the impact of Instagram use and deliberate self-harm in adolescents: A scoping review*, 32 INT'L. J. MENTAL HEALTH NURSING 14, 15 (2023).

⁷ R.C. Brown, et al., #cutting: Non-suicidal self-injury (NSSI) on Instagram, 48, PSYCH MED. 337–46 (2018).

⁸ Id.; A.M. Memon, *The role of online social networking on deliberate self-harm and suicidality in adolescents: A systematized review of literature*, 60 INDIAN J. OF PSYCH. 384–92 (2018).

⁹ R.C. Brown et. al., "I just finally wanted to belong somewhere" – Qualitative analysis of experiences with posting pictures of self-injury on Instagram, 11 FRONTIERS IN PSYCH. 1–8 (2020).

rather than providing a safe, destigmatized community, Instagram can cause its most vulnerable users to emulate and permanently adopt self-harming behavior.[30]¹⁰"

1.4.6 Harm: Meta Says Harmful Content On Its Platform Isn't Meeting Standards for Suicide Self-Injury, Creating Impression Such Content Is Rare

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** People of the State of California v. Meta Platforms, Inc. pg. 82 para. 480-481: "480. The impression that the Reports create—that Meta's Platforms are safe and users only rarely encounter harmful content—is false and misleading.

481. Meta's third quarter 2021 Report estimated that on Instagram, 'less than 0.05% of views were of content that violated our standards against Suicide & Self-Injury.' That representation created the impression that it was very rare for users to experience content relating to suicide and self-injury on Instagram."

1.5 Body Image Issues and Eating Disorders

1.5.1 Harm: 32% of Teen Girls Feel Worse About Their Bodies Due to Instagram

CLAIM OF HARM DRAWN FROM:

SOURCE: WSJ, Sep 2021: "Thirty-two percent of teen girls said that when they felt bad
about their bodies, Instagram made them feel worse,' the researchers said in a March
2020 slide presentation posted to Facebook's internal message board, reviewed by The
Wall Street Journal. 'Comparisons on Instagram can change how young women view
and describe themselves."

[NOTE FROM ANUM: article references an internal research presentation from Mar 2020]

 SOURCE: WSJ: Facebook Leaked Internal Document, Sep 2021, Slide 9: "32% of teenage girls said that when they felt bad about their bodies, Instagram made it worse"

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¹⁰ A.M. Memon, *The role of online social networking on deliberate self-harm and suicidality in adolescents: A systematized review of literature*, 60 INDIAN J. OF PSYCH.. 384–92 (2018); R.A. Record et al., #Selfharm om #Instagram: Examining user awareness and use on Instagram's self-harm reporting tool, 35 HEALTH COMMC'N. 894–901 (2020).



1.5.2 Harm: Instagram Makes Body Image Issues Worse of 1 in 3 Teen Girls

CLAIM OF HARM DRAWN FROM:

 SOURCE: WSJ, Sep 2021: "We make body image issues worse for one in three teen girls,' said one slide from 2019, summarizing research about teen girls who experience the issues."

[NOTE FROM ANUM: article references an internal research presentation from 2019]

1.5.3 Harm: 17% of Teen Girls on Instagram Say Platform Makes Eating Issues Worse

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Ajita Abraham V. Meta pg. 17-18 para. 49: "[49.] Meta also knows that 13.5% of teen girls on Instagram say the platform makes thoughts of suicide and self-injury worse, that 17% of teen girls on Instagram say the platform makes eating issues worse, and that Meta makes body image issues worse for one in three teen girls."

1.5.4 Harm: 40% of U.S. and UK Teens Who Feel Unattractive Say It Started on Instagram

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** WSJ, Sep 2021: "In one study of teens in the U.S. and U.K., Facebook found that more than 40% of Instagram users who reported feeling 'unattractive' said the

feeling began on the app. About a quarter of the teens who reported feeling 'not good enough' said the feeling started on Instagram. Many also said the app undermined their confidence in the strength of their friendships."

[NOTE FROM ANUM: article references internal research]

1.5.5 Harm: 70% of U.S. Teen Girls Are Seeing Content Associated with More NAC, Per Meta's Research

CLAIM OF HARM DRAWN FROM:

• SOURCE: Ajita Abraham V. Meta pg. 17-18 para. 49: "49. This increased NAC exposure has resulted in 75 percent of U.S. teen girls 'see[ing] 10%+ or more content that's problematic' and the fact that 'approximately 70% of teen girls may [be] see[ing] 'too much' sensitive content' that 'is associated with more negative appearance comparison.' Meta researchers have also concluded that a 'majority of teen girls experience negative social comparison[4]¹¹ and a significant share of them think IG makes it worse.' Meta also knows that 13.5% of teen girls on Instagram say the platform makes thoughts of suicide and self-injury worse, that 17% of teen girls on Instagram say the platform makes eating issues worse, and that Meta makes body image issues worse for one in three teen girls."

1.5.6 Harm: Instagram Sends Teens Toward Eating Disorders, Per Instagram's Internal Research from 2020

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** WSJ, Sep 2021: "The features that Instagram identifies as most harmful to teens appear to be at the platform's core.

The tendency to share only the best moments, a pressure to look perfect and an addictive product can send teens spiraling toward eating disorders, an unhealthy sense of their own bodies and depression, March 2020 internal research states. It warns that the Explore page, which serves users photos and videos curated by an algorithm, can send users deep into content that can be harmful."

[NOTE FROM ANUM: article from Sep 2021 referencing March 2020 internal research]

1.5.7 Harm: Instagram Filters Actively Encourage Body Dysmorphia, Meta Knows This

CLAIM OF HARM DRAWN FROM:

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¹¹ Internal Meta documents define negative social comparison as "[w]hen someone feels bad about themselves after comparing themselves with others."

• **SOURCE:** Ajita Abraham V. Meta pg. 25-26 para. 76-77: "76. Meta also makes visual filters that simulate facial plastic surgery available to young users on Instagram. Meta's leadership (including Instagram's former Head of Policy, Karina Newton) understands that these filters 'actively encourage[e] young girls into body dysmorphia.' Further, Meta leaders communicated these concerns about the 'severe impacts' of these filters on users' mental health to Zuckerberg, but Zuckerberg dismissed them.

77. In November 2019, Margaret Gould Stewart, Meta's then-Vice President of Product Design and Responsible Innovation, initiated an email conversation, with the subject '[Feedback needed] Plastic Surgery AR Effects + Camera Settings Policies,' addressing recipients including Andrew Bosworth (Meta's Chief Technology Officer), Mosseri (Head of Instagram), Fidji Simo (then-Head of Facebook), and Newton. Stewart described the 'PR fire' in mid-October 2019 caused over public allegations that Meta was 'allowing the promotion of plastic surgery' through 'selfie' camera filters on Instagram, filters which can be easily accessed by Instagram's youngest users."

1.5.8 Harm: Meta Pushes/Promotes Negative Appearance Content, and Consuming NAC Makes You Consume More NAC Content Per Their Research

CLAIM OF HARM DRAWN FROM:

SOURCE: Ajita Abraham V. Meta pg. 16-17 para. 44-46: "44. Similarly, Meta's recommendation algorithms also push content that Meta internally categorizes as 'Negative Appearance Comparison' or 'NAC' content (meaning content with a tendency to cause users to feel worse about their body or appearance). Meta pushes and highlights NAC content on Instagram's Explore Feed, a page where Meta presents new pages and interests for users to follow. As one internal research paper stated:

Pooled across all topics, seeing more unconnected content [i.e., content from accounts that a user has not chosen to follow] is associated with worse appearance comparison. Women who spend proportionally more time on Explore (where we promote unconnected content) also have higher levels of appearance comparison In a recent listening session, one creator described Explore as "a landmine for everything I want to avoid on IG" . . . because it triggers appearance comparison."

45. In July 2021, Meta researchers published internally a paper entitled 'Negative Appearance Comparison (also, 'NAC'): Amplified exposure to High-NAC content in IG Explore.' In this study, the researchers used 'Drebbel' – a 'proprietary 'system for understanding the impact of our recommendation systems on bad societal outcomes' – to 'examine[] the consumption of High-NAC content on Explore and its associated outcomes.' They described their methodology and findings as follows:

'To understand what happens, we examined how views of High-NAC content changed over time for both people who had amplified exposure on April 10th and people who did

not Specifically, we compared trends in High-NAC content consumption prior to this time (prior to the week ending 3/20), and a week later (the week ending 4/17 onwards). Entering the state of amplified exposure was associated with a ~5-10% increase in consumption of High-NAC content that lasted about 6 weeks. Comparing High-NAC content consumption in the week prior (ending 3/20) and week following (ending 4/17), people consumed about 10.8% more High-NAC content. After an additional 4 weeks, people were still consuming about 4.8% more High-NAC content compared to before.'

46. The researchers further found that '[f]or people who did not have amplified exposure, High-NAC content consumption declined 5.7% in that same time period (3/20 vs. 4/17), by 5.4% after 4 weeks, and by 5.3% after an additional 2 weeks. As such, amplified exposure may still have a residual effect after 6 weeks.' The researchers also concluded that '[a]fter entering the state of amplified exposure, teen girls consumed 14.9% more High-NAC content in the week following, compared to 13.1% for teen boys."

1.5.9 Harm: Instagram Knows Advertising NAC Exacerbates Harmful Trends in Society, Especially for Women

CLAIM OF HARM DRAWN FROM:

- SOURCE: Ajita Abraham V. Meta pg. 17-18 para. 47-48: "47. By advertising NAC content in user's Explore Feeds, the algorithms exacerbate already harmful trends in society, especially as NAC content is disproportionately advertised to women and young girls. Meta's researchers observed that High-Negative Appearance Comparison content appears both in Instagram's Main Feed and in Explore, but that '17% of people see substantially more (at least 20 percentage points) High-NAC content in Explore than in Feed,' and that '[i]t's worse for women and teen girls.' The researchers stated that their 'findings suggest that our algorithms may be increasing exposure to High-NAC content beyond the preferences that people have indicated.'
 - 48. Meta is aware of the significant impact of NAC content on young users. Meta has conceded that for teens in the top 10% of High-Negative Appearance Comparison consumption, 57% of Instagram's recommendations in Explore were for High-Negative Appearance Comparison content. Meta employees characterized this phenomenon as Meta 'choosing to show them a lot and potentially amplifying.' The statistic is even higher for teen girls in that category: 70.96 percent of content they encountered in Explore was classified as High-Negative Appearance Comparison."

1.5.10 Harm: Instagram Knows Its Platform Exacerbates Eating Disorders

CLAIM OF HARM DRAWN FROM:

• SOURCE: People of the State of California v. Meta Platforms, Inc. pg. 65-66 para. 368: "368. [redacted] it continued to misrepresent to the public that Instagram helped teen

girls struggling with mental health and eating disorders. Davis falsely denied to the public and lawmakers that Meta promotes and makes available content associated with eating disorders, when in fact, Meta's own Platform features are associated with body image issues related to eating disorders."

1.6 Negative Social Comparison

1.6.1 Harm: 66% of Teen Girls and 40% of Teen Boys Experience Negative Social Comparison on Instagram

CLAIM OF HARM DRAWN FROM:

- SOURCE: Ajita Abraham V. Meta pg. 20 para. 55: "55. Through internal studies, Meta has learned that the mental health of young users is significantly impacted by the public quantification of Like counts on Instagram posts. Meta is aware that '66% of teen girls on IG experience negative social comparison,' along with '40% of teen boys' as a result of the Likes feature. An April 2020 Meta study candidly concluded: '[s]eeing high Like counts is associated with feeling worse (more negative, less positive comparison).' A 2021 internal Meta report concluded that teens suffered from 'constant negative comparisons' on Instagram from the combination of Meta's features that advertise triggering content and continue to display the number of Likes on every post."
- **SOURCE:** WSJ: Facebook Leaked Internal Document, Sep 2021, Slide 9: "66% of Teen girls on IG experience negative social comparison (compared to 40% of teen boys)"



1.6.2 Harm: 52% of Teen Girls Experiencing Negative Social Comparison on Instagram Said It Was Image-Related

CLAIM OF HARM DRAWN FROM:

 SOURCE: WSJ: Facebook Leaked Internal Document, Sep 2021, Slide 9: "52% of teenage girls who experienced negative social comparison on Instagram, said it was caused by images related to beauty"



1.6.3 Harm: 1 in 4 Teens Reporting They Don't Feel Good Enough, Say That Began on Instagram

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** WSJ. Sep 2021: "In one study of teens in the U.S. and U.K., Facebook found that more than 40% of Instagram users who reported feeling 'unattractive' said the feeling began on the app. About a quarter of the teens who reported feeling 'not good enough' said the feeling started on Instagram. Many also said the app undermined their confidence in the strength of their friendships."

[NOTE FROM ANUM: article references internal research]

SOURCE: People of the State of California v. Meta Platforms, Inc. pg. 95 para. 535:
 "535. Elaborating further [redacted], teens responded that Instagram use led to them feeling 'not good enough,' with [redacted] 24% reporting the feelings started on Instagram."

1.6.4 Harm: 1 in 5 Teens Says Instagram Makes Them Feel Worse About Themselves

CLAIM OF HARM DRAWN FROM:

- SOURCE: People of the State of California v. Meta Platforms, Inc. pg. 95 para. 534: "534. Meta has found that Instagram specifically impacted young users, with one in five teens stating that Instagram makes them feel worse about themselves."
- SOURCE: Instagram Teen Annotated Research Deck, Sep 2021, Slide 21: "One in five teens says that Instagram makes them feel worse about themselves, with UK girls most negative"

[NOTE FROM ANUM: this research was shared internally Oct 2019]

FACEBOOK ANNOTATION This research was not intended to (and does not) One in five teens say that Instagram makes them feel evaluate causal claims between Instagram and health worse about themselves, with UK girls the most negative or well-being. Stated effect of Instagram Although this headline emphasizes certain negative reported effects, it could have been written to note the Much worse positive or neutral effect of Instagram on users; users Somewhat worse reported perceptions that Instagram made them feel No effect better about themselves (or no different) at higher Somewhat bette rates than feeling worse about themselves. Much better Q: In general, how has instagram affected [the way you feel about yourself/your mental health]? There were no statistically significant differences among those who answered for the way you feel about yourself and those who ORIGINAL RESEARCH

1.6.5 Harm: 14% of Teen Boys Said Instagram Makes Them Feel Worse About Themselves

CLAIM OF HARM DRAWN FROM:

SOURCE: WSJ, Sep 2021: "Teen boys aren't immune. In the deep dive Facebook's researchers conducted into mental health in 2019, they found that 14% of boys in the U.S. said Instagram made them feel worse about themselves. In their report on body image in 2020, Facebook's researchers found that 40% of teen boys experience negative social comparison."

[NOTE FROM ANUM: article references 2019 internal research]

1.6.6 Harm: ~39% of 13-15 Y/O Experienced Negative Social Comparison In Previous 7 Day Period

CLAIM OF HARM DRAWN FROM:

• SOURCE: Arturo Bejar Congressional Testimony, pg. 3: "Thereafter, I detailed the staggering levels of abuse that teens aged 13-15 were experiencing every week. The initial data from the research team indicated that as many as 21.8% of 13-15 year olds said they were the target of bullying in the past seven days, 39.4% of 13-15 year old children said they had experienced negative comparison, in the past seven days, and 24.4% of 13-15 year old responded said they received unwanted advances, all in the prior seven days. Later, the research team revised the survey results to state that the likely number of 13-15 year old children receiving unwanted sexual advances in the past seven days was likely only 13 percent, still a shocking number. Obviously, an even higher percentage of these children are receiving unwanted sexual advances on a monthly basis."

1.6.7 Harm: Some Harms Like Social Comparison Are Unique to Instagram, Per Internal Research

CLAIM OF HARM DRAWN FROM:

SOURCE: WSJ, Sep 2021: "They [researchers within Facebook] came to the conclusion that some of the problems were specific to Instagram, and not social media more broadly. That is especially true concerning so-called social comparison, which is when people assess their own value in relation to the attractiveness, wealth and success of others.

'Social comparison is worse on Instagram,' states Facebook's deep dive into teen girl body-image issues in 2020, noting that TikTok, a short-video app, is grounded in performance, while users on Snapchat, a rival photo and video-sharing app, are sheltered by jokey filters that 'keep the focus on the face.' In contrast, Instagram focuses heavily on the body and lifestyle."

1.6.8 Harm: Instagram Knows Its Platform Exacerbates Negative Social Comparison

CLAIM OF HARM DRAWN FROM:

• SOURCE: People of the State of California v. Meta Platforms, Inc. pg. 43 para. 207: "207. Instagram researchers (who are ultimately funded by and report to Meta) have also observed that '[s]ocial comparison exacerbates problems teens are dealing with' in that, '[a]Ithough others' behaviors online can hurt, the self-scrutiny and anxiety associated with personal consumption patterns is more damaging to mental health."

1.7 Bullying

1.7.1 Harm: ~22% of 13-15 Y/O Experienced Bullying In Previous 7 Day Period in

CLAIM OF HARM DRAWN FROM:

• SOURCE: Arturo Bejar Congressional Testimony, pg. 3: "Thereafter, I detailed the staggering levels of abuse that teens aged 13-15 were experiencing every week. The initial data from the research team indicated that as many as 21.8% of 13-15 year olds said they were the target of bullying in the past seven days, 39.4% of 13-15 year old children said they had experienced negative comparison, in the past seven days, and 24.4% of 13-15 year old responded said they received unwanted advances, all in the prior seven days. Later, the research team revised the survey results to state that the likely number of 13-15 year old children receiving unwanted sexual advances in the past seven days was likely only 13 percent, still a shocking number. Obviously, an even higher percentage of these children are receiving unwanted sexual advances on a monthly basis."

[NOTE FROM ANUM: from the source it seems Bejar was reporting this in 2021 to executives]

1.7.2 Harm: 1 in 5 Teens Got Bullied on Instagram in 2017

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** The Atlantic, Oct 2018: "According to a recent Pew survey, 59 percent of teens have been bullied online, and according to a 2017 survey conducted by Ditch the Label, a nonprofit anti-bullying group, more than one in five 12-to-20-year-olds experience bullying specifically on Instagram."

1.7.3 Harm: Instagram May Not Be Accurately Representing Extent of Bullying On Its Platform

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** People of the State of California v. Meta Platforms, Inc. pg. 83 para. 490: "490. The third quarter 2021 Report concluded that only "0.05-0.06%" of views on Instagram were of content that violated Meta's standards on bullying and harassment. This representation created the impression that it was very rare for users to experience

bullying or harassment on Instagram."

• **SOURCE:** People of the State of California v. Meta Platforms, Inc. pg. 83 para. 498: "498. [redacted] Meta affirmatively misrepresented that fact through its Reports."

1.8 Drugs

1.8.1 Harm: Searching by Hashtag Brings Up Drugs

CLAIM OF HARM DRAWN FROM:

• SOURCE: AP News Sep 2024: "On Instagram, as recently as this summer, a simple hashtag search for popular prescription drugs brought up numerous results with accounts offering to sell illicit pills to anyone looking. Many accounts directed users to Snapchat or Telegram, where experts say encryption and alleged lax moderation make it even easier to engage in illegal activity. Money is sent through payment platforms and the drugs can be delivered by mail, DelPonte said."

1.8.2 Harm: Instagram Warns You're Going to Drug Sale Pages... Then Lets You GO

CLAIM OF HARM DRAWN FROM:

• SOURCE: AP News Sep 2024: "Until recently, a search for #Xanax on Instagram led to a warning page specifying that 'This may be associated with the sale of drugs' and that the 'sale, purchase of trade of illicit drugs can cause harm to yourself and others and is illegal in most countries.' A blue 'Get help' link directed users to federal substance abuse resources. Underneath that link, users could click to "see results anyway." After it was pointed out by the AP, the company quickly removed the ability to "see results anyway" for location-specific hashtags such as #xanaxdallas or #xanaxchicago. Later, it also removed the 'see results' option entirely for common drugs such as Xanax, cocaine and Adderall, among others.

Meta also said it investigated accounts shared by The Associated Press and concluded they were not drug dealers, but financial scam artists based in Africa pretending to sell drugs locally."

1.9 Prevalence of Negative Experiences

1.9.1 Harm: Half on Instagram Users (All Ages, See Graph) and >50% of All Teen Age Groups Had a Negative Experience in the Past 7 Days

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Arturo Bejar BEEF Survey, Slide 20: "A little over half of respondents (51.6%) experienced at least one issue in the past 7 days"

[NOTE FROM ANUM: from the source, the data was a week covering end of June/beginning of July 2021; it's on the first page of the source.]

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Respondents experiencing one or more issues

A little over half of respondents (51.6%) experienced at least one issue in the past 7 days

Each respondent was asked whether they've experienced any of five issues, randomly selected out of a set of 22 issues. 51.6% of respondents said they've experienced at least one issue. Within age groups, the percentage is highest among those age 16-17 (57.3%), followed by 18-21 (55.7%), and 13-15 (54.1%). The group with the lowest percentage of experiencing one or more issue is age 45+, at 31.2%. (Note: Age was the last question asked, so we only have age data for the 67.5% of respondents who completed the survey.)

	None	1 or more (out of 5)	% of each age group experiencing one or more issues
13-15	5,283	6,215	54.1%
16-17	7,371	9,888	57.3%
18-21	16,033	21,164	56.9%
22-26	12,520	15,713	55.7%
27-34	13,019	13,426	50.8%
35-44	9,978	7,689	43.5%
45 or older	7,877	3,564	31.2%
Prefer not to say	5,647	5,229	48.1%
Total	77,727	82,888	51.6%

19

• **SOURCE**: Arturo Bejar BEEF Survey, Slide 21: "The 13-15 age group has the highest rates for 8/22 issues, while the 45+ group has the lowest rates of 21/22 issues"

[NOTE FROM ANUM: from the source, the data was a week covering end of June/beginning of July 2021; it's on the first page of the source.]

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Issues by most and least impacted age groups

The 13-15 age group has the highest rates for 8/22 issues, while the 45+ group has the lowest rates of 21/22 issues

The table to the right shows the percentages of respondents who selected "Yes, during the last 7 days" for each of the issues, split by self-reported age. The green cells represent the lowest incidence for that issue across all age groups, and the red cells represent the highest incidence. Numbers that share a numeric subscript are not statistically significantly different from each other at p < 0.05. The full breakdown by all age groups is on the next slide.

The 13-15 age group has the most red cells (8)—that is, they have the highest rates of issue experience in 8 of the 22 issues, more than any other age group. By contrast, the oldest age group (45+) has the most green cells (21)—they have the lowest rates of issue experience in 10 of the 22 cells.

	Overall	13-15	45+
commerciality	48.2%	37.7%a	39.6%a,f
misinfo	30.3%	24.4%a	16.1%e
bully witness	28.3%	27.2%a	10.6%e
audience limitation	26.8%	28.2%a,b	15.9%e
usability passive	25.5%	30.1%a	10.1%e
hate witness	25.3%	26.0%a	9.0%e
data privacy	24.4%	17.9%a	14.3%e
perceived control	23.9%	18.4%a	14.2%d
fake acct 1st	21.8%	15.8%a	13.2%e
negative comparison	19.2%	21.4%a	6.8%e
transparency	17.5%	14.9%a	8.4%e
political posts	17.0%	14.3%a,d	8.7%e
nudity	16.3%	19.2%a	6.2%e
over enforcement	14.8%	14.1%a,c	5.9%e
violence	12.8%	12.8%a,b	5.0%d
unwanted advances	11.9%	13.0%a	6.9%d
usability action	10.7%	11.2%a,e	6.6%d
bully target	8.1%	10.8%a	3.4%e
self harm	6.7%	8.4%a	1.9%d
acct security	3.9%	5.2%a	1.3%d
drugs	3.9%	3.7%a,b	1.7%c
impersonation 1st	3.7%	5.5%a	0.3%b

An expanded table with confidence intervals can be found here

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1.9.2 Harm: Instagram's Moderation Process/Policies Seems to Be Missing A Lot of the "Negative" Content

CLAIM OF HARM DRAWN FROM:

SOURCE: <u>Arturo Bejar Congressional Testimony</u>, pg. 2-3: "At this time we knew that well over 90% of the issues that people were reporting did not technically violate company policy. Most importantly and initially surprisingly, we learned that in 50% of the issues teens were flagging as the most intense bad experiences, the content involved was discernibly benign to us, as outside observers."

[NOTE FROM ANUM: from the source it seems Bejar was reporting this in 2021 to executives]

• SOURCE: Arturo Bejar Congressional Testimony, pg. 3: "First, I pointed out how the reporting process grossly understated misconduct on the site. I explained that the number of people reporting to surveys that they had a negative experience on Instagram was 51% every week but only 1% of those reported the offending content and only 2% of those succeeded in getting the offending content taken down."

[NOTE FROM ANUM: from the source it seems Bejar was reporting this in 2021 to executives]

1.10 Poor Mental Health Outcomes

1.10.1 Harm: Slightly Less Than One Third of Instagram Users Think Platform Makes Mental Health Worse

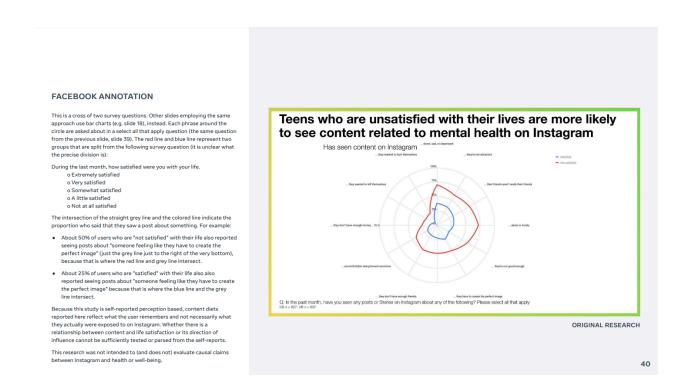
CLAIM OF HARM DRAWN FROM:

- SOURCE: Ajita Abraham V. Meta pg. 37 para. 115: "115. Meta's top leaders and executives are aware of, and yet callously ignore, their platform's detrimental and serious effects on young users' mental health and well-being. As internal researchers told Zuckerberg, social media 'can and does attenuate or exacerbate a user's experience with mental health issues.' Indeed, Zuckerberg's staff informed him that 'a sizable proportion of [Instagram] users (under a third) think we make issues related to mental health worse.' Nevertheless, Meta has done nothing and continues to psychologically exploit the well-being of young users."
- SOURCE: People of the State of California v. Meta Platforms, Inc. pg. 95 para. 536: "536. Meta knows that '[t]eens blame Instagram for increases in the rates of anxiety and depression among teens.' Instagram's deliberate design features, such as 'comparisons of followers and like counts,' exploit teens' vulnerability to social comparison, creating a negative feedback loop that leads to mental health harm including self-esteem, anxiety, and insecurity issues."

1.10.2 Harm: Teens Unsatisfied With Life Are More Likely to See Mental Health Content on Instagram

CLAIM OF HARM DRAWN FROM:

SOURCE: Instagram Teen Annotated Research Deck, Sep 2021, Slide 40: "Teens who
are unsatisfied with their lives are more likely to see content related to mental heath on
Instagram"



1.10.3 Harm: Meta Knows Young Users Are Coping with Serious Issues Due to Instagram Through Its Teen Mental Health Deep Dive Research

CLAIM OF HARM DRAWN FROM:

- SOURCE: People of the State of California v. Meta Platforms, Inc. pg. 94-95 para.
 531-533: "531. Meta has conducted detailed internal research that demonstrates the mental health impacts of its Platforms on young users, notably a 'Teen Mental Health Deep Dive' that surveyed over 2,500 young users in the U.S. and U.K.
 - 532. Through this 'Teen Mental Health Deep Dive,' Meta identified that young users are coping with a variety of emotional issues, including not having 'enough friends' or having friends 'who aren't really their friends' (52%), having 'to create a perfect image' and not being 'honest about feelings' (67%), wanting to 'hurt [or] kill themselves' (14%), feeling 'down, sad, []depressed[,] [a]lone, or lonely (62%), and feeling 'not good enough [or] [a]ttractive' (70%).
 - 533. The broad takeaway from Meta's 'Teen Mental Health Deep Dive' was that '[s]ocial media amplifies many of the age-old challenges of being a teenager. The always-on nature of social media means that teens' social lives have infiltrated into every part of life without a brea'." [redacted]"

1.10.4 Harm: Internal Research Shows Teens Can't Get Themselves to Get Off Instagram Even When They Know It's Bad for Their Mental Health

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** People of the State of California v. Meta Platforms, Inc. pg. 70 para. 396-398: "396. An October 2019 internal presentation entitled 'Teen Mental Health Deep Dive' discussed the findings from a survey of over 2,500 teenagers who use Instagram on at least a monthly basis.

397. Among the researchers' conclusions was the finding that '[y]oung people are acutely aware that Instagram can be bad for their mental health, yet are compelled to spend time on the app for fear of missing out on cultural and social trends.'

398. Other Meta documents acknowledge this problem, noting that over half of Instagram's teen users report struggling with FOMO."

SOURCE: WSJ, Sep 2021: "Instagram's researchers noted that those struggling with the
platform's psychological effects weren't necessarily logging off. Teens regularly reported
wanting to spend less time on Instagram, the presentations note, but lacked the self
control to do so."

[NOTE FROM ANUM: article reporting on internal findings]

• SOURCE: People of the State of California v. Meta Platforms, Inc. pg. 95 para. 537: "537. Meta also knows that although 'young people are acutely aware that Instagram can be bad for their mental health,' they feel 'compelled to spend time on the app' because Meta has designed its Platforms to exploit young users' 'fear of missing out on cultural and social trends."

1.11 Other Miscellaneous

1.11.1 Harm: Meta Is Not Forthcoming About the Results of Its Internal Research Which Undermines Its Bottom Line

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** WSJ, Sep 2021: "In August, Sens. Richard Blumenthal and Marsha Blackburn in a letter to Mr. Zuckerberg called on him to release Facebook's internal research on the impact of its platforms on youth mental health.

In response, Facebook sent the senators a six-page letter that didn't include the company's own studies. Instead, Facebook said there are many challenges with

conducting research in this space, saying, 'We are not aware of a consensus among studies or experts about how much screen time is 'too much,' ' according to a copy of the letter reviewed by the Journal.

Facebook also told the senators that its internal research is proprietary and 'kept confidential to promote frank and open dialogue and brainstorming internally.'

A Facebook spokeswoman said the company welcomed productive collaboration with Congress and would look for opportunities to work with external researchers on credible studies.

'Facebook's answers were so evasive—failing to even respond to all our questions—that they really raise questions about what Facebook might be hiding,' Sen. Blumenthal said in an email. 'Facebook seems to be taking a page from the textbook of Big Tobacco—targeting teens with potentially dangerous products while masking the science in public.'"

 SOURCE: WSJ, Sep 2021: "Instead of referencing their own data showing the negative effects of Instagram, Facebook executives in public have often pointed to studies from the Oxford Internet Institute that have shown little correlation between social-media use and depression.

. . .

Facebook has in the past been a donor to a researcher at the Oxford institute, which is part of the research and teaching department of Britain's Oxford University."

1.11.2 Harm: Meta's Internal Research Is Damning and Employees Have Suggested Censoring/Burying It

CLAIM OF HARM DRAWN FROM:

- SOURCE: Ajita Abraham V. Meta pg. 51 para. 168-170: "168. Some Meta employees have gone so far as to recommend hiding and censoring specific internal Meta research about teen mental health. In an internal chat from 2021, Meta employees suggested censoring terms such as 'mental health' in internal documents that 'might become public' to avoid scrutiny. Externally, Meta's leadership has made false statements about the company's research. On December 8, 2021, Mosseri told Congress, 'I don't believe [Meta's] research suggests that our products are addictive.'
 - 169. Of course, Meta's own research did suggest that their products were addictive, as they were intended to be. This also makes common sense: as Newton acknowledged in an internal email from May 2021, 'it's not 'regulators' or 'critics' who think [I]nstagram is unhealthy for young teens it's everyone from researchers and academic experts to

parents. [T]he blueprint of the app is inherently not designed for an age group that don't [sic] have the same cognitive and emotional skills that older teens do.'

170. Through these and other misrepresentations to young users, parents, Congress, and other members of the public, Meta deceived the public about the qualities, nature, and effects of Instagram, all in a feeble effort to hide the significant harm they cause."

1.11.3 Harm: Instagram Algo Provides Users Disturbing Content Without Warning, and It Keeps Young Users on Platform Longer

CLAIM OF HARM DRAWN FROM:

• SOURCE: Ajita Abraham V. Meta pg. 15-16 para. 41: "41. Most disturbingly, as part of this personalization process, Meta's recommendation algorithms also periodically present young users with psychologically and emotionally gripping content. Some of the most disturbing content, presented without warning, is related to eating disorders, violence, negative self- perception and body image issues, bullying, and other categories of content known by Meta to provoke intense reactions. Periodically serving harmful or disturbing content has been shown to keep young users on the platforms longer."

1.11.4 Harm: Preference Amplification on Instagram and How It Keeps Serving Problematic Content

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Ajita Abraham V. Meta pg. 16 para. 42: "42. Meta describes the manipulative effect the recommendation algorithms have on users as 'preference amplification' (sometimes referred to as falling into 'rabbit holes'), as the algorithmic model prioritizes user engagement and categories of content to keep users on:

'[P]eople don't just fall into rabbit-holes (and we stopped using this term.) They have some preference that our models amplify (hence the term 'preference amplification') - eg, follow accounts, like reels, etc. Then they tend to 'drift' towards what the rec[ommendation] sys[tem] shows them, which is further picked up by the model, which makes the problem even worse."

• SOURCE: Ajita Abraham V. Meta pg. 16 para. 43: "43. Meta's own internal research reveals how these "preference amplifications" work on young users. For example, in a March 2021 internal investigation focusing on "eating disorder content on Instagram," researchers created a "test user" profile, through which Meta's team followed existing users with account names such as @st4rv_1ng (a stylization of the word "starving"), @skinx_bones, @prettywhenimhungry, and @skinnny_goals_. After the test user began following these accounts, Instagram's recommendation algorithms generated a list of "Suggestions For You" that included accounts related to anorexia, such as

@milkyskinandbones, @skinny._.binge, @_skinandbones__, and @applecoreanorexic. As another example, an internal Meta document from 2018 recognized that "seeing SSI [suicide and self-injury] admissions on Instagram is significantly associated with increased time spent" on Instagram."

1.11.5 Harm: People of the State of CA vs. Meta Says Harms by Instagram Are Pervasive and Measurable

CLAIM OF HARM DRAWN FROM:

• **SOURCE**: People of the State of California v. Meta Platforms, Inc. pg. 35-37 para. 194-206: "194. These harms are pervasive and often measurable."

[NOTE FROM ANUM: a lot of redacted content in para. 194-206—if we could get the unredacted, this could be a gold mine.]

1.11.6 Harm: Meta Leaves Notifications On By Default While Knowing They Abuse It

CLAIM OF HARM DRAWN FROM:

- **SOURCE:** Ajita Abraham V. Meta pg. 24 para. 71-72: "71. In June 2018, Meta prepared an internal presentation entitled 'Facebook 'Addiction," which proposed that Meta reduce notifications to curb problematic use in users. But Meta did nothing. All users, by default, still have notifications enabled. While such constant notifications can technically be disabled, Meta knows that leaving notifications on by default greatly decreases the number of users who will manually switch them off.
 - 72. Of course, any effort to reduce notifications is, to Meta, a threat to its business. In an email chain from late 2017 and early 2018 which included Mosseri and other Meta executives Meta addressed declines in U.S. engagement metrics and the association of engagement declines with notification reductions. One Meta employee stated that the company faces a trade-off between '[p]reserving a better notification experience for people' and '[r]ecovering US DAP [Daily Active People] impact.' In the same email thread, Facebook Chief Product Officer Chris Cox stated, "[i]f we think that the filtered [notification] experience is better for people, I feel strongly that we shouldn't revert this because a metric is down. The heart of the matter is that we need to get better at making the harder decisions where the metric isn't the main decision criteria: the experience is." Then-Vice President of Analytics Alex Schultz added, 'fundamentally I believe that we have abused the notifications channel as a company."

2. TikTok

2.1 Adult Content

2.1.1 Harm: TikTok Doesn't Differentiate Videos It Serves Adults Vs Minors (Reported Sep 2021)

CLAIM OF HARM DRAWN FROM:

- SOURCE: Nebraska V. TikTok pg. 41 para. 114: "114. When The Journal shared 'a sample of 974 videos about drugs, pornography, and other adult content that were served to minor accounts,' a spokesperson for Defendants stated that "the majority didn't violate guidelines"—though several hundred were subsequently removed—and that 'the [TikTok] app doesn't differentiate between videos it serves to adults and minors.'[82]¹²"
- **SOURCE:** Nebraska V. TikTok pg. 44 para. 123-124: "123. As part of its investigation, the State created TikTok accounts for Nebraska minor users registered as 13, 15, and 17 years old, using fictitious names and birthdates.
 - i. Mature and Inappropriate Content

124. Within minutes of scrolling through TikTok's 'For You' feed—before the accounts had searched for any videos or 'followed' any users—TikTok's algorithm repeatedly exposed each Nebraska teen account to overtly mature and otherwise inappropriate content."

[NOTE FROM ANUM: para. 125 of this court case then gives examples of the mature content offered]

2.1.2 Harm: Adult Content Was Shown to Teens Even in "Safe Mode"

CLAIM OF HARM DRAWN FROM:

• SOURCE: Nebraska V. TikTok pg. 59 para. 150: "150. Notably, all of the [pornographic] content described above was accessible to the Nebraska teen accounts even in 'Restricted Mode'—a safety feature Defendants tell parents will prevent their teens from seeing various categories of mature and inappropriate content."

¹² Rob Barry et al., How TikTok Serves Up Sex and Drug Videos to Minors, WALL. ST. J. (September 8, 2021), https://www.wsj.com/articles/tiktok-algorithm-sex-drugs-minors-11631052944 (accessed May 16, 2024).

2.1.3 Harm: TikTok Only Moderates Videos with >10,000 Views, Which Is How Teens Get Exposed to Adult Content (Sep 2021)

CLAIM OF HARM DRAWN FROM:

• SOURCE: Nebraska V. TikTok pg. 72 para. 204: "204. The reality is that Defendants' enforcement of the TikTok Community Guidelines is haphazard at best, and Defendants know it. As The Journal's investigation reported, Defendants' content moderation is almost non-existent for less popular videos with fewer than 10,000 views, which is one reason why users as young as 13 years old are regularly exposed to and can easily find adult content.[147]¹³ And as the State's own investigation has documented, TikTok to this day consistently exposes its youngest and most vulnerable users to mature and harmful content that violates the Community Guidelines, including videos that have received millions of views."

2.1.4 Harm: Teen Users Recommended Adult Content (Sep 2021); Can Use This to Generate Estimates of Total Exposure

CLAIM OF HARM DRAWN FROM:

 SOURCE: WSJ (Investigation Report), Sep 2021: "The account was one of dozens of automated accounts, or bots, created by The Wall Street Journal to understand what TikTok shows young users. These bots, registered as users aged 13 to 15, were turned loose to browse TikTok's For You feed, the highly personalized, never-ending feed curated by the algorithm.

An analysis of the videos served to these accounts found that through its powerful algorithms, TikTok can quickly drive minors—among the biggest users of the app—into endless spools of content about sex and drugs.

TikTok served one account registered as a 13-year-old at least 569 videos about drug use, references to cocaine and meth addiction, and promotional videos for online sales of drug products and paraphernalia. Hundreds of similar videos appeared in the feeds of the Journal's other minor accounts.

TikTok also showed the Journal's teenage users more than 100 videos from accounts recommending paid pornography sites and sex shops. Thousands of others were from creators who labeled their content as for adults only.

Still others encouraged eating disorders and glorified alcohol, including depictions of

[NOTE FROM ANUM: this is the following source referenced elsewhere in the document as a primary source: WSJ (Investigation Report), Sep 2021]

¹³ Rob Barry et al., How TikTok Serves Up Sex and Drug Videos to Minors, WALL. ST. J. (September 8, 2021), https://www.wsj.com/articles/tiktok-algorithm-sex-drugs-minors-11631052944 (accessed May 16, 2024).

drinking and driving and of drinking games.

The Journal shared with TikTok a sample of 974 videos about drugs, pornography and other adult content that were served to the minor accounts—including hundreds shown to single accounts in quick succession.

Of those, 169 were removed from the platform before the Journal shared them—whether by their creators or TikTok couldn't be determined. Another 255 were removed after being shared with the company, among them more than a dozen portraying adults as 'caregivers' entering relationships with people pretending to be children, called 'littles.'"

2.1.5 Harm: Quantity of Adult Content in TikTok (Sep 2021)

CLAIM OF HARM DRAWN FROM:

SOURCE: WSJ (Investigation Report), Sep 2021: "In some cases, TikTok creators were clear about not wanting children to see their videos, labeling them (or their accounts) as for adults only. But the app served them anyway. In one stretch of 200 videos, nearly 40% were labeled as being for adults only. In all, at least 2,800 such videos were served to the Journal's minor accounts."

2.2 Sextortion, CSAM, Predation

2.2.1 Harm: TikTok's Failure to Report Problematic Content to NCMEC

CLAIM OF HARM DRAWN FROM:

SOURCE: Kentucky V. TikTok pg. 37 para. 112-113: "112. Furthermore, in violation of 18 U.S.C. § 2258A, Defendants knowingly fail to report massive amounts of material in violation of 18 U.S.C. § 2256 and 18 U.S.C. § 1466A. And, as evidenced above, Defendants knowingly do not take feasible, adequate, and readily available measures to remove these contraband materials from TikTok in a timely fashion.

113. While Defendants have stepped up their reporting to NCMEC—reporting 362,108 reports in the last half of 2023—these efforts illustrate how wantonly negligent TikTok has been historically, with only 596 reports made in 2019 and 22,692 in 2020. Defendants' disregard for the safety of Young Users on TikTok has endangered countless children, including children in Kentucky."

2.2.2 Harm: TikTok Designs Features Practically Tailor Made for CSAM/Abuse

CLAIM OF HARM DRAWN FROM:

- **SOURCE:** <u>Kentucky V. TikTok pg. 34-35 para. 101-103</u>: "101. Defendants designed various TikTok features that promote and dramatically exacerbate sexual exploitation, the spread of CSAM, sextortion, and other socially maladaptive behavior that harms children.
 - 102. These design features enable the spread of this illegal material and create material risks to Young Users. Yet they provide value to Defendants in the form of increased user activity.

103. TikTok contains a 'Your Private Videos,' feature, where users can create and store private videos that are only visible to the user, better known as "Post-in-Private" accounts, which some refer to as posting in "Only Me" mode. [95]¹⁴ However, these accounts are used by predators to store, create, post, and share CSAM. As explained in an exposé in Forbes, '[f]rom the outside, there's nothing to see; on the inside, there are graphic videos of minors stripping naked, masturbating, and engaging in other exploitative acts. Getting in is as simple as asking a stranger on TikTok for the password.'[96]¹⁵"

2.2.3 Harm: TikTok Algo Starts Suggesting Other CSAM Stuff

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Kentucky V. TikTok pg. 34-35 para. 104: "104. Even more alarming, TikTok's algorithm actually amplifies CSAM to predators using the Post-in-Private feature. Within days of following a small number of 'Post-in-Private' accounts, TikTok's algorithm begins recommending dozens of other "Post-in-Private" accounts to follow, making it easy for predators to view and share even more CSAM.[98]¹⁶"

2.3 "Challenges"

2.3.1 Harm: TikTok Challenge Antisocial Behavior – Bomb/Gun Threat in Bag

[NOTE FROM ANUM: the direct link that works is actually: https://www.forbes.com/sites/alexandralevine/2022/11/11/tiktok-private-csam-child-sexual-abuse-material/]

[NOTE FROM ANUM: I think the Id. refers to:

https://www.forbes.com/sites/alexandralevine/2022/11/11/tiktok-private-csam-child-sexual-abuse-material/

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https://www.forbes.com/sites/alexandralevine/2022/11/11/tiktok-private-csam-child-sexual-abuse-material/

¹⁴ Gracelynn Wan, These TikTok Accounts Are Hiding Child Sexual Abuse Material In Plain Sight, Forbes (Nov. 14, 2022) (available at https://www.forbes.com/sites/alexandralevine/2022/11/11/tiktok-private-csam-child-sexual abuse-material/?sh=749d6cb63ad9)

 $^{^{15}}$ Id

¹⁶ *Id*.

CLAIM OF HARM DRAWN FROM:

- **SOURCE:** Kentucky V. TikTok pg. 30 para. 91: "91. There is no shortage of reporting on teens' use of TikTok in Kentucky, albeit for troubling reasons. As one example, the Oldham County school district was required to send a message to parents to discourage their children from participating in a "TikTok challenge" that would result in obvious criminal behavior—to wit, '[t]he challenge encourages students to video themselves telling a teacher they have a bomb or a gun in their backpack.'[85]¹⁷ Indeed, this 'challenge' resulted in three Kentucky teens being charged with terroristic threatening. [86]¹⁸"
- SOURCE: <u>WDRB, Aug 2023</u>: "The Oldham County school district has already experienced four of these incidents. They've tekn [sic] place at Oldham County High School and South Oldham High School."

2.3.2 Harm: TikTok Challenge – Subway Surfing

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** <u>CNN, Nov 2024</u>: "Six subway surfing fatalities and 181 related arrests have been recorded this year through October 27, the New York Police Department told CNN on Tuesday. Both tallies are outpacing last year's five fatalities and 118 arrests, which can yield a charge of reckless endangerment, the department said."

[NOTE FROM ANUM: this isn't explicitly tied to TikTok solely but this challenge is definitely on TikTok

The 6 fatalities and 181 arrests stat is for 2024 The 5 fatalities and 118 arrests stat is for 2023

- **SOURCE:** CNN, Nov 2024: "Once a subway surfer is found, a field team will hold the train at the next station and remove them,' the city said Thursday, noting the effort has 'helped save' 114 people, ages 9 to 33 with an average of 14 years old."
- SOURCE: New York V. TikTok pg. 24 para. 107-108: "107. Numerous teen users have injured or even killed themselves or others participating in viral pranks to obtain rewards and increase their number of "Likes," views, and followers, a foreseeable consequence of TikTok's engagement-maximizing design.

¹⁷ Dalton Godbey, *Oldham County Schools warning parents about dangerous new TikTok challenge*, WDRB (Aug. 18, 2023) (available at

https://www.wdrb.com/news/oldham-county-schools-warning-parents-about-dangerous-new-tiktok-challenge/article_51aa2034-3dd7_-11ee-b5f8-9be975173eb4.html)

Alia Shoaib, 3 high school teens charged with 'terroristic threats' after TikTok bomb threat challenge, Business Insider (Aug. 27, 2023) (available at https://www.businessinsider.com/tiktok-challenge-kentucky-high-schoolers-accused-of-terroristic-threats-2023-8).

108. For example, the mother of a 15-year-old Manhattan boy who died subway surfing—attempting to "surf" on top of a moving subway car—on February 20, 2023, found videos promoting subway surfing in a challenge on his TikTok account. He also received an ad for a ski mask, which is often used during subway surfing to hide identity.[24]¹⁹"

2.3.3 Harm: TikTok Challenges – Stealing Kias

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** New York V. TikTok pg. 24 para. 109: "109. There are also a number of reports of Kia's being stolen due to a TikTok Kia Challenge, which includes videos that show users how to hack the ignition to start many Kia and Hyundai car models. For example, four teenagers were killed in a car crash in Buffalo that police suspect was the result of the TikTok Kia Challenge.[25]²⁰

Additionally, a group of thieves stole an undercover Kia police car in the Bronx and led officers on a chase in the early morning hours which was tied to a Kia challenge.[26]²¹ A Kia Forte was stolen in New York City and crashed into a house in Greenwich causing significant damage to both the car and the residence. The ignition was damaged consistent with the TikTok Kia Challenge.[27]²²"

2.3.4 Harm: TikTok Challenges – Blackout Challenge

CLAIM OF HARM DRAWN FROM:

• SOURCE: Bloomberg, Nov 2022: "The game had a name: the blackout challenge. Kids around the world were choking themselves with household items until they blacked out, filming the adrenaline rush they got regaining consciousness and then posting the videos on social media. It's a modern incarnation of choking dares that have been around for decades, only now they're being delivered to children by powerful social media algorithms and reaching those too young to fully grasp the risk.

There was no press coverage of Arriani's death, and TikTok didn't learn about it for months. But the company was aware that kids not old enough to have profiles on its app

¹⁹ Kristin Thorne, *Mother of teen killed subway surfing files lawsuit against TikTok, Meta, MTA*, ABC7 (Feb. 20, 2024), https://abc7ny.com/subway-surfing-lawsuit-15-year-old-boy-killed-social-media/14450444/. 25 *Buffalo teen guilty in high-speed crash of stolen Kia that killed 4 passengers*, AP.com (June 15, 2023), https://apnews.com/article/tiktok-challenge-kia-fatal-crash-buffalo-d4d2f74cbb804ca41eb5eb6569957710.

²⁰ Buffalo teen guilty in high-speed crash of stolen Kia that killed 4 passengers, AP.com (June 15, 2023), https://apnews.com/article/tiktok-challenge-kia-fatal-crash-buffalo-d4d2f74cbb804ca41eb5eb6569957710.

²¹ Emma Seiwell & Rocco Parascandola, *Undercover NYPD car stolen in Bronx, possibly inspired by social media "Kia challenge"*, Daily News (New York) (Jan. 25, 2023),

https://www.nydailynews.com/2023/01/24/undercover-nypd-car-stolen-in-bronx-possibly-inspired-by-social-media-kia-challenge/.
22 Kathy Reakes, Social Media Challenge: 4 Charged After Crashing Into Greenwich Home In Stolen Car, Daily Voice (New York)

⁽May 1, 2023), https://dailyvoice.com/connecticut/greenwich/kia-challenge-4-charged-after-crashing-into-greenwich-home-in-stolen-car/.

were dying doing the blackout challenge. In the weeks before, TikTok's trust and safety team, which works to protect users and defend the company's reputation, had begun investigating a similar incident in Palermo, Sicily. A 10-year-old girl, Antonella Sicomero, had been found hanging from a towel rack in January with a bathrobe belt around her neck. Antonella's parents told local media she'd died playing 'an extreme game on TikTok.' The Palermo prosecutor's office opened an investigation, and Italy's privacy watchdog ordered the social network to remove any user in the country whose age it couldn't verify as being over 13, alleging that it was failing to abide by its own rule to keep preteens off the app."

- SOURCE: <u>Bloomberg</u>, <u>Nov 2022</u>: "The blackout challenge has been linked to the deaths of at least 15 kids age 12 or younger in the past 18 months, according to data Businessweek compiled from news reports, court records and interviews with family members. At least five children age 13 and 14 also died in that time. Headlines in the wake of the deaths frequently singled out TikTok, but police departments denied Freedom of Information Act requests to see incident reports that might help prove which platform was involved, if any."
- **SOURCE:** <u>Bloomberg, Nov 2022</u>: "When Musical.ly was absorbed into TikTok, the challenges came with it.

These challenges resonated with teens stuck at home during the first wave of Covid. They evolved from choreographed dance routines into family-bonding trends—things like showing four generations in one video or dressing up pets. In 2020, TikTok's downloads jumped 75%. To amplify the surge, company representatives reached out to influencers to encourage them to try different challenges.

When some turned dangerous, with kids climbing stacked milk crates, chugging Benadryl or vandalizing school property, TikTok established a "harm spectrum" to help its moderators decide what could stay up and what should come down, according to Eric Han, the company's US head of safety. The cinnamon challenge, in which users ate a spoonful of powder, could lead to minor lung damage, but it was deemed unlikely to cause catastrophic harm, so the trust and safety team attached a warning to the content and left it up. They had other pressing issues to solve, including election integrity, combating hate speech and coping with the Trump administration's threat to ban TikTok over national security concerns.

Amid that chaos and the app's explosive growth, the challenges kept getting riskier. In the skull-breaker challenge, two people would trick a third to jump up between them and then trip the leaper in midair, resulting in reports of concussions and brain damage. The outlet challenge, which involves dropping a penny onto the prongs of a partly plugged-in phone charger to watch it spark, led to students being charged with property destruction. The fire challenge, in which kids doused objects with accelerant and set them on fire, sometimes ended in third-degree burns. And the blackout challenge has been outright

deadly."

• SOURCE: Bloomberg, Nov 2022: "US health officials seem to have studied deaths linked to choking games only in the years before the social media boom. A report published by the Centers for Disease Control and Prevention in 2008 found that 82 children from age 6 to 19 had died playing the choking game between 1995 and 2007, the year the first iPhone was released. The government hasn't published another study on the issue since, but anecdotal reports from researchers suggest social media has amplified the problem.

Judy Rogg became an advocate seeking to raise awareness of the choking challenge after her 12-year-old son, Erik, died playing the game in 2010, long before TikTok was created. Rogg started a nonprofit called Erik's Cause, which helps train schools about how to handle online risks and gathers statistics on choking-game-related deaths. She's found that since 2018 at least 33 kids younger than 13 have died. 'It's grown more popular with social media,' Rogg says. 'It's absolutely exploded.'

The challenges bounce across platforms, morphing into new iterations with different hashtags and code words as users sidestep safety restrictions. The blackout challenge goes by many names, from the more obvious 'choking game' and 'pass-out challenge,' to the subtler 'flatliner' and the obscure 'space monkey.' Kids misspell words to avoid detection, like 'space monkee' or 'blackout tr1ck.' Videos with some of these titles exist on TikTok today, showing kids taking deep breaths and pushing on one another's chests until they faint or choking each other with their hands. You can see kids temporarily lose consciousness then wake up laughing. One caption says: 'Craziest feeling ever.'"

- SOURCE: Bloomberg. Nov 2022: "A global army of about 40,000 moderators is responsible for reviewing videos at TikTok, three-quarters of whom work on contract. Each looks at about 1,000 videos a day, taking around 20 seconds to review each one, according to former employees. They say the system isn't geared toward finding underage users. Posts are filtered to moderators by artificial intelligence software that scans every video uploaded—10 billion in the first quarter of this year alone—and automatically removes anything that would violate a community guideline, such as nudity or violence. If the software is unsure, it sends the material to a human to assess. Every video that has more than about 3,000 views (the number varies across countries) is also sent to a moderator, ensuring that the most popular content gets a human review. Kids younger than 13 are unlikely to post content that violates guidelines or reaches that many eyes, though."
- SOURCE: <u>Bloomberg</u>, <u>Nov 2022</u>: "After the funeral, the Arroyos asked Arriani's friends what game she'd been playing when she died. That's when they first heard the words 'blackout challenge.'

They read the news reports as more kids kept dying. Joshua Haileyesus was found in

Colorado two months later with a shoelace around his neck; his father, Zeryihun, said he'd died attempting TikTok's blackout challenge. Three more children died in June, also resulting in blackout challenge headlines: Nate Squires, 13, in Massachusetts; LaTerius Smith Jr., 9, in Tennessee; and James Boyd-Gergely, 14, in Australia. In July, Lalani Walton, 8, was found hanging in her bedroom, also in Tennessee. In September, Hayden Robert Craig, 10, was found hanging from a tree in his backyard in Georgia.

Police didn't publicly link any of these deaths to TikTok. Other fatalities may have gone unreported, according to Rogg, the Erik's Cause founder. 'Unfortunately, many of these deaths are misclassified as suicide,' she says. The only way to prove a child was participating in the challenge or to figure out which platform was involved is for officials to conduct a psychological autopsy—an investigation of the child's online network and friendship groups to reconstruct what they may have been thinking—or order a forensic analysis of their devices to determine what they'd been watching online.

Officers in Clarksville, Tennessee, where Lalani Walton died, did just that. According to a lawsuit her parents filed, police said the analysis of her phone showed she'd spent hours watching blackout challenge videos on TikTok on a road trip the day before her death. (A spokesman for the Clarksville Police Department declined to comment.) After Hayden Robert Craig's body was found in Georgia, a policeman noticed his iPad nearby, according to an incident report seen by Businessweek. It refreshed to show a TikTok of a black screen with a bloody knife emoji."

• SOURCE: Bloomberg, Nov 2022: "Members of TikTok's Asia-Pacific safety advisory council, which consists of outside experts, raised concerns about the blackout challenge being linked to deaths in their region, too. Linh Phuong Nguyen, a Vietnamese expert in child online safety who's on the council, says several kids died attempting the challenge in Cambodia, the Philippines and Vietnam. One, from Ho Chi Minh City, was only 5. She used a piece of chiffon to hang herself from her bunk bed after viewing the challenge on YouTube. (A spokeswoman for YouTube says the platform removes blackout challenge videos and bans 'any activity that prevents breathing or can lead to suffocation.')

Some on the council suggested to TikTok and other social media platforms that they build an alliance to stop dangerous challenges from spreading, people familiar with the private meetings say. But TikTok had few friends in Silicon Valley. According to the Washington Post, one potential ally, Meta Platforms Inc., had hired opposition researchers in 2021 to plant news stories about how TikTok was spreading dangerous challenges that had actually originated on Facebook. Meta didn't deny the smear campaign to turn the public against its biggest rival, whose format and algorithm it was simultaneously working to copy."

• **SOURCE:** <u>Bloomberg. Nov 2022</u>: "After Antonella Sicomero's death in January 2021 and the ban on unverified TikTok accounts in Italy, the company agreed to reverify the ages of the country's 12.5 million users. It wound up deleting half a million accounts.

TikTok also told its regional managers to keep an eye out for any blackout challenge content in their markets, removed videos promoting such content and ended users' ability to search for it in the app. TikTok declined to reveal how many videos were removed, but Cullinane says the company has never found any evidence of the challenge trending on the platform. She points to a survey it commissioned that year showing that only 0.3% of teens said they'd taken part in a challenge they considered 'really dangerous.' The global survey also found that 2% said they'd participated in challenges they deemed 'risky and dangerous.' Despite the measures TikTok has taken, the deaths keep happening."

• SOURCE: Bloomberg, Nov 2022: "The lawsuit filed by the Arroyo and Walton families alleges that TikTok is liable for their deaths because its algorithm recommended the challenge to the girls and was unable to stop it from spreading."

2.4 Suicidal Ideation and Self-Harm

2.4.1 Harm: After 5-6 Hrs on TikTok, 1 in 2 Videos Were Mental Health Related and Potentially Harmful for Accounts Having Shown Any Interest in Mental Health

CLAIM OF HARM DRAWN FROM:

• SOURCE: Amnesty International (Press Release of Research), Nov 2023: "Technical research in partnership with the Algorithmic Transparency Institute and Al Forensics using automated accounts showed that after 5-6 hours on the platform, almost 1 in 2 videos were mental health-related and potentially harmful, roughly 10 times the volume served to accounts with no interest in mental health."

2.4.2 Harm: 3 to 20 Minutes in, Half of Videos Served Related to Mental Health and Many Romanticized or Encouraged Suicide

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Amnesty International (Press Release of Research), Nov 2023: "There was an even faster 'rabbit hole' effect when researchers manually rewatched mental health-related videos suggested to 'sock puppet' accounts mimicking 13-year-old users in Kenya, the Philippines and the USA.

Between 3 and 20 minutes into our manual research, more than half of the videos in the 'For You' feed were related to mental health struggles with multiple recommended videos in a single hour romanticizing, normalizing or encouraging suicide."

2.4.3 Harm: Within 36 Minutes, a New Account Engaging with Videos on Depression Gets 93% Content on Sad Topics

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Bloomberg, Apr 2023: "Seven months later [from Nov 2020, ref one para up in article], the Wall Street Journal published an investigation that had involved monitoring more than 100 automated accounts to track how TikTok's algorithm works. Within 36 minutes, the newspaper reported, a bot programmed to engage with videos about depression was fed a stream of content that was 93% about sad topics."

2.4.4 Harm: 74.6% of Teens Seeing Self-Harm/Suicide Content on Per a 2022 Study

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** New Mexico V. Snap pg. 126 para. 314: "314. In March 2022, the National Association of Attorneys General cited a study from Bark, which analyzed 3.4 billion messages in 2021 across 30 apps (including Snap and TikTok) to find that 74.6% of teens were involved in a self-harm/suicidal situation.[132]²³"

2.4.5 Harm: TikTok Knows Algo Sends Gen Z Streams of Depression / Suicide-Glorifying Video

CLAIM OF HARM DRAWN FROM:

• SOURCE: Bloomberg, Apr 2023: "Concerns about TikTok's recommendation engine have been raised internally since at least 2020. That's when Charles Bahr, a former ad sales manager in TikTok's office in Germany, says he warned his superiors the algorithm was sending Generation Z users endless streams of depressing and suicide-glorifying videos. Bahr spent a year and a half with the company, joining in July 2020, at age 18. He'd founded two tech startups as a teenager and was advising politicians and businesses on how to master TikTok when he was hired."

2.4.6 Harm: TikTok Moderation Isn't Catching Harmful Suicide/Self-Harm Videos Violating Rules

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** <u>Bloomberg, Apr 2023</u>: "When he first started using the app, he says, his For You feed was amusing and fun. He loved the product and was proud to wear his TikTok T-shirt. <u>Once he started posting videos identifying himself as an employee, though, many</u>

²³ State attorneys want TikTok and Snap to support third-party parental control apps, TechCrunch (Mar. 30, 2022). https://techcrunch.com/2022/03/30/tiktok-snapchat-parental-controls-attorneys-general/

in his growing following began to forward him disturbing videos that violated TikTok's rules, urging him to remove them. One of the first scary videos he remembers being sent was of a man shooting himself in the head. As Bahr watched clips like this, sometimes passing them to the trust and safety team for help, his feed began to warp. 'More and more depression, suicide and self-harm content came on,' he says. Some days it led him to cry."

2.4.7 Harm: Prevalence of TikTok Videos / Algorithm Promoting Videos About Hopelessness and Death

CLAIM OF HARM DRAWN FROM:

• SOURCE: Bloomberg. Apr 2023: "It's impossible to know why Nasca ended his life. There are often multiple factors leading to suicide, and he left no note. But two weeks after his death, his mother, Michelle, started searching his social media accounts, desperate for answers. When she opened the TikTok app on his iPad, she found a library of more than 3,000 videos her son had bookmarked, liked, saved or tagged as a favorite. She could see the terms he'd searched for: Batman, basketball, weightlifting, motivational speeches. And she could see what the algorithm had brought him: many videos about depression, hopelessness and death."

2.5 Body Image Issues and Eating Disorders

2.5.1 Harm: 52% of Teen Girls Use Image Filters Daily, 50% Report Not Looking Good Without Editing, and 77% Report Trying to Alter or Hide Part of Their Body Using Filters

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** New York V. TikTok pg. 22 para. 99: "99. In March 2023, the personal care brand Dove launched a campaign for users to #TurnYourBack on the Bold Glamour filter, citing studies that found that 52% of girls said they use image filters every day, and 80% had used a social media platform to change their appearance before the age of 13. [20]²⁴ Studies also show that 50% of girls believe they do not look good without editing and 77% reported trying to change or hide at least one part of their body using these filters. [21]²⁵"

2.5.2 Harm: Even Users with High Self-Esteem Felt They Looked 44% Worse Before Image Edited With Filter

CLAIM OF HARM DRAWN FROM:

²⁴ Oct. 6, 2024). 20 Dove, *Dove Invites You To Take A Stand And #TurnYourBack To Digital Distortion*, PR NEWSWIRE (Mar. 8, 2023),

https://www.prnewswire.com/news-releases/dove-invites-you-to-take-a-stand-and-turnyourback-to-digital-distortion-301766207.html. ²⁵ Id

SOURCE: New York V. TikTok pg. 23 para. 101: "101. A recent study found that even users reporting a higher initial level of self-esteem felt they looked 44% worse before their image was edited using a filter. In a follow-up survey, 'when the AR [augmented reality] filter increased the gap between how participants wanted to look and how they felt they actually looked, it reduced their self-compassion and tolerance for their own physical flaws.'[23]²⁶"

2.5.3 Harm: Within 30 Minutes of a 13 Y/O Joining TikTok, the Algo Starts Recommending Eating Disorder and Self-Harm Content, Sometimes in as Little as 3 Minutes (Per NYT Dec 2022)

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Nebraska V. TikTok pg. 38-39 para. 107-108: "107. U.S. journalists in particular have documented and alerted Defendants to the dangers of TikTok for young users. In 2021, The Wall Street Journal ('The Journal') reported that 'TikTok is flooding teen users with videos of rapid-weight-loss competitions and ways to purge food that health professionals say contribute to a wave of eating-disorder cases spreading across the country.' This type of content harms teens by preying upon insecurities and exacerbating body image issues, disordered eating, and self-harm.[74]²⁷

108. A year later, The New York Times reported that TikTok still 'starts recommending content tied to eating disorders and self-harm to 13-year-olds within 30 minutes of their joining the platform, and sometimes in as little as three minutes.'[75]²⁸"

2.5.4 Harm: Banned Eating Disorder Content Is Readily Available on TikTok

CLAIM OF HARM DRAWN FROM:

SOURCE: Nebraska V. TikTok pg. 46 para. 130: "130. Popular hashtags like #ed—a
 TikTok abbreviation for "eating disorder"—provide easy access to content promoting
 disordered eating. Other popular hashtags that feature unhealthy messages for minor
 users—especially teen girls—include #skinny (398.4k posts), #thin (135.9k posts), and
 #skinnygirl (21.2k posts)."

²⁶ Matthias Bastian, *TikTok, Instagram, Snapchat – AR Filters Change Self-Perception* (Dec. 26, 2021), https://mixed-news.com/en/tiktok-instagram-snapchat-ar-filters-change-self-perception/.

²⁷ Tawnell D. Hobbs et al., 'The Corpse Bride Diet': How TikTok Inundates Teens With Eating-Disorder Videos, WALL ST. J. (December 17, 2021), https://www.wsj.com/articles/how-tiktok-inundates-teens-with-eating-disorder-videos-11639754848 (accessed May 16, 2024).

²⁸ Sapna Maheshwari, *Young TikTok Users Quickly Encounter Problematic Posts*, Researchers Say, N.Y. TIMES (December 14, 2022), https://www.nytimes.com/2022/12/14/business/tiktok-safety-teens-eating-disorders-self-harm.html (accessed May 16, 2024).

 SOURCE: <u>WSJ (Investigation Report)</u>, <u>Sep 2021</u>: "Content that glorifies eating disorders is banned on the app. However, TikTok served the Journal accounts several such videos."

2.5.5 Harm: Exposure to Any "Body" Media, Positive or Negative, Results in Increased Appearance Comparison

CLAIM OF HARM DRAWN FROM:

• SOURCE: Kentucky V. TikTok pg. 60 para. 195: "195. A 2022 study[163]²⁹—focusing exclusively on TikTok users—showed that TikTok is detrimental to body image, with usage being associated with body dissatisfaction. TikTok also caused indirect effects by increasing upward appearance comparison[164]³⁰ and body surveillance, which in turn increases body dissatisfaction. While researchers hypothesized that being exposed to body positive media could function as a protective factor against TikTok causing negative body image, the results actually showed the complete opposite, with people who consumed high levels of this type of media engaging in increased appearance comparison.[165]³¹"

2.6 Negative Social Comparison

[none]

2.7 Bullying

[none]

2.8 Drugs

2.8.1 Harm: TikTok Serving Minors TONS of Content on Drug Use (as of Sep 2021)

CLAIM OF HARM DRAWN FROM:

SOURCE: <u>Nebraska V. TikTok pg. 41 para. 113</u>: "113. Likewise, The Journal reported,
 'TikTok served one account registered as a 13-year-old at least 569 videos about drug

²⁹ Danielle Bissonette Mink, Dawn M. Szymanski, *TikTok use and body dissatisfaction: Examining direct, indirect, and moderated relations*, Body Image, Volume 43, 2022, Pages 205- 216, ISSN 1740-1445, https://doi.org/10.1016/j.bodyim.2022.09.006 (last visited April 9, 2024).

³⁰ "Upward appearance" refers to appearance-based social comparisons, specifically those made to others with perceived "better" bodies, while "body surveillance" is a preoccupation with monitoring one's physical appearance and attractiveness. See, e.g., <a href="https://www.cognitivebehaviorassociates.com/blog/does-tiktok-cause-body-dysmorphia/#:~:text=Research%20has%20shown%20that%20TikTok,increases%20body%20dissatisfaction%20even%20more (last visited April 9, 2024).

³¹ Danielle Bissonette Mink, Dawn M. Szymanski, *TikTok use and body dissatisfaction: Examining direct, indirect, and moderated relations*, Body Image, Volume 43, 2022, Pages 205- 216, ISSN 1740-1445, https://doi.org/10.1016/j.bodyim.2022.09.006 (last visited April 9, 2024).

use, references to cocaine and meth addiction, and promotional videos for online sales of drug products and paraphernalia.' According to The Journal, '[h]undreds of similar videos appeared in the feeds of the Journal's other minor accounts.' Other videos shown to the teen accounts 'encouraged eating disorders and glorified alcohol, including depictions of drinking and driving and of drinking games.'[81]³²"

• **SOURCE:** <u>WSJ (Investigation Report)</u>, <u>Sep 2021</u>: "TikTok served one account registered as a 13-year-old at least 569 videos about drug use, references to cocaine and meth addiction, and promotional videos for online sales of drug products and paraphernalia. Hundreds of similar videos appeared in the feeds of the Journal's other minor accounts."

2.9 Prevalence of Negative Experiences

2.9.1 Harm: 18% of U.S. TikTok Teens Had a Harmful Online Experience, 9% Experienced Sexual Solicitation

CLAIM OF HARM DRAWN FROM:

- SOURCE: Kentucky V. TikTok pg. 77-78 para. 246: "246. In May 2021, the child protection non-profit Thorn published quantitative research, based on data collected in 2020.[226]³³ According to this report, TikTok ranked at the top among platforms for various harms caused to minors, with 18% of survey participants reporting a potentially harmful online experience on TikTok.[227]³⁴ Thorn found the following regarding harm on TikTok:
 - 18% of surveyed minors reported having had a potentially harmful online experience on TikTok.
 - 9% of all respondents said they have had an online sexual interaction, which includes being asked to send a nude photo or video, go 'on cam' with a sexually explicit stream, being sent a sexually explicit photo (of themselves or another child), or sexually explicit messages, etc."

2.10 Poor Mental Health Outcomes

[none]

[NOTE FROM ANUM: I think the Id. refers to: WSJ, Jul 2021]

³² Id.

³³ Thorn, Responding to Online Threats: Minors' Perspectives on Disclosing, Reporting, and Blocking Findings from 2020 quantitative research among 9–17 year olds (May 2021), https://info.thorn.org/hubfs/Research/Responding%20to%20Online%20Threats_2021-Full-Report.pdf?utm_campaign=H2D%20report&utm_source=website (last visited April 9, 2024).

2.11 Other Miscellaneous

[none]

3. Snapchat

3.1 Adult Content

[Most of the adult content info basically is more exploitative, it felt wrong to call anything from Snap "adult content" rather than "predation" so see section 3.2 sextortion, CSAM, Predation]

3.2 Sextortion, CSAM, Predation

3.2.1 Harm: Thousands of Teen Boys Sextorted, Dozens of Suicides as of 2023

CLAIM OF HARM DRAWN FROM:

- **SOURCE:** WSJ, Nov 2023: "An online nude-photo scam is ensnaring thousands of teen boys and causing emotional trauma. Scammers posing as teen girls befriend boys online, share nude photos of a girl and then ask for nude photos in return. Once the boy reciprocates, the schemer demands money be sent by a peer-to-peer payment app and threatens to share the boy's photos with his social-media followers if he doesn't pay."
- **SOURCE:** WSJ, Nov 2023: "Three years ago, the National Center for Missing and Exploited Children received fewer than 10 reports of this sort of financial extortion. Last year, the congressionally mandated nonprofit received more than 10,000—and has already received 12,500 this year.

In a survey of more than 6,000 teens and young adults in the U.S. and five other countries conducted by Snapchat's parent company, 65% of respondents said they or their friends have been targeted in schemes where unknown attackers obtained explicit personal imagery or other private information, then threatened to release the material to friends and family. The majority of those approached were boys.

Boys are easily lured because they respond to sexual photos more readily than girls do, says Lauren Coffren, NCMEC's executive director. As soon as boys send their own photos, she says, 'The immediate response back is, 'I'm going to ruin your life if you don't pay me." More than a dozen teen boys in the U.S. have killed themselves in instances involving these scams, she adds. By law, cases involving child sexual materials need to be reported to NCMEC."

[NOTE FROM ANUM: WSJ 2023. The survey referenced is https://www.weprotect.org/blog/two-thirds-of-gen-z-targeted-for-online-sextortion-new-sn ap-research/ and it is linked from the text "survey of more than 6,000 teens and young adults"]

3.2.2 Harm: Snapchat Gets Rated Worst for Sextortion, CSAM, Predation (Sources from 2021 to 2024)

CLAIM OF HARM DRAWN FROM:

- **SOURCE:** New Mexico V. Snap pg. 16-17 para. 55: "55. Snapchat is perhaps the most popular social media platform for children to send sexually explicit images of themselves and for inappropriate sexual interaction with adults.[27]³⁵
 - #1 parent-reported platform for sharing of child-sex abuse material (Parents Together, Apr. 2023)
 - #1 platform where most minors reported having an online sexual interaction (Thorn Report, Feb. 2023)
 - #2 highest platform used for sextortion (Snapchat 38%, Instagram 42% 'by far the most frequently used social media environments where victims were targeted' (Canadian Centre for Child Protection, Aug. 2022)
 - #3 for platforms on which minor users reported having a sexual experience with an adult (Thorn Report, Feb. 2023)
 - #3 parent-reported platform for sexually explicit requests to children (Parents Together, Apr. 2023)
 - Snapchat was the most identified platform for the recruitment of sex trafficking victims from 2021-2023 (2023 Federal Human Trafficking Report)"
- **SOURCE:** New Mexico V. Snap pg. 17 para. 56: "56. Additionally, the National Center on Sexual Exploitation's Director of Corporate and Strategic Initiatives Lina Nealon noted,

'In my conversations with law enforcement, child safety experts, lawyers, survivors, and youth, I ask them what the most dangerous app is, and without fail, Snap is in the top two. Just in the past few months, three separate child protection agencies noted Snapchat to be the top app together with Instagram for sextortion, one of the top three places children were most likely to view pornography outside of pornography sites, and the number one online site where children were most likely to have a sexual interaction, including with someone they believe to be an adult."

• SOURCE: New Mexico V. Snap pg. 17 para. 57: "57. Since 2016, Snap has been named practically every year, including 2023, in the National Center on Sexual Exploitation's ('NCOSE') Dirty Dozen List, which exposes twelve mainstream entities for facilitating or profiting from sexual abuse and exploitation.[28]³⁶"

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³⁵ https://endsexualexploitation.org/wp-content/uploads/Snapchat-Proof-Compilation_July-2023_DDL-2023.pdf (at page 2).

³⁶ https://endsexualexploitation.org/dirtydozenlist-2021/

• SOURCE: New Mexico V. Snap pg. 23-24 para. 67: "67. Financial sextortion is one of the most rapidly growing crimes targeting American youth.[40]³⁷ In January 2024, the Network Contagion Research Institute (NCRI) published its Threat Intelligence Report which warned of an 'exponential increase in sextortion cases targeting minors and youth on social media platforms over the past 18 months. During this period, the FBI reported a 1,000% increase in financial sextortion incidents, while NCMEC reported a 7,200% increase in financial sextortion targeting children from 2021-2022. A Reddit community on sextortion has more than 1 million monthly unique viewers and most of its comments are nearly always victims of sextortion.[41]³⁸1 This surge has been characterized by the FBI Director and international partners as a 'global crisis that demands everyone's attention.'[42]³⁹"

3.2.3 Harm: Majority of Sextortion Online Now Happening on Snapchat

CLAIM OF HARM DRAWN FROM:

• SOURCE: New Mexico V. Snap pg. 50-51 para. 107: "107. Snap continued to discuss-internally-evidence of ongoing child sexual exploitation on its platform. [redacted] The attached article, 'Jump in sexual assaults of children groomed online,' called out the prevalence of child sexual abuse on Snapchat stating, 'They found a big upswing since 2015 in perpetrators using social media platforms, especially Snapchat and dating sites, to communicate with children aged between 12 and 17 before meeting and assaulting them.' The article continued, 'In the early years of the study, between 2007 and 2013, three-quarters of offenders had used Facebook to communicate with child victims, but between 2014-2016 dating apps, many that children should be too young to access, started to feature. Between 2017 and 2020, Snapchat had been the platform employed by nearly half of offenders."

[NOTE FROM ANUM: the article referenced here doesn't seem to be cited in references but I searched for the text and found it: <u>The Royal Children's Hospital Melbourne</u>, <u>Jun</u> 2021]

SOURCE: New Mexico V. Snap pg. 66 para. 153: "153. [redacted] the 2023 Federal
Human Trafficking Reported noted that Snapchat was one of the 'Top Platforms used in
the recruitment of Victims 2019-2023.'[58]⁴⁰"

39 Id. citing

https://www.fbi.gov/news/press-releases/international-law-enforcement-agencies-issue-joint-warning-about-global-financial-sextortion-crisis. See also https://www.weprotect.org/blog/two-thirds-of-gen-z-targeted-for-online-sextortion-new-snap-research/40 2023 Federal Human Trafficking Report at page 63.

³⁷ A Digital Pandemic: Uncovering the Role of 'Yahoo Boys' in the Surge of Social Media-Enabled Financial Sextortion Targeting Minors, NCRI, Paul Raffile, et al. (Jan. 2024).

³⁸ *Id*. at 4.

3.2.4 Harm: Snap Has Been Told Its Platform Enables Sextortion, CSAM, and Predation

CLAIM OF HARM DRAWN FROM:

- SOURCE: New Mexico V. Snap pg. 3-4 para. 6-7: "6. Adult strangers can then take advantage of Snap's algorithm, its appearance of safety and impermanence, and features like Snap Map, which allows them to find and meet these children in the real world. For years, Snap has been on notice from both external and internal sources of the dangers its platform presents for children but has nonetheless failed to stem the tide of damaging sexual material, sexual propositions, and dangerous drugs delivered to children. In short, Snap's design—especially its focus on ephemeral content—is uniquely situated to facilitate illegal and illicit conduct and conversations. Snap's algorithm serves up children to adult predators, and Snap Map lets them find them in the real world. Snap knows all of this.
 - 7. Snap was specifically aware, but failed to warn children and parents, of 'rampant' and 'massive' sextortion on its platform—a problem so grave that it drives children facing merciless and relentless blackmail demands or disclosure of intimate images to their families and friends to suicide."
- SOURCE: New Mexico V. Snap pg. 16 para. 54: "54. Due to Snapchat's lack of parental controls and dangerous features that make it easy for predators to find and connect with young victims, there has been a steady increase in child sexual offenders utilizing the platform. With widespread media coverage, government inquiries, and increased public outrage, Snap knew, or should have known, that its platform was endangering its underage users."
- SOURCE: New Mexico V. Snap pg. 33 para. 82: "82. The ease with which accounts
 representing minors were located and targeted by malicious users highlights the manner
 in which Snap enables sexual exploitation and abuse on its platforms."
- **SOURCE:** New Mexico V. Snap pg. 60 para. 135: "In July 2023, Snap again was warned that 'Snapchat has served as a hub for predators seeking to contact, groom, and abuse kids, as Snapchat's very design of disappearing messages and secrecy make it an attractive platform to those who desire to harm children. In fact, when we ask law enforcement, survivors, lawyers, and other child online safety experts which platforms they believe are the most dangerous for children, without fail, Snapchat is named in the top three and is often cited as the worst.'[52]⁴¹"

3.2.5 Harm: Snapchat's Very Platform Structure Enables Sextortion, CSAM, Predation

CLAIM OF HARM DRAWN FROM:

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⁴¹ https://endsexualexploitation.org/wp-content/uploads/Snapchat-Proof-Compilation_July-2023_DDL-2023.pdf

- **SOURCE:** New Mexico V. Snap pg. 15-16 para. 51-52: "51. Snap marketed Snapchat as 'temporary social media' that would allow users to show a more authentic, unpolished, and spontaneous side of themselves.[24]⁴² The ephemeral feature foreseeably and quickly drove users, including minors, to exchange sexually explicit 'Snaps,' sometimes called 'sexts' even though they are photos. Because of its brand identity among millennials as the original ephemeral-messaging app, Snapchat almost immediately became known as the 'sexting' app—a fact that Snap would have known from public sources.[25]⁴³
 - 52. Snap also became the predominant forum for 'sextortion,' whereby predators solicit and capture sexually explicit images of users, including children lulled into a false sense of security by Snap's promises that images will disappear, and then extort senders to send money to avoid distribution of the Snap to friends and family. Especially because teenagers are already anxious about their social image, parents and law enforcement report numerous children driven to suicide by the shame and fear of sexually explicit Snaps.[26]⁴⁴"
- SOURCE: New Mexico V. Snap pg. 57 para. 126: "126. In January 2018, a professor at John Jay College of Criminal Justice cautioned that, 'Snapchat has become a haven for child predators to be able to both exchange child pornography with each other, and to be able to induce children to send pictures of them to the predator. And we're also seeing difficulty in law enforcement being able to investigate due to the safeguards Snapchat has in deleting both snaps and 'stories' after certain amounts of time.' [50]⁴⁵"
- **SOURCE:** New Mexico V. Snap pg. 57 para. 127: "127. Senator Marsha Blackburn again warned Snap in a July 2019 letter that 'Snapchat's disappearing videos are a child predator's dream. Due to the auto-deleting feature, which allows individuals to set the erasure of photo evidence within seconds, predators are far more likely to use Snapchat than other platforms."

[NOTE FROM ANUM: the second link is actually: https://techcrunch.com/2012/05/12/snapchat-not-sexting/]

[NOTE FROM ANUM: the first link is: https://www.washingtonpost.com/parenting/2023/10/02/teen-boys-sextortion/ and the second link is: https://www.nytimes.com/2024/05/15/nyregion/social-media-scam-sextortion.html]

⁴² Jenna Wortham, *A Growing App Lets You See It, Then You Don't, New York Times* (Feb. 9, 2013), https://www.nytimes.com/2013/02/09/technology/snapchat-a-growing-app-lets-you-see-it-then-you-dont.html? r=0

⁴³ Megan Dickey, *Let's Be Real: Snapchat Is Totally Used for Sexting*, Bus. Insider (Nov. 30, 2012), https://www.businessinsider.com/snapchat-growth-sexting-2012-11; Billy Gallagher, *No, Snapchat Isn't About Sexting, Says Co-Founder Evan Spiegel*, TechCrunch (May 12, 2012), https://techcrunch.com/2012/05/12/snapchat-not-sexting/b (describing an interview in which a journalist asked the CEO of Snap about the product's potential use for sexting).

⁴⁴ See, e.g., Chris Moody, "'IDK what to do': Thousands of teen boys are being extorted in sexting scams'" Washington Post (Oct. 2, 2023); Sarah Maslin Nir, 'Chelsea' Asked for Nude Pictures. Then the Sextortion Began, New York Times (May 15, 2024).

⁴⁵ Snapchat 'Has Become A Haven' For Child Preadtors, Criminal Justice Scholar Says, WBUR, (Jan. 23, 2018). https://www.wbur.org/hereandnow/2018/01/22/snapchat-child-predators

• **SOURCE:** New Mexico V. Snap pg. 16-17 para. 55: "129. [redacted] a publication from a British research firm, Revealing Reality, titled 'Not Just Flirting.' Summarizing its findings, the report noted, '82% reported that when people send nudes, they 'usually' or 'always' used Snapchat to do so."

[NOTE FROM ANUM: the citation is given in the next paragraph but it corresponds to Revealing Reality Report, Jun 2022 and the context of the rest of the paragraph suggests it's young people who are the 82%]

- SOURCE: New Mexico V. Snap pg. 62 para. 141: "141. In November 2019, NCOSE advised, 'Online platforms like Instagram and Snapchat 'remove previous barriers to grooming victims for child abusers...because apps make minors' accounts easily discoverable and accessible."
- SOURCE: New Mexico V. Snap pg. 82 para. 202: "202. In 2014, Snap introduced Snapcash, a mobile payment service. Snapcash provided a way for users to pay for private content with little to no oversight.[73]⁴⁶ Snapcash enabled CSAM and other exploitation, as users were paid with Snapcash to send, receive, create, publish, save, accept, or otherwise participate in CSAM networks. It also enabled predators to extort cash from adolescent users by threatening to disseminate CSAM to other users if they did not pay or send additional sexually explicit photographic or video content."
- **SOURCE:** New Mexico V. Snap pg. 82 para. 204: "204. NCOSE placed Snapchat on its Dirty Dozen list for 2016 and 2017, noting the built-in Snapcash feature 'enables users to monetize and profit from the exchange of sexual content."
- **SOURCE**: New Mexico V. Snap pg. 83 para. 206: "206. Snapcash was finally removed from Snapchat in August 2018 because of excessive misuse of the feature.[74]⁴⁷ Upon information and belief, Snap failed to report suspicious uses of Snapcash to law enforcement."

3.2.6 Harm: New Mexico DOJ Investigation: Scope and Sophistication of Sextortion, CSAM, and Predation Networks and Info Linked to Snap

CLAIM OF HARM DRAWN FROM:

⁴⁶ Kurt Wagner, *Snapchat to Let You Send Money to Friends, Thanks to Square*, Vox, (Nov. 17, 2014)

[[]NOTE FROM ANUM: the direct link is: https://www.vox.com/2014/11/17/11632930/snapchat-to-let-vou-send-money-to-friends-thanks-to-square]

⁴⁷ Christian Hargrave, Snapcash Goes Away After Excessive Feature Misuse, App Developer Magazine (July 25, 2018).

- SOURCE: New Mexico V. Snap pg. 37 para. 89: "89. The Department of Justice's investigators found that CSAM is exchanged widely on Snap's platform. Searching the unindexed deep web, investigators identified more than 10,000 records for the last year alone related to Snap and CSAM, including information related to minors younger than 13 years old being sexually assaulted."
- SOURCE: New Mexico V. Snap pg. 33-34 para. 84: "84. The victimization of children through Snapchat is commonplace, and further illustrated by the volume of explicit images linked to Snap on the dark web—a virtual yearbook of child sexual exploitation. The New Mexico Department of Justice's investigation uncovered an ecosystem of sites dedicated to sharing stolen, non-consensual sexual images from Snap accounts, some of whom appear to be underage. Rudimentary searches for 'snapchat leaks' or 'snapchat teens' confirm the existence of sexually explicit images that are captured on Snap, despite the illusory safety of ephemeral images, and then sold. Results included links selling stolen Snap accounts or instructions on how to break into Snap accounts, and long lists of links for CSAM and accounts sharing CSAM images and CSAM videos."
- **SOURCE:** New Mexico V. Snap pg. 35 para. 86: "86. One of these dark web sites include a comprehensive handbook for online sextortion that highlights the manner in which Snap's design and deception enabled predators to obtain, distribute, and extort child sexual exploitation material on its platform. The author dedicated two chapters to Snapchat manipulation and abuse [shown in the figure]. (Fig. 12)."
- SOURCE: New Mexico V. Snap pg. 36 para. 88: "88. The instructions [from the sextortion manual NM DOJ found] direct users to pose as teens age 13-17, and state that teenagers younger than 18 are most likely to be sextortion victims. New Mexico is listed as one of the top 10 states with the highest success rate of 'receiving sexually explicit photos from targets.' (Fig. 14) [Fig 14 shows the top 10 states and top 3 countries]."
- **SOURCE:** New Mexico V. Snap pg. 83 para. 207-208: "207. In 2016, Snap introduced another problematic Snapchat feature 'My Eyes Only,' basically a 'hidden vault,'[75]⁴⁸ which enables and encourages users to hide harmful content in a special tab that requires a passcode. The content self-destructs if a user attempts to access the hidden folder with the wrong passcode. Content cannot be recovered from 'My Eyes Only'--allegedly even by the company itself.
 - 208. When Snap designed 'My Eyes Only' it knew or should have known that this feature would likely be used to store potentially illegal material, sexually explicit photos and CSAM.[76]⁴⁹ This dangerous feature increases the risk that Snapchat's adolescent users

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⁴⁸ Claire Hariek, *The Snapchat Feature that all parents should know about*, Kidspot, (May 24, 2021), https://www.kidspot.com.au/parenting/teenager/cybersafety/the-snapchat-feature-that-all-parents-should-know-about/news-story/c13 714ad7716762861b2fff6eb39bd1f.

⁴⁹ Salvador Rodriguez, Snapchat Finally Acknowledges the Existence of Sexting With 'Memories' The latest app update includes a tool called "My Eyes Only" that lets you privately store sensitive photos and videos, Inc.com, (Jul. 6, 2016).

will feel safe in creating sexually explicit image that can be hidden from their parents, and that predators can safely store evidence of their crimes."

3.2.7 Harm: Specific (New Mexico) DOJ Investigation Yielded Evidence Snapchat Enabled Sextortion and CSAM Behaviors

CLAIM OF HARM DRAWN FROM:

- **SOURCE:** New Mexico V. Snap pg. 36 para. 87: "87. The handbook [on online sextortion that the NM DOJ found] describes Snapchat as an ideal vehicle for sextortion because of its intimacy and the belief in its privacy, based on Snap's promises of screenshot detection and its ephemerality settings. (Fig. 13)."
- **SOURCE:** New Mexico V. Snap pg. 39 para. 91: "91. The [New Mexico, based on earlier paragraphs] Department of Justice's investigators also identified recommended Snapchat [sic] openly users focused on meeting or collecting explicit images of minors. (Fig. 17)."
- SOURCE: New Mexico V. Snap pg. 41 para. 94: "94. [NM Dept of Justice] Investigators identified countless recommended users selling or seeking child pornography: trade young, trade teens, trade nudes, loli trade (for Lolita), trade girls, cp (child pornography), or pizza sellers (another proxy for child pornography, which shares initials with cheese pizza). A sample is included below. (Fig. 20)."
- SOURCE: New Mexico V. Snap pg. 43 para. 95: "95. Searches for child rape, necrophilia, bestiality, and a range of other fetishes were permitted and yielded recommendations, through Snap's algorithm, for to [sic] users to add. (Fig. 21)"

3.2.8 Harm: Snapchat Al Giving Inappropriate Predatory Advice

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** New Mexico V. Snap pg. 80 para. 198: "Research by the Center for Humane Technology uncovered many examples of My AI providing inappropriate and harmful advice to underage users. 'In another conversation with a supposed 13-year-old, My AI even offered advice about having sex for the first time with a partner who was 31 instructing the minor to 'consider setting the food with candles or music.'"

3.3 "Challenges"

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[none]

3.4 Suicidal Ideation and Self-Harm

3.4.1 Harm: 74.6% of Teens Seeing Self-Harm/Suicide Content on Per a 2022 Study

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** New Mexico V. Snap pg. 126 para. 314: "314. In March 2022, the National Association of Attorneys General cited a study from Bark, which analyzed 3.4 billion messages in 2021 across 30 apps (including Snap and TikTok) to find that 74.6% of teens were involved in a self-harm/suicidal situation.[132]⁵⁰"

3.5 Body Image Issues and Eating Disorders

3.5.1 Harm: Snapchat Is One of Worst Social Media for Mental Health/Body Dysmorphia Because of the Filters (Per 2017 Study)

CLAIM OF HARM DRAWN FROM:

• SOURCE: New Mexico V. Snap pg. 109 para. 267: "267. A 2017 study found that these features [facial filters] made Snapchat one of the worst social media products for the mental health of children and adolescents, behind only Instagram. [101]⁵¹ In recent years, plastic surgeons have reported an increase in requests for alterations that correspond to Snapchat's filters. This has led researchers to coin the term 'Snapchat Dysmorphia,' in which the effect of Snapchat's filters triggers body dysmorphic disorder. [102]⁵² The rationale underlying this disorder is that beauty filters on Snapchat create a 'sense of unattainable perfection' that leads to self-alienation and damages a person's self-esteem. [103]⁵³ One social psychologist summarized the effect as 'the pressure to present a certain filtered image on social media,' which 'can certainly play into

https://abcnews.go.com/Technology/lines-blur-real-virtual-beauty-filters/story?id=77427989

[NOTE FROM ANUM: direct link to first thing is: https://pubmed.ncbi.nlm.nih.gov/31246236/]

⁵⁰ State attorneys want TikTok and Snap to support third party parental control apps, TechCrunch (Mar. 30, 2022). https://techcrunch.com/2022/03/30/tiktok-snapchat-parental-controls-attorneys-general/.

Kara Fox, *Instagram worst social media app for young people's mental health*, CNN (May 19, 2017), https://www.cnn.com/2017/05/19/health/instagram-worst-social-network-app-young-people-mental-health/index.html

⁵² Chen et al., Association Between Social Media and Photograph Editing Use, Self-esteem and Cosmetic Surgery Acceptance, JAMA Facial Plastic Surgery, 2019; See also Nathan Smith & Allie Yang, What happens when lines blur between real and virtual beauty through filters, ABC News (May 1, 2021),

⁵³ Chen et al., Association Between Social Media and Photograph Editing Use, Self-esteem and Cosmetic Surgery Acceptance, JAMA Facial Plastic Surgery, 2019; See also Nathan Smith & Allie Yang, What happens when lines blur between real and virtual beauty through filters, ABC News (May 1, 2021), https://abcnews.go.com/Technology/lines-blur-real-virtual-beauty-filters/story?id=77427989

[depression and anxiety] for younger people who are just developing their identities.'[104]⁵⁴"

3.5.2 Harm: Snapchat's My Al Fueling Eating Disorders

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** New Mexico V. Snap pg. 81 para. 200: "On August 10, 2023, the Washington Post profiled new research on how AI, including Snapchat's MY AI buddy, is fueling 'one of the most deadly mental illness' – anorexia.[70]⁵⁵"

3.6 Negative Social Comparison

[none]

3.7 Bullying

[none]

3.8 Drugs

3.8.1 Harm: Snapchat's Very Platform Features Facilitate Drug Dealing to Minors

CLAIM OF HARM DRAWN FROM:

- SOURCE: New Mexico V. Snap pg. 85-86 para. 214: "214. The [New Mexico]
 Department of Justice's investigators used emojis, slang terms, and geographic
 locations to search for drugs, adding Snap users who seemed likely to be selling
 controlled substances. Snap's algorithm then began recommending and sending
 notifications about additional, similar users. These included users with account names
 and profile pictures that openly advertised sales of pills and methamphetamines in New
 Mexico."
- **SOURCE:** New Mexico V. Snap pg. 88-89 para. 218: "218. Other litigation has highlighted the use of Snapchat to market, sell, and buy illicit drugs. Alex Neville, a 14-year-old, fatally overdosed after purchasing fentanyl on Snapchat. According to his mother's testimony at a Congressional hearing, Alex was first introduced to opioids while using Snapchat.[80]⁵⁶ In declining to grant Snap's motion to dismiss Neville's complaint as immunized by Section 230, a California state court noted the numerous dangerous

⁵⁴ https://abcnews.go.com/Technology/lines-blur-real-virtual-beauty-filters/story?id=77427989

⁵⁵ AI is acting 'pro-anorexia' and tech companies aren't stopping it, The Washington Post (Aug. 10, 2023) https://www.washingtonpost.com/technology/2023/08/07/ai-eating-disorders-thinspo-anorexia-bulimia/.

design features alleged to have contributed to his death—in line with those described here: ineffective age and identity verification; lack of parental controls and reporting mechanisms; a "quick add' feature [that] facilitates drug dealers' targeting of minors with drug menus and solicitation;' a "stories' feature [that] facilitates drug dealers' engagement with minors' and recommended posts with detailed drug menus; notifications; Snap's failure to cooperate with law enforcement and to limit usage by children, which made Snapchat 'an inherently dangerous product for young users' and allowed it to evolve into a 'digital open-air drug market."

• **SOURCE:** The Guardian, Oct 2023: "In April, the relatives of more than 65 victims, represented by the Social Media Victims Law Center, filed lawsuits against Snap, the parent company of Snapchat – an app known for its disappearing messages features, and the platform used by the vast majority of the suit's victims.

The suit claims Snapchat's features facilitate practices like drug sales by connecting dealers to young customers while promising safety from legal repercussions through anonymity. Chief among those designs is the promise that a message will disappear not only to fellow users, but also on the software's back end, says Matthew Bergman, the lead attorney on the case. It prevents law enforcement officials from seeing the activity of a dealer even after they have been identified."

3.8.2 Harm: Ease of Finding Drugs on Snapchat

CLAIM OF HARM DRAWN FROM:

- SOURCE: New Mexico V. Snap pg. 93 para. 226: "226. National news media exposed the ability to use Snapchat to sell drugs. In 2020, a Vice news reporter posed as a teenager on Snapchat and almost immediately found a 'drug dealer's directory' with usernames for 104 different dealers she could contact to buy drugs. To buy drugs, the investigation concluded, she needed only a few minutes, 'an address and [a] Snacphat account.'[86]⁵⁷"
- SOURCE: <u>CBS News, Sep 2024</u>: "While it can happen on any social media site, experts
 often single out Snapchat as a particularly dangerous platform, something the company
 vehemently disagrees with. In October 2022, a group of parents who say their children
 bought fentanyl from drug dealers they met through Snapchat sued the company for
 wrongful death and negligence, calling it a 'haven for drug trafficking."

3.9 Prevalence of Negative Experiences

[none]

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⁵⁷ VICE, Buying Drugs Over Snapchat, YouTube (Feb. 5, 2020), https://www.youtube.com/watch?v=1Ki7d_R-t60.

3.10 Poor Mental Health Outcomes

[none]

3.11 Other Miscellaneous

[none]

4. General

4.1 Adult Content

4.1.1 Harm: Girls Receive More Explicit Images Online Than Boys

CLAIM OF HARM DRAWN FROM:

- SOURCE: Pew Research, Sep 2018: "Girls also are more likely than boys to report being the recipient of explicit images they did not ask for (29% vs. 20%). And being the target of these types of messages is an especially common experience for older girls: 35% of girls ages 15 to 17 say they have received unwanted explicit images, compared with about one-in-five boys in this age range and younger teens of both genders.[2]⁵⁸"
- **SOURCE:** Pew Research, Sep 2018: "Similar shares of boys and girls have been harassed online but girls are more likely to be the targets of online rumor-spreading or nonconsensual explicit messages"

4.2 Sextortion, CSAM, Predation

4.2.1 Harm: Reports of CSAM on Online Platforms Have Skyrocketed

CLAIM OF HARM DRAWN FROM:

- SOURCE: WaPo, Jan 2024: "John Shehan, head of the exploited children division at the National Center for Missing and Exploited Children, says reports of child sexual abuse material on online platforms grew from 32 million in 2022 to a record high of more than 36 million in 2023."
- **SOURCE:** WaPo, Jan 2024: "Reports of online enticement, including sextortion, ballooned from 80,000 in 2022 to 186,000 in 2023, said Shehan of NCMEC, which serves as a clearinghouse for reports of online CSAM from around the world."

4.2.2 Harm: Feb 2023 Estimate: 3,000 Victims of Sextortion, >Dozen Suicides (Across Platforms?)

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** missingkids.org. Feb 2023: "Just recently, NCMEC, the FBI and Homeland Security Investigations jointly issued a public safety alert about an alarming spike in

⁵⁸ A 2017 Pew Research Center survey of U.S. adults also found age and gender differences in receiving nonconsensual explicit images; women ages 18 to 29 are especially likely to encounter this behavior.

children and teens being coerced into sending explicit images online, then extorting them for money. Many of these financial sextortion schemes – impacting at least 3,000 minors, mostly boys, and resulting in more than a dozen suicides – originated outside the U.S., primarily in West African countries such as Nigeria and the Ivory Coast."

4.2.3 Harm: Jan 2024 Estimate: 12,600 Victims of Sextortion, At Least 20 Suicides (Across Platforms?)

CLAIM OF HARM DRAWN FROM:

SOURCE: FBI.gov, Jan 2024: "These crimes can lead victims to self-harm and has led
to suicide. From October 2021 to March 2023, the FBI and Homeland Security
Investigations received over 13,000 reports of online financial sextortion of minors. The
sextortion involved at least 12,600 victims—primarily boys—and led to at least 20
suicides.

In the six-month period from October 2022 to March 2023, the FBI observed at least a 20% increase in reporting of financially motivated sextortion incidents involving minor victims compared to the same time period the previous year."

[NOTE FROM ANUM: the 13,000 reports stat was also referenced in NYT, May 2024]

4.2.4 Harm: A Third of Girls Have Been Asked to Send a Nude, and of Those, a Third Said They'd Been 13 or Younger

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Revealing Reality Report, Jun 2022: "Girls are much more likely than boys to have been asked to send a nude, and at a younger age. When asked how old they were when they'd first been asked to send a nude, more than one in three girls said they'd been 13 or younger[48]⁵⁹. Only just over a third of the girls in the survey said they'd never been asked at all[49]⁶⁰."

4.2.5 Harm: Profile of Typical Sextortion Victims

CLAIM OF HARM DRAWN FROM:

 SOURCE: FBI.gov, Jan 2024: "For financially motivated sextortion, victims are typically males between the ages of 14 to 17, but any child can become a victim. Additionally, offenders are usually located outside the United States and primarily in West African

⁵⁹ Q: How old were you when someone first asked you to send them a nude or nearly nude image or video of yourself? 34% of girls answered age 13 or younger, Base: All girls, n=2585.

⁶⁰ Q: How old were you when someone first asked you to send them a nude or nearly nude image or video of yourself? 36% of girls answered 'I've not been asked to send one before', Base: All girls, n=2585.

countries such as Nigeria and Ivory Coast, or Southeast Asian countries such as the Philippines."

- **SOURCE:** <u>IC3.gov</u>, <u>Sep 2023</u>: "The [violent online] groups target minors between the ages of 8 and 17 years old, especially LGBTQ+ youth, racial minorities, and those who struggle with a variety of mental health issues, such as depression and suicidal ideation."
- **SOURCE:** KPBS, Sep 2024: "'Traditional sextortion typically targets females,' he [FBI Agent Hansen] said. 'And the age range there is 10 to 17, so you're seeing them target even younger females.' For boys, the age range is 14 to 17."

4.3 "Challenges"

[none]

4.4 Suicidal Ideation and Self-Harm

4.4.1 Harm: 146% Increase in Suicide Rates for 12-16 Y/Os from 2007 to 2018

CLAIM OF HARM DRAWN FROM:

• SOURCE: Rodriguez V. Meta & Snap. pg. 2 para. 2: "2. On December 7, 2021, the United States Surgeon General issued an advisory cataloging extensive evidence showing a dramatic increase in teen mental health crises including suicides, attempted suicides, and inpatient mental-health admissions. Between 2007 and 2018, for example, suicide rates among youth ages twelve to sixteen in the U.S. increased a staggering 146 percent. The incidence of serious depression and dissatisfaction with life in this age group has likewise increased dramatically."

4.4.2 Harm: 60% Increase in Suicide Rates Among U.S. Youth from 2007 to 2018

CLAIM OF HARM DRAWN FROM:

• SOURCE: Nebraska V. TikTok pg. 33-34 para. 89: "89. According to the Surgeon General, 'national surveys of youth have shown major increases in certain mental health symptoms, including depressive symptoms and suicidal ideation.' From 2009 to 2019, the number of high school students reporting 'persistent feelings of sadness or hopelessness' increased by 40%, to more than one in three students. Youth psychiatric visits to emergency departments for depression, anxiety, and behavioral challenges increased by 28%. Perhaps most alarmingly, the number of U.S. youth seriously considering attempting suicide increased by 36%, and the number creating a suicide

plan increased by 44%. Between 2007 and 2018, suicide rates among youth increased by almost 60%.[63]⁶¹"

4.4.3 Harm: 30% of Female High School Students Seriously Considered Suicide Per 2021 CDC Survey

CLAIM OF HARM DRAWN FROM:

- SOURCE: New Mexico V. Snap pg. 120 para. 302: "Statistics from the CDC's 'Youth Risk Behavior Survey' confirm that the rise in social media use among teenagers and adolescents corresponds with a decline in youth mental health. According to the survey, '[i]n 2021, 42% of high school students felt so sad or hopeless almost every day for at least two weeks in a row that they stopped doing their usual activities.' The percentage of female high school students who reported feeling 'persistent feelings of sadness or hopelessness' increased from 36% in 2011 to 57% in 2021. Twenty-nine percent of all respondents and 41% of female respondents reported experiencing 'poor mental health' in the past 0 days. And the survey reported that 30% of female high school students had 'seriously considered attempting suicide' during the past year, an increase from only 19% 10 years earlier."
- **SOURCE:** Nebraska V. TikTok pg. 33-34 para. 90: "90. Mental health challenges are especially acute for teen girls.[64]⁶² In 2023, the U.S. Centers for Disease Control and Prevention released new statistics revealing that, in 2021, nearly three in five teenage girls experienced persistent sadness—defined as sadness every day for at least two weeks in the past year—and one in three seriously considered suicide.[65]⁶³"

4.4.4 Harm: 1 in 4 Teens Considered Killing themselves in 2021, and APA Pins Blame Partly on Social Media

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** <u>Bloomberg. Apr 2023</u>: "Centers for Disease Control and Prevention data show nearly 1 in 4 teens said they'd seriously considered killing themselves in 2021, nearly double the level a decade earlier. The American Psychological Association and other authorities pin the blame partly on social media."

4.4.5 Harm: Among Teens Exhibiting Problematic Internet Use, 42% Reported Suicidal Ideation and Attempted at 10X Higher Rate, 22% Reported Self-Harm Per 2014 Study

⁶¹ Protecting Youth Mental Health: The U.S. Surgeon General's Advisory, U.S. Dep't of Health & Human Servs. (2021), https://www.hhs.gov/sites/default/files/surgeon-general-vouth-mental-health-advisory.pdf (accessed May 16, 2024).

⁶² Id.; Jean M. Twenge et al., *Increases in Depressive Symptoms, Suicide-Related Outcomes and Suicide Rates Among U.S. Adolescents After 2010 and Links to Increase New Media Screen Time*, 6 CLINICAL PSYCH. SCI. 3-17 (2017).

⁶³ Azeen Ghorayshi & Roni Caryn Rabin, Teen Girls Report Record Levels of Sadness, C.D.C. Finds, N.Y. TIMES (February 13, 2023), https://www.nytimes.com/2023/02/13/health/teen-girls-sadness-suicide-violence.html (accessed May 16, 2024).

CLAIM OF HARM DRAWN FROM:

• SOURCE: Kentucky V. TikTok pg. 69-70 para. 229: "229. Problematic internet use, in turn, is linked to a host of additional problems. For example, in one study of 564 children between the ages of 7 and 15, researchers found that problematic internet use was positively associated with depressive disorders, attention deficit hyperactivity disorder, general impairment, and increased sleep disturbances.[192]⁶⁴ An analysis of peer-reviewed studies involving cognitive findings associated with problematic internet use in both adults and adolescents found 'firm evidence that PIU . . . is associated with cognitive impairments in motor inhibitory control, working memory, Stroop attentional inhibition and decision making.'[193]⁶⁵ Another study of over 11,000 European adolescents found that among teens exhibiting problematic internet use, 33.5% reported moderate to severe depression; 22.2% reported self-injurious behaviors such as cutting; and 42.3% reported suicidal ideation.[194]⁶⁶ The incidence of attempted suicide was also ten times higher for teens exhibiting problematic internet use than their peers who exhibited healthy internet use.[195]⁶⁷"

4.4.6 Harm: Youth Suicide Rates Increased by 57%

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Kentucky V. TikTok pg. 71-72 para. 232: "232. Fueled by social media addiction, youth suicide rates are up an alarming 57%.[199]⁶⁸ In the decade leading up to 2020, there was a 40% increase in high school students reporting persistent sadness and hopelessness,[200]⁶⁹ and a 36% increase in those who attempted to take their own lives. In 2019, one in five high school girls had made a suicide plan.[201]⁷⁰ By 2018, suicide was the second leading cause of death for youth ages 10–24.[202]⁷¹ Lastly, due to the extent of the youth mental health crisis fueled by social media addiction, the number of teens and adolescents waiting in emergency rooms for mental health treatment for suicide nationwide tripled from 2019 to 2021.[203]⁷²"

⁶⁸ Protecting Youth Mental Health: The U.S. Surgeon General's Advisory at 8, U.S. Dep't of Health & Hum. Servs. (Dec. 7, 2021), https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf (last visited April 9, 2024).

⁷¹ AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health, Am. Acad. Pediatrics (Oct. 19, 2021),

https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/ (last visited April 9, 2024).

⁶⁴ Restrepo, et al., *Problematic Internet Use in Children and Adolescents: Associations with Psychiatric Disorders and Impairment*, 20 BMC Psychiatry 252 (2020), https://doi.org/10.1186/s12888-020-02640-x (last visited April 9, 2024).

⁶⁵ Konstantinos Ioannidis, et al., *Cognitive Deficits in Problematic Internet Use: Snap-Analysis of 40 Studies*, 215 British Journal of Psychiatry 639, 645 (2019), https://pubmed.ncbi.nlm.nih.gov/30784392 (last visited April 9, 2024).

⁶⁶ Michael Kaess, et al., *Pathological Internet use among European adolescents: psychopathology and self-destructive behaviours*, 23 Eur. Child & Adolescent Psychiatry 1093, 1096 (2014), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4229646/ (last visited April 9, 2024).

⁶⁷ Id

 $^{^{70}}$ Id

⁷² Stephen Stock, et al., Children languish in emergency rooms awaiting mental health care, CBS News (Feb. 27, 2023, 8:02 am), https://www.cbsnews.com/news/emergency-rooms-children-mental-health/#:~:text=For%20kids%20in%20crisis%2C%20ER.health%20facilities%20%E2%80%94%20within%20six%20months (last visited April 9, 2024).

4.5 Body Image Issues and Eating Disorders

4.5.1 Harm: Half of Eating Disorder Patients' Issues are Impacted by Social Media, Per Director of Johns Hopkins Eating Disorders Program

CLAIM OF HARM DRAWN FROM:

SOURCE: WSJ, Sep 2021: "For years, there has been little debate among medical doctors that for some patients, Instagram and other social media exacerbate their conditions. Angela Guarda, director for the eating-disorders program at Johns Hopkins Hospital and an associate professor of psychiatry in the Johns Hopkins School of Medicine, said it is common for her patients to say they learned from social media tips for how to restrict food intake or purge. She estimates that Instagram and other social-media apps play a role in the disorders of about half her patients."

4.5.2 Harm: Social Media Platforms With Strong Image Focus Increase Disordered Eating/Behaviors in Young Adolescents

CLAIM OF HARM DRAWN FROM:

• SOURCE: Kentucky V. TikTok pg. 72 para. 234: "234. Design features that maximize time spent on social media can also lead to heightened exposure to negative body image—related content, which increases children's susceptibility to poor body image and, consequently, disordered eating. A study of data from 7th and 8th graders published in 2019 in the International Journal of Eating Disorders 'suggest[ed] that [social media], particularly platforms with a strong focus on image posting and viewing, is associated with elevated [disordered eating] cognitions and behaviors in young adolescents.'[206]⁷³ Personal stories from sufferers of disordered eating have highlighted the link to social media.[207]⁷⁴"

4.6 Negative Social Comparison

[none]

4.7 Bullying

⁷³ Simon M. Wilksch et al., *The Relationship Between Social Media Use and Disordered Eating in Young Adolescents*, 53 Int. J. Eat. Disord. 96, 104 (2020).

⁷⁴ See, e.g., Jennifer Neda John, *Instagram Triggered My Eating Disorder*, Slate (Oct. 14, 2021), https://slate.com/technology/2021/10/instagram-social-media-eating-disorder-trigger.html (last visited April 9, 2024); Clea Skopeliti, *'I Felt My Body Wasn't Good Enough': Teenage Troubles with Instagram*, The Guardian (Sept. 18, 2021), https://www.theguardian.com/society/2021/sep/18/i-felt-my-body-wasnt-good-enough-teenage-troubles-with-instagram">https://www.theguardian.com/society/2021/sep/18/i-felt-my-body-wasnt-good-enough-teenage-troubles-with-instagram (last visited April 9, 2024).

4.7.1 Harm: 59% of U.S. Teens Have Experienced Abusive Online Behavior

CLAIM OF HARM DRAWN FROM:

- **SOURCE:** Pew Research, Sep 2018: "A new Pew Research Center survey finds that 59% of U.S. teens have personally experienced at least one of six types of abusive online behaviors.[1]⁷⁵"
- SOURCE: Pew Research, Sep 2018: Overall, 60% of girls and 59% of boys have
 experienced at least one of six abusive online behaviors. While similar shares of boys
 and girls have encountered abuse, such as name-calling or physical threats online, other
 forms of cyberbullying are more prevalent among girls. Some 39% of girls say someone
 has spread false rumors about them online, compared with 26% of boys who say this."

4.7.2 Harm: Gender Differential in Experiencing Bullying Online

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** Pew Research, Sep 2018: "These are some of the key findings from the Center's surveys of 743 teens and 1,058 parents living in the U.S. conducted March 7 to April 10, 2018. Throughout the report, 'teens' refers to those ages 13 to 17, and 'parents of teens' are those who are the parent or guardian of someone in that age range.

When it comes to the overall findings on the six experiences measured in this survey, teenage boys and girls are equally likely to experience cyberbullying. However, there are some differences in the specific types of harassment they encounter."

- **SOURCE:** Pew Research, Sep 2018: "Similar shares of boys and girls have been harassed online but girls are more likely to be the targets of online rumor-spreading or nonconsensual explicit messages"
- SOURCE: Pew Research, Sep 2018: Overall, 60% of girls and 59% of boys have experienced at least one of six abusive online behaviors. While similar shares of boys and girls have encountered abuse, such as name-calling or physical threats online, other forms of cyberbullying are more prevalent among girls. Some 39% of girls say someone has spread false rumors about them online, compared with 26% of boys who say this."

4.8 Drugs

4.8.1 Harm: 80% of Teen/YA Fentanyl Deaths Can Be Traced to Social Media

⁷⁵ Pew Research Center measured cyberbullying by asking respondents if they had ever experienced any of six online behaviors. Respondents who selected yes to one or more of these questions are considered to be targets of cyberbullying in this study. Throughout the report the terms "cyberbullying" and "online harassment" are used interchangeably.

CLAIM OF HARM DRAWN FROM:

 SOURCE: <u>CBS News, Sep 2024</u>: "While data on the prevalence of drug sales on social platforms is hard to come by, the National Crime Prevention Council estimates that 80% of teen and young adult fentanyl poisoning deaths can be traced to some social media contact

In a sweeping 2023 report on the problem, Colorado's attorney general called the availability of fentanyl and other illicit substances online 'staggering.'"

4.8.2 Harm: 1,100 Cases from Operation Last Mile Involved Social Media and Encrypted Comms Platforms

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** AP News Sep 2024: "Last May, for instance, the Drug Enforcement Administration's "Operation Last Mile," targeting Mexico's Sinaloa and Jalisco Cartels, led to 3,337 arrests and the seizure of nearly 44 million fentanyl pills and other deadly drugs. More than 1,100 associated cases involved social media apps and encrypted communications platforms, the DEA said."

4.9 Prevalence of Negative Experiences

[none]

4.10 Poor Mental Health Outcomes

4.10.1 Harm: 40% of U.S. High School Students Report Persistent Sadness/Hopelessness, and Youth Psychiatric Visits Have Increased by 28%

CLAIM OF HARM DRAWN FROM:

• SOURCE: Nebraska V. TikTok pg. 33-34 para. 89: "89. According to the Surgeon General, 'national surveys of youth have shown major increases in certain mental health symptoms, including depressive symptoms and suicidal ideation.' From 2009 to 2019, the number of high school students reporting 'persistent feelings of sadness or hopelessness' increased by 40%, to more than one in three students. Youth psychiatric visits to emergency departments for depression, anxiety, and behavioral challenges increased by 28%. Perhaps most alarmingly, the number of U.S. youth seriously considering attempting suicide increased by 36%, and the number creating a suicide plan increased by 44%. Between 2007 and 2018, suicide rates among youth increased

by almost 60%.[63]76"

- SOURCE: Nebraska V. TikTok pg. 34-35 para. 92-93: "92. For example, according to data from the Nebraska Youth Risk Behavior Survey ("Nebraska YRBS"), the number of youth who reported feeling sad or hopeless almost every day for at least two weeks in the past year increased from 20% in 2012 to 36% in 2021. Nearly half of all Nebraska girls reported feeling sad or hopeless, compared to 25% of boys.
 - 93. Reflecting the staggering rise in depression and anxiety, the Nebraska YRBS data shows that one out of five high school students in Nebraska seriously considered attempting suicide in the past 12 months, with 14% making a suicide plan and 10% actually attempting it."

4.10.2 Harm: 42% of High School Students Met Major Depression Diagnostic Criteria; 57% of Teen Girls Were Persistently Sad/Hopeless; 29% of Respondents and 41% of Female Respondents Reported Poor Mental Health Per 2021 CDC Survey

CLAIM OF HARM DRAWN FROM:

- SOURCE: New Mexico V. Snap pg. 120 para. 302: "Statistics from the CDC's 'Youth Risk Behavior Survey' confirm that the rise in social media use among teenagers and adolescents corresponds with a decline in youth mental health. According to the survey, '[i]n 2021, 42% of high school students felt so sad or hopeless almost every day for at least two weeks in a row that they stopped doing their usual activities.' The percentage of female high school students who reported feeling 'persistent feelings of sadness or hopelessness' increased from 36% in 2011 to 57% in 2021. Twenty-nine percent of all respondents and 41% of female respondents reported experiencing 'poor mental health' in the past 0 days. And the survey reported that 30% of female high school students had 'seriously considered attempting suicide' during the past year, an increase from only 19% 10 years earlier."
- **SOURCE:** Nebraska V. TikTok pg. 33-34 para. 90: "90. Mental health challenges are especially acute for teen girls.[64]⁷⁷ In 2023, the U.S. Centers for Disease Control and Prevention released new statistics revealing that, in 2021, nearly three in five teenage girls experienced persistent sadness—defined as sadness every day for at least two weeks in the past year—and one in three seriously considered suicide.[65]⁷⁸"

⁷⁶ Id.; Jean M. Twenge et al., *Increases in Depressive Symptoms*, *Suicide-Related Outcomes and Suicide Rates Among U.S. Adolescents After 2010 and Links to Increase New Media Screen Time*, 6 CLINICAL PSYCH. SCI. 3-17 (2017).

⁷⁷ Id.; Jean M. Twenge et al., *Increases in Depressive Symptoms, Suicide-Related Outcomes and Suicide Rates Among U.S. Adolescents After 2010 and Links to Increase New Media Screen Time*, 6 CLINICAL PSYCH. SCI. 3-17 (2017).

⁷⁸ Azeen Ghorayshi & Roni Caryn Rabin, Teen Girls Report Record Levels of Sadness, C.D.C. Finds, N.Y. TIMES (February 13, 2023), https://www.nytimes.com/2023/02/13/health/teen-girls-sadness-suicide-violence.html (accessed May 16, 2024).

4.10.3 Harm: 90% of Students Said Social Media Negatively Impacted Mental Health, Per A Survey Done by Teens for a National Science Competition

CLAIM OF HARM DRAWN FROM:

• **SOURCE:** WSJ, Sep 2021: "Ms. Ramos and her friend Isabel Yoblonski, 18, believed this posed a potential health problem to their community, so they decided to survey their peers as a part of a national science competition. They found that of the 98 students who responded, nearly 90% said social media negatively affected their mental health."

[NOTE FROM ANUM: article references a survey done during pandemic]

4.10.4 Harm: Among Teens Exhibiting Problematic Internet Use, >1/3 Reported Depression Per 2014 Study

CLAIM OF HARM DRAWN FROM:

• SOURCE: Kentucky V. TikTok pg. 69-70 para. 229: "229. Problematic internet use, in turn, is linked to a host of additional problems. For example, in one study of 564 children between the ages of 7 and 15, researchers found that problematic internet use was positively associated with depressive disorders, attention deficit hyperactivity disorder, general impairment, and increased sleep disturbances.[192]⁷⁹ An analysis of peer-reviewed studies involving cognitive findings associated with problematic internet use in both adults and adolescents found "firm evidence that PIU . . . is associated with cognitive impairments in motor inhibitory control, working memory, Stroop attentional inhibition and decision making."[193]⁸⁰ Another study of over 11,000 European adolescents found that among teens exhibiting problematic internet use, 33.5% reported moderate to severe depression; 22.2% reported self-injurious behaviors such as cutting; and 42.3% reported suicidal ideation.[194]⁸¹ The incidence of attempted suicide was also ten times higher for teens exhibiting problematic internet use than their peers who exhibited healthy internet use.[195]^{82"}

4.10.5 Harm: Spending >3 Hrs/Day on Social Media Doubles Risk of Poor Mental Health Outcomes Per Surgeon General May 2023

CLAIM OF HARM DRAWN FROM:

⁷⁹ Restrepo, et al., *Problematic Internet Use in Children and Adolescents: Associations with Psychiatric Disorders and Impairment*, 20 BMC Psychiatry 252 (2020), https://doi.org/10.1186/s12888-020-02640-x (last visited April 9, 2024).

⁸⁰ Konstantinos Ioannidis, et al., *Cognitive Deficits in Problematic Internet Use: Snap-Analysis of 40 Studies*, 215 British Journal of Psychiatry 639, 645 (2019), https://pubmed.ncbi.nlm.nih.gov/30784392 (last visited April 9, 2024).

⁸¹ Michael Kaess, et al., *Pathological Internet use among European adolescents: psychopathology and self-destructive behaviours*, 23 Eur. Child & Adolescent Psychiatry 1093, 1096 (2014), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4229646/ (last visited April 9, 2024).

⁸² Id.

• SOURCE: New Mexico V. Snap pg. 117-118 para. 295: "295. In May 2023, the Surgeon General of the United States issued an advisory entitled 'Social Media and Youth Mental health' that summarized findings concerning the devastating impacts of social media use and noting 'increasing concerns among researchers, parents and caregivers, young people, healthcare experts, and others about the impact of social media on youth mental health.'[115]⁸³ While noting benefits from social media use, the advisory warned 'that adolescents who spent more than 3 hours per day on social media faced double the risk of experiencing poor mental health outcomes including symptoms of depression and anxiety.'[116]⁸⁴ The Surgeon General further explained that studies on 'college-aged youth' had shown 'sizable effects,' including stark increases in depression and anxiety, and 'raise serious concerns about the risk of harm from social media exposure for children and adolescents who are at a more vulnerable stage of brain development.'[117]⁸⁵"

4.11 Other Miscellaneous

4.11.1 Harm: 1 in 3 Teens Wake Up to Check Their Notifications At Least Once Per Night

CLAIM OF HARM DRAWN FROM:

• SOURCE: Kentucky V. TikTok pg. 74 para. 238: "238. Maximizing children's time spent online at the expense of sleep or movement also harms children's physical health. When children are driven to spend more time online, they sleep less—because it is impossible to be online and sleep at the same time, because stimulation before bedtime disrupts sleep patterns, and because many of the design features discussed herein make users feel pressured to be connected constantly. That feeling does not always go away at nighttime. Research shows that children who exhibit problematic internet use often suffer from sleep problems.[211]⁸⁶ One-third of teens say that at least once per night, they wake up and check their phones for something other than the time, such as to check their notifications or social media.[212]⁸⁷ Some teens set alarms in the middle of the night to remind them to check their notifications or complete video game tasks that are only available for a limited time.[213]⁸⁸ In addition, screen time before bed is known to inhibit academic performance in children.[214]⁸⁹ Teenagers who use social media for

⁸³ Advisory, https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf at 4 (last visited Dec. 1, 2023).

⁸⁴ *Id.* at 6.

⁸⁵ *Id.* at 7.

Restrepo, et al., *Problematic Internet Use in Children and Adolescents: Associations with Psychiatric Disorders and Impairment*, 20 BMC Psychiatry 252 (2020), https://doi.org/10.1186/s12888-020-02640-x (last visited April 9, 2024).

⁸⁷ Common Sense, *Screens and Sleep: The New Normal: Parents, Teens, Screens, and Sleep in the United States* at 7 (2019), https://www.commonsensemedia.org/sites/default/files/research/report/2019-new-normal-parents-teens-screens-and-sleep-united-states-report.pdf (last visited April 9, 2024).

⁸⁸ Emily Weinstein & Carrie James, Behind Their Screens: What Teens Are Facing (And Adults Are Missing), MIT Press, at 31 (2022).

⁸⁹ Chloe Wilkinson, et al., *Screen Time: The Effects on Children's Emotional, Social, and Cognitive Development* at 6 (2021), https://informedfutures.org/screen-time/ (last visited April 9, 2024).

more than five hours per day are about 70% more likely to stay up late on school nights.[215]⁹⁰ A lack of sleep in teenagers has been linked to inability to concentrate, poor grades, drowsy-driving incidents, anxiety, depression, thoughts of suicide, and even suicide attempts.[216]⁹¹"

⁹⁰ Heavy Social Media Use Linked to Poor Sleep, BBC News (Oct. 23, 2019), https://www.bbc.com/news/health-50140111 (last visited April 9, 2024).

⁹¹ Among teens, sleep deprivation an epidemic, Stanford News Ctr. (Oct. 8, 2015), https://med.stanford.edu/news/all-news/2015/10/among-teens-sleep-deprivation-an-epidemic.html (last visited April 9, 2024).