COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, ss.

SUPERIOR COURT
CIVIL ACTION NO. 2384CV_02397-BLS1_

COMMONWEALTH OF
MASSACHUSETTS,

Plaintiff,

v.

META PLATFORMS, INC. and
INSTAGRAM, LLC,

Defendants.

COMPLAINT AND JURY DEMAND

I.   INTRODUCTION

1.   Over the past decade, Defendant Meta Platforms Inc. ("Meta") has intentionally designed its flagship social media platforms, especially Instagram, to be addictive to youth, preying upon young people's unique psychological vulnerabilities and overcoming their ability to decide how much time they spend on Meta's platforms.

2.   The effects are staggering.

3.   Today, more than 90% of young people[1] in the United States use Instagram; including 350,000 teenagers, ages 13–17, in Massachusetts who use Instagram daily.

4.   Meta has relentlessly prioritized targeting these young users and has tailored its platforms' features to manipulate and exploit their developing brains in a way that ensures they return incessantly to its platforms and then stay on, for longer periods of time, over and over

---

[1] Unless otherwise specified, all references in the Complaint to "young people," "young users," "youth," or "teens" refer to users under the age of 18.

1

again. Its internal documents so demonstrate, explaining that in terms of long-term retention: "The young ones are the best ones. You want to bring people to your service young and early." Meta's founding president has explained that the platforms' design "exploit[s] a vulnerability in human psychology. The inventors, creators—me, Mark [Zuckerberg], Kevin Systrom on Instagram, all of these people—understood this consciously, and we did it anyway."[2] No less than the Surgeon General of the United States has recognized and warned of the dangers for youth of the exploitative design choices Meta has made: "[I]f we tell a child, use the force of your willpower to control how much time you're spending, you're pitting a child against the world's greatest product designers. . . . [It's] just not a fair fight."[3]

5.   Meanwhile, Meta knows well that addictive overuse of its platforms by young people is dangerous and damaging to their mental and physical health. It knows, too, that these dangers and mental and physical health harms are even more acute in younger users, aged 8 to 12 years old, whose brains are at an even earlier stage of development and who lack the skills to regulate their time on social media for their own health and safety.

6.   These facts are confirmed by Meta's own internal research, which leverages and analyzes the data about each of its more than 33 million U.S. teen users at a scale that prior generations would have found unfathomable.

7.   Because Meta, and only Meta, has access to its vast amounts of data about its users, including the research it conducts to identify the harms being experienced by its young users, Meta knows well its impact on young people. Yet, the company takes painstaking efforts

---

[2] Alex Hern, *Never Get High on Your Own Supply—Why Social Media Bosses Don't Use Social Media*, THE GUARDIAN (Jan. 23, 2018), https://www.theguardian.com/media/2018/jan/23/never-get-high-on-your-own-supply-why-social-media-bosses-dont-use-social-media.

[3] Allison Gordon & Pamela Brown, *Surgeon General Says 13 is "Too Early" to Join Social Media*, CNN HEALTH (Jan. 29, 2023), https://www.cnn.com/2023/01/29/health/surgeon-general-social-media/index.html.

to conceal unfavorable internal findings highlighting the severe negative harms inflicted by its platforms on the nation's youth. It likewise conceals when it has made pernicious design choices intended to override young users' ability to regulate their own use, and that exacerbate known harms to young users and conceals when it has made profit-motivated decisions not to implement interventions that it knew it could take to mitigate harms to youth and improve young users' well-being.

8. Not only does Meta hide its knowledge of the harms induced by its platform, but it has also embarked on a public campaign to affirmatively misrepresent and deceive the public that it cares deeply about and prioritizes young users' safety and well-being.

9. Meta's deception on these issues is ceaseless.

10. Rather than acknowledging the addictive aspects of its platforms, Meta claims there are none. Rather than acknowledging it has prioritized maximizing young users' time spent on its platforms over their health, Meta claims instead that its top priority is youth's well-being. Rather than acknowledging its choice to maintain algorithms that Meta knows promote harmful material for teens, Meta misleadingly suggests that such material is vanishingly rare. Rather than adopting design choices and interventions that its own staff have recommended to reduce young users' overuse or mitigate its harms, Meta simply pretends to have done so while pressing forward to profit from its addictive design. Rather than acknowledging the hundreds of thousands of underage users it knows are being subjected to the harms of its platforms, Meta simply pretends they do not exist.

11. These choices have harmed young people in Massachusetts and burdened our school districts and social service providers attempting to respond to the serious and ongoing mental health impacts on youth.

12.   Meta's unfair and deceptive trade practices targeted at youth are exactly the type of unscrupulous, immoral, oppressive, unethical, and unconscionable conduct prohibited by the Commonwealth's laws.

13.   Unless and until Meta is barred from unfairly and deceptively deploying its purposefully addictive product designs to manipulate and overcome the will of its young users, it will continue to sacrifice the well-being of the Commonwealth's youth in pursuit of profit. Unless and until Meta is barred from deceiving the public and its customers about the insidious nature of its platform, it will continue to mislead and harm our young people.

14.   Because that is not a future Massachusetts can tolerate, the Attorney General of the Commonwealth brings this action.

TABLE OF CONTENTS

II. PARTIES

A. Plaintiff

15. Plaintiff is the Commonwealth of Massachusetts ("Commonwealth"), represented by Attorney General Andrea Joy Campbell, who brings this action in the public interest pursuant to G.L. c. 93A, § 4. The Attorney General has reason to believe that Meta has engaged in, and will continue to engage in, the unfair and deceptive practices set forth below that severely impact the health, safety, and welfare of families and youth in the Commonwealth.

16. The Commonwealth also brings certain claims in this action pursuant to the authority conferred on the Attorney General by applicable state law, common law, and pursuant to *parens patriae* authority. These laws authorize the Commonwealth to seek injunctive and other equitable relief, as well as civil penalties, attorneys' fees, expenses, and costs.

B. Defendants

17. Defendant Meta Platforms, Inc., d/b/a Meta ("Meta"), and formerly known as Facebook, Inc. and TheFacebook, Inc., is a U.S.-headquartered multinational technology conglomerate incorporated in Delaware, with a principal place of business in Menlo Park, California, and multiple places of business in Massachusetts. As relevant here, Meta, through itself and/or its subsidiaries, develops, designs, markets, and operates social media platforms and services including Facebook, Instagram, Messenger, and WhatsApp (collectively, Meta's "social media platforms" or simply "platforms"),[4] and its burgeoning virtual reality ("VR") and augmented reality ("AR") line of products. As a result of acquisitions such as Instagram, Meta has come to dominate the market of social media products and apps, becoming the largest social

---

[4] References herein to a singular "platform" refer to Instagram unless otherwise specified.

media company in the world.[5] As of October 2023, Meta itself is valued at over $700 billion.

Defendant Meta, as named in this Complaint, includes its wholly-owned subsidiaries Instagram,

LLC; Facebook Holdings, LLC; Facebook Operations, LLC; Meta Payments Inc.; Meta

Platforms Technologies, LLC; and Siculus, Inc.

18.   Defendant Instagram, LLC ("Instagram"), offers an online social media

networking platform that enables users to post and share images and videos with others, as well

as interact with other users. Instagram is a limited liability company incorporated in Delaware

with its principal place of business in Menlo Park, California. Instagram is a wholly-owned

subsidiary of Meta, following Meta's purchase of Instagram on April 9, 2012. Instagram

currently has over a billion monthly active users, and over 30 million U.S. teen users. The Head

of Instagram, Adam Mosseri, is overseen by and reports directly to Meta's Chief Product

Officer, Chris Cox, who in turn reports directly to Meta's Founder, Chairman & CEO, Mark

Zuckerberg.

19.   At all relevant times, Meta, including through its subsidiaries and executives,

collectively directed, controlled, had the authority to control, or participated in all aspects of the

strategy, operation, planning, management, policies, design, and development of its social media

platforms, including Instagram, including in the acts and practices set forth in this Complaint.

20.   Meta's relevant executives involved in the company's decision-making and

development and approval of Meta's and Instagram's business strategy, operations, policies,

practices, and platform design and development include, but are not limited to: Founder,

Chairman & CEO Mark Zuckerberg, former Chief Operating Officer Sheryl Sandberg, Chief

---

[5] Andrea Murphy, et al., *The Global 2000*, FORBES (June 8, 2023), https://www.forbes.com/lists/global2000/; *see also* Stacy Jo Dixon, *Global Social Networks Ranked by Number of Users 2023*, STATISTA (Sept. 22, 2023), https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/.

Financial Officer Susan Li, Chief Technology Officer Andrew Bosworth, Chief Product Officer Chris Cox, Chief Strategy Officer David Wehner, Vice President of Global Affairs Nick Clegg, Global Head of Safety Antigone Davis, Head of Instagram Adam Mosseri, and Head of Facebook Fidji Simo.

21.   As detailed in the allegations below, Meta is engaging, has engaged, and continues to engage in unfair, deceptive, and unlawful activity in the Commonwealth. Meta has conducted this activity on its own and/or through its subsidiaries over which it exercises complete control and dominion, and over which Meta's executive officers and directors have direct oversight. Because Meta and its subsidiaries operate as a common enterprise, each of them is jointly and severally liable for the acts and practices alleged below, and all references to "Meta" in this Complaint shall refer to and is meant to include both Meta and its above-named subsidiaries, including Instagram.

III.   JURISDICTION AND VENUE

22.   The Attorney General is authorized to bring this action, in this Court, under G.L. c. 93A, § 4, G.L. c. 12, § 10, common law, and *parens patriae* authority.

23.   Venue is proper in Suffolk County under G.L. c. 93A, § 4, and G.L. c. 223, § 5, as the Commonwealth is the plaintiff.

24.   The Attorney General notified Defendants of her intent to bring this action at least five days prior to the commencement of this action, as required by G.L. c. 93A, § 4.

25.   This Court has jurisdiction over the subject matter of this action by virtue, *inter alia*, of G.L. c. 93A, § 4 and G.L. c. 212, § 4.

26.   This Court has specific personal jurisdiction over Defendants under G.L. c. 223A, § 3, because, among other things, and as further set forth below:

a.   Defendants have transacted and continue to transact, direct, and solicit business in

Massachusetts by advertising, promoting, and offering their products and services

to Massachusetts consumers and advertisers; successfully signing up millions of

Massachusetts users on their platforms; collecting Massachusetts users' data; and

selling advertising opportunities to entities (based within and without

Massachusetts) that seek to reach audiences comprised primarily or exclusively of

Massachusetts users based on such data;

b.   Defendants have contracted to supply services or things in the Commonwealth by

contracting with Massachusetts-based advertisers to place advertisements on their

platforms specifically targeted to Massachusetts users based on personal data

collected from Massachusetts users registered on their platforms to gain ad

revenue derived from Massachusetts users;

c.   Defendants' misrepresentations, omissions, actions, and inactions in connection

with designing, developing, and promoting platform features that Defendants

knew would induce addictive, problematic, and harmful use by Massachusetts

young users have harmed the public health, safety, and welfare of Massachusetts

residents, and in particular youth under 18 years old; and/or

d.   Defendants possess and use a physical Massachusetts place of business with

hundreds of Massachusetts-based employees for the purposes of facilitating the

advertising, offering, soliciting, and recruiting of Massachusetts youth to sign up

for their services and supporting their other business efforts in Massachusetts.

27.   Defendant Meta conducts business in the Commonwealth through itself and/or its

subsidiaries (*i.e.*, Defendant Instagram, LLC, Facebook Holdings, LLC, Facebook Operations,

LLC, Meta Payments, Inc., Meta Platforms Technologies, LLC, and Siculus, Inc.) over which it exercises complete dominion and control and over which Meta's executive officers and directors have direct oversight. Meta and its subsidiaries operate as a common enterprise while engaging in the unfair, deceptive, and other unlawful acts and practices alleged below. Because Meta exercises significant control over its wholly-owned subsidiary Instagram, and Meta's executives, directors, and officers are intermingled with and share and have direct oversight and decision-making authority over Instagram, this Court has jurisdiction over each Defendant Meta and Instagram individually and collectively.

28. Meta's business within the Commonwealth has been long-standing and pervasive. Specifically, Meta was founded by Chairman & CEO, Mark Zuckerberg, in Cambridge, Massachusetts in 2004.

29. Thereafter, in December 2009, Meta (then known as Facebook, Inc.) filed a Foreign Corporation Certificate of Registration with the Massachusetts Secretary of State pursuant to G.L. c. 156D, § 15.03 and 950 CMR 113.48, listing its registered agent office in the Commonwealth as 84 State Street, Boston, MA. Within such certificate of registration, Meta described its "activities to be conducted in the [C]ommonwealth" as "Online Social Networking."

30. Meta has filed annual corporate reports with the Massachusetts Secretary of State pursuant to G.L. c. 156D, § 16.22 and 950 CMR 113.57 each year from 2009 to present. Each annual report describes the business of the corporation within the Commonwealth as "Social Media Services" or "Social Media."

31. Meta tracks the number of Daily Active Users ("DAU") and Monthly Active Users ("MAU") (*i.e.*, the number of unique user accounts who visited Instagram at least once on

a specific day, and in the last 30 days, respectively) in Massachusetts on its Instagram platform, including specifically the number of teen DAU and MAU in Massachusetts, in order to identify opportunities to grow its number of users and increase time spent on its platforms.

32. From February 2018 to April 2023, Meta had approximately 2,083,743 to 3,196,439 daily active Massachusetts users (*i.e.*, registered and logged-in users who visited Instagram at least once a day) with accounts on its Instagram platform.

33. From February 2018 to April 2023, Meta had approximately 3,048,490 to 4,782,575 monthly active Massachusetts users (*i.e.*, registered and logged in users who visited Instagram least once in the last 30-day period) with accounts on its Instagram platform.

34. Meta has had large numbers of Massachusetts teen or "young users" (*i.e.*, youth under 18 years old) with accounts on its Instagram platform at all relevant times to the Complaint. In particular, from July 2020 to June 2021, Meta had between approximately 321,770 to 365,621 daily active Massachusetts teen users with accounts on its Instagram platform. From October 2022 to April 2023, Meta had between approximately 344,637 to 364,591 daily active Massachusetts teen users with accounts on its Instagram platform.

35. From July 2020 to June 2021, Meta had between approximately 410,833 to 609,149 monthly active teen users in Massachusetts with accounts on its Instagram platform. From October 2022 to April 2023, Meta had between approximately 572,868 to 609,149 monthly active teen users with accounts in Massachusetts on its Instagram platform.

36. Meta's annual SEC filings report profits derived by "average revenue per user," including Massachusetts users. Meta states in its filings that "the number of users affect [its] revenue and financial results by influencing the number of ads we are able to show, the value of our ads to marketers, the volume of [p]ayment transactions, as well as our expenses and capital

expenditures."[6] Meta further states that the geography of its users affects its revenue and financial results because it "monetizes users in different geographies at different average rates" and tracks its total revenue in a given geography.[7]

37.   Moreover, Meta has explicitly targeted Massachusetts-based users. For example, in an internal email from May 2020, Instagram laid out a plan to release a new "Guides" tool that could be utilized to find information during the COVID-19 pandemic, with the goal of targeting users in certain states, including specifically Massachusetts.

38.   Meta further directed and continues to direct its business toward Massachusetts youth residing within the Commonwealth by cultivating, marketing, and operating its platforms within Massachusetts to be accessed by Massachusetts youth and soliciting the creation of new accounts by Massachusetts youth who accept Defendants' Terms of Use.

39.   When Massachusetts users sign up to use Defendants' social media platforms, Meta collects their location data, which Meta then deploys to sell opportunities to third parties to advertise to Instagram users in Massachusetts, and accordingly derives substantial revenue from the Massachusetts users successfully recruited to its platforms.

40.   Relatedly, among the many features Meta affords its advertisers is the ability to target its users by state or region, such that advertisers can and do target their advertisements to Massachusetts audiences (or to audiences in a geographic area within the Commonwealth).[8] According to Meta's publicly accessible Ad Library, Meta has sold advertising packages to Massachusetts-based advertisers who have specifically paid to target users residing in

---

[6] Meta, Annual Report (Form 10-K) at 57 (Feb. 2, 2022), https://www.sec.gov/ix?doc=/Archives/ edgar/data/1326801/000132680123000013/meta-20221231.htm.

[7] *Id.* at 59.

[8] Instagram Business Blog, *Reaching Your Customers on Instagram*, INSTAGRAM (Nov. 14, 2021), https://business.instagram.com/blog/targeting-instagram-ads.

Massachusetts cities and towns. Those advertisements were directed to Massachusetts users and Meta purposely derived economic benefits, including ad revenue, from such activity in Massachusetts.[9]

41. Meta also takes advantage of users' known or predicted location within Massachusetts to determine what posts to show those users (for example, posts from other users who are geographically nearby). In so doing, Meta strives to show users posts that will result in those users spending more time on Meta's platforms, which allows Meta to sell more advertisements.

42. Defendants also made materially false representations and/or omissions about their products which Defendants knew or should have known would be viewed, heard by, conveyed to, and/or relied upon by Massachusetts users and residents, including in Defendants' Terms of Use, in news publications frequently viewed by Massachusetts residents,[10] and to Massachusetts elected officials.[11] Defendants have also interfaced directly with the millions of Massachusetts registered users, including hundreds of thousands of Massachusetts teen users, by sending messages, notifications, and other communications directed toward and received within Massachusetts relating to the recipients' use of Defendants' social media platforms. As a

---

[9] *See, e.g.*, Advertiser Audience Selection May 24, 2023 – Aug. 21, 2023 for MA Teachers Association, META AD LIBRARY, https://www.facebook.com/ads/library/?active_status=all&ad_type=political_and_issue_ads&country =US&media_type=all (last visited Sept 2023).

[10] A Google Trends Explore search reveals that for major new publications such as The Wall Street Journal, The New York Times, the Washington Post, CNN, NBC News, the Boston Globe, and the Boston Herald, among others, Massachusetts was one of the highest interested states in viewing such publications. For example, over the past 5 years, September 2018 to September 2023, Massachusetts state was the 2nd highest "subregion" or state that searched for and viewed The Wall Street Journal (*see* Search for The Wall Street Journal, GOOGLE TRENDS https://trends.google.com/trends/explore?date=today%205-y&geo=US&q=%2Fm%2F017b3j&hl=en (Last visited Oct. 18, 2023)) and the 4th highest state that searched for and viewed The New York Times (*see* Search for The New York Times, GOOGLE TRENDS, https://trends.google.com/trends/explore?date=today%205-y&geo=US&q=%2Fm%2F07k2d&hl=en (Last visited Oct. 18, 2023)).

[11] Aaron Pressman, *Senator Markey Says Facebook Statements on Kids Advertising 'Appear Misleading'*, BOS. GLOBE (Nov. 23, 2021), https://www.bostonglobe.com/2021/11/23/business/senator-markey-says-facebook-statements-kids-advertising-appear-misleading.

consequence, Defendants' conduct has directly affected the lives and well-being of Massachusetts individuals and youth.

43.   Moreover, Defendants have maintained a place of business in Massachusetts, having set up physical offices in Massachusetts to support and facilitate their global business of soliciting and signing up users for its social media platform services, including users residing in Massachusetts, as well as promoting its platform to advertisers located in Massachusetts or who want to target advertisements to Massachusetts users.

44.   Defendant Meta maintains two offices in Massachusetts. The first office was opened in 2013 at One Broadway in Kendall Square, Cambridge, Massachusetts, and a second office was opened in 2019 at 100 Binney Street, Cambridge, Massachusetts. The number of Meta employees at these Massachusetts office locations has ranged from approximately 200 to 500 employees.

45.   According to Meta's career website, Meta employs in its Massachusetts offices staff to support its "Advertising Technology Team" that focuses on, among other things, building products and services to help connect people and brands on their platforms.[12] In addition, Meta employs staff in its Massachusetts offices specifically focused on Instagram, including product growth analysts, user experience researchers, content designers, and product strategy leads.

46.   Based on the foregoing, Meta has engaged and continues to engage in a persistent course of conduct and/or derives substantial revenue from its services or products offered and used by residents in the Commonwealth, and Meta purposefully avails itself of the Massachusetts

---

[12] *See* Search for Open Positions in Boston, MA, META CAREERS https://www.metacareers.com/v2/locations/boston/?p[offices][0]=Boston%2C%20MA&offices[0]=Boston%2C%20MA (Last visited Oct. 18, 2023), and Search for Open Positions Related to Advertising Technology, META CAREERS https://www.metacareers.com/areas-of-work/adtech/?p[teams][0]=Advertising%20Technology&teams[0]=Advertising%20Technology&offices[0]=Boston%2C%20MA#openpositions (Last visited Oct. 18, 2023).

market so as to render the exercise of jurisdiction over Meta consistent with traditional principles of fair play and substantial justice.

IV. TRADE AND COMMERCE IN THE COMMONWEALTH

47. As alleged in this Complaint, Meta's unfair and/or deceptive acts and practices occurred "in the conduct of any trade or commerce" under G.L. c. 93A, § 1.

48. Under G.L. c. 93A, § 1, "trade" and "commerce" include "the advertising, the offering for sale, . . . the sale, . . . or distribution of any services . . . directly or indirectly affecting the people of this commonwealth."

49. Meta engages in trade or commerce because it advertises its platform to attract Massachusetts users as well as enters commercial transactions with third-party advertisers who wish to reach and target Massachusetts users—both of which directly and indirectly affect Massachusetts consumers.

50. Moreover, Meta also engages in trade and commerce because it directly offers and distributes its social media platform and services to Massachusetts residents in exchange for access to data about those Massachusetts users, which Meta then monetizes.

51. Meta solicits and offers its social media services to Massachusetts users in exchange for the considerable value of access to the data that the users generate, which Meta leverages to sell advertising opportunities to third parties who want to target specific users with advertising. Under Meta's Terms of Use for Instagram, it expressly states "[i]nstead of paying to use Instagram, by using the [s]ervice covered by these Terms, you acknowledge that we can show you ads that businesses and organizations pay us to promote on and off the Meta Company Products," and that "[w]e use your personal data, such as information about your activity and

interests, to show you ads . . . ."[13]

52.   Obtaining Massachusetts users' agreement to the collection and use of their personal data confers great value, benefit, profit, and revenue to Meta because, as stated in its SEC filings, Meta generates substantially all of its revenue from selling advertising placements to advertisers. [14]

53.   Meta attracts and retains advertisers by boasting that its possession of users' unique personal data enables marketers to reach people based on an extensive variety of differentiating factors such as age, gender, location, interests, and online behaviors. Advertisers specifically pay Meta for the amount of ad impressions, *i.e.*, the number of times their ads were on users' screens in their target audience.[15]

54.   Since at least 2018 to present, Meta has successfully solicited and/or maintained business from residents and youth of the Commonwealth, with approximately 3 million daily active Massachusetts users and over 4.5 million monthly active users with accounts on its Instagram platform as of April 2023. Over 350,000 of these daily users are Massachusetts teens.

55.   As alleged in further detail below, in conducting this trade or commerce in the Commonwealth, Meta uses unfair and deceptive acts and practices in its design and operation of the Instagram platform to addict Massachusetts young users to their platforms at the expense of young users' physical and mental health. It further uses unfair and deceptive practices to conceal those acts and practices, the revelation of which would risk making Meta less attractive to families who might otherwise try to restrict their children's use of its platforms and the countless

---

[13] Terms of Use, INSTAGRAM (July 26, 2022) https://help.instagram.com/581066165581870.

[14] Form 10-K, s*upra* note 6, at 57

[15] *Impressions*, META BUS. HELP CTR, https://www.facebook.com/business/help/675615482516035 (Last visited Oct. 18, 2023).

companies to which it seeks to sell digital advertising.

V.   THE INSTAGRAM PLATFORM

56.   Defendants operate the online social media platform Instagram. The Instagram

platform is accessible through an application ("app") that is installed on mobile devices, such as

iPhones or Android phones. Instagram is also accessible through various internet web browsers,

but the overwhelming majority of users access Instagram do so through mobile apps.

Accordingly, unless otherwise specified, the platform features referenced herein will refer to use

of such features on a mobile device.

57.   At its core, Instagram allows people or entities who sign up for accounts,

commonly called "users," to "post" videos, photos, pictures, captions, and other audiovisual

material to Instagram's platform for other users to see and to interact with. The posts are

primarily visual, centering around a photo, picture, or video, but can include audio, music, and

textual descriptions.

58.   To use Instagram's platform, a person or organization needs to sign up for an

account and login with that account.

59.   One user can "follow" other Instagram accounts. Following is done to increase

the likelihood that the user will see the posts from the followed account, as described in more

detail below.

60.   For illustrative purposes, an example of a post that a user might see on their home

screen when the user opens the Instagram app is shown below.[16] The image below is overlaid

with labels identifying the various user features of the Instagram platform that are relevant to the

---

[16] The image comes from an Android phone, but it is not materially different from how the app appears on an iPhone.

allegations in this Complaint.

61.   When a user opens Instagram, the user is taken to a "Home" screen, where the user is presented with a "feed" (*see* above image). The feed is populated with posts from other Instagram accounts (label #1 above).

62.   After viewing the post displayed upon opening the app, a user can swipe up to scroll down on their screen and more posts from the user's feed will continue to be populated on the screen. The feed also contains advertisements.

63.   The posts in the feed include those from accounts that the user has chosen to follow as well as "suggested posts," which consists of posts from accounts that the user has not chosen to follow.

64.   In addition to the home screen feed, Instagram also offers other features labeled above, and which are mentioned in more relevant detail below, including the ability to "Like" a post (label #2 above), the ability to see the number of people who have "Liked" a post (label #3), additional viewing features such as "Reels" (label #4), "Stories" (label #5), "Live" (label #6), and "Explore" (label #7), and a button to show all "Notifications" to the user of various types of activity on the platform (label #8).

VI.   DEFENDANTS' UNFAIR AND DECEPTIVE SCHEME TO EXPLOIT YOUNG USERS FOR PROFIT

65.   Meta has hailed its Instagram platform as its "growth engine"[17] because of the platform's ability to attract young users and capture their attention. Recent data shows that Instagram's tens of millions of young users spend an average of 3–4 hours a day on the platform.[18]

---

[17] Sheera Frenkel, et al., *Instagram Struggles With Fears of Losing Its 'Pipeline': Young Users*, N.Y. TIMES (Oct. 26, 2021), https://www.nytimes.com/2021/10/16/technology/instagram-teens.html.

[18] *Id*.

66.   What these millions of young users, their families, and the public do not know, however, is that Meta has meticulously and purposefully designed its Instagram platform features to exploit, psychologically manipulate, and capitalize off young users' especially susceptible and vulnerable developing brains and social sensitivities, to hook them into spending excessive amounts of time on its platform—more than they would otherwise choose.

67.   Young users, their families, and the public are unaware—because of Meta's painstaking efforts to conceal it—that Meta designs tools and features to induce addiction and habitual use, because the more time spent on its platform, the more advertising revenue Meta generates.

68.   These millions of young users, their families, advertisers, and the public also do not know that Meta is especially financially motivated to specifically target, attract, and retain young users in particular, to build a pipeline of lifelong users who can be shown more ads to directly increase its advertising revenue, and that Meta has employed extensive psychologically exploitative measures specifically to drive up "teen time spent" on its platforms.

69.   Young users, their families, advertisers, and the public also do not know that Meta's internal research also shows that specific platform features have negative mental and physical impacts on young users, yet Meta does nothing to effectively mitigate those harms.

70.   And what Meta has effectively and deceptively concealed, is that it has repeatedly made decisions to not invest in improving young users' well-being, has gone so far as to test measures that could effectively reduce the harmful effects of its platforms, and yet has intentionally chosen to not implement them.

A. **Meta Deliberately and Unfairly Exploits Young Users' Vulnerabilities and Sacrifices Their Health and Well-Being in Order to Gain Profit**

71. While companies like Meta, who are reliant on advertising revenue, predictably seek to increase time spent with their products and services to show more ads, Meta perniciously achieves this goal by employing an arsenal of addictive-by-design features specifically targeted and tailored to exploiting, manipulating, and capitalizing off of young users' unique vulnerabilities, thereby overriding young people's autonomy and ability to self-regulate their time spent on its platform. At the same time, Meta has deceptively and unfairly hidden the risky and harmful nature of these features as further described below.

1. **Meta Knowingly Develops and Employs Features Designed to Psychologically Manipulate Young Users into Addictive Use of Its Platform**

72. To draw young people into its platforms, keep them there, and lure them back for hours upon hours, every single day, Meta employs designs features that it knows preys on young users' still-developing brains and psychological vulnerabilities, including their well-known social "fear of missing out" (commonly called "FOMO").

73. In creating and designing these features, Meta has carefully studied the fundamental neuroscience of teenage brains to exploit teens' vulnerabilities.

74. For example, in May 2020, Meta researchers tasked with studying Instagram's "Teen Ecosystem" to identify opportunities for growth, conducted an internal presentation called "Teen Fundamentals," which discussed "adolescent development concepts, neuroscience as well as nearly 80 studies of our own product research" that highlighted vulnerabilities of the teenage brain.

75. The presentation discussed teen brains' relative immaturity, and teenagers' tendency to be driven by "emotion, the intrigue of novelty and reward."

76.   The presentation explained how these characteristics "manifest . . . in product usage," noting that "the teenage brain happens to be pretty easy to stimulate" and that teens' desire for novelty "manifests itself in three behaviors that especially lend themselves to social media—exploration, discovery and experiences."

77.   With respect to exploration, the presentation highlighted how Meta's Instagram platform capitalizes off teens' "novelty seeking mind[s]" by "deliver[ing] [teens] a dopamine hit" every time a teen "finds something unexpected" on the app, fulfilling their brains' "insatiable" need for "'feel good' dopamine effects," to which "teen brains are much more sensitive."

78.   The presentation further highlighted how the "especially 'plastic'" nature of teens' brains often sends teens down "rabbit holes" of viewing posts on a particular topic.

79.   In addition, because "[a]pproval and acceptance are huge rewards for teens," the presentation continued, "[direct messages (DMs)], notifications, comments, follows, likes, etc. encourage teens to continue engaging and keep coming back to the app."

80.   A June 2020 internally circulated research article entitled, "What Makes Teens Tick," highlighted similar "biological factors . . . consistent across adolescent development" that the company could use to "gain valuable unchanging insights to inform product strategy." (emphasis in original). Specifically, the article emphasized that "[t]he teen brain is easily stimulated by novelty," "teens are still developing self control," and "[t]hey are motivated by the prospect of immediate rewards."

81.   As Sean Parker, the former president of Meta, publicly acknowledged at a November 2017 conference, Meta employs these psychological tactics in order to make its platform addictive and to "exploit[] a vulnerability in human psychology":

> The thought process that went into building these applications,
> Facebook being the first of them . . . was all about: "How do we

23

consume as much of your time and conscious attention as possible?" That means that we need to sort of give you a little dopamine hit every once in a while, because someone liked or commented on a photo or a post or whatever. . . . It's a social-validation feedback loop … exactly the kind of thing that a hacker like myself would come up with, because you're exploiting a vulnerability in human psychology. The inventors, creators—me, Mark [Zuckerberg], Kevin Systrom on Instagram, all of these people—understood this consciously. And we did it anyway.[19]

82.   Meta and Instagram specifically cater to these particular youth vulnerabilities by designing and developing manipulative features that include, but are not limited to: (a) pushing a regular stream of disruptive audiovisual and haptic alerts and notifications to recall young users back to the platform at all times of day and night; (b) using "infinite scroll" and "autoplay" features to keep young users from leaving the platform and instead spending excessive amounts of time on Meta's platforms; (c) employing ephemeral, time-sensitive aspects to its content-viewing features to induce "fear of missing out" ("FOMO") in young users to encourage more time spent on its platform; and (d) using intermittent variable reward schedules to interfere with young users' autonomy and keep them hooked and returning to the platform over and over again.

83.   Notably, Meta embeds these features into its platform in a way that either cannot be changed by the user, or as default settings, which Meta knows young users are highly unlikely to alter, which furthers Meta's goal of keeping young users on its platform as long as possible.

a.   Incessant Notifications and Alerts

84.   Alerts and notifications are integral to Meta's business goal of prolonging youth time spent on its platforms. According to an April 2018 study on "Understanding Levers for Teen Growth," Meta specifically relies on "leverag[ing] teens' higher tolerance for notifications" to increase retention and time spent on the platform.

---

[19] Hern, *supra* note 2.

85.   Notifications are signals displayed on a user's device to alert them of some activity occurring on the platform to prompt them to return the application or to keep using it. By default, Meta enables a range of these audio and visual "push" notifications when the Instagram app is installed on a smartphone.[20] Many of these notifications show up on a user's phone screen even when the user does not have the Instagram app open, or when the phone is not being used at all.

86.   A push notification pops up as banner on a user's phone screen alerting them of some type of activity that has occurred on Instagram (*e.g.,* "[@user] just made a post"). Meta's Instagram app enables approximately 40 types of notifications to alert a user to a myriad of events or activities occurring on the app, including when someone:[21]

- Follows or requests to follow the user

- "Goes Live" (*i.e.*, starts a live broadcast)

- Likes the user's posts

- Comments on the user's posts

- Mentions the user in a comment

- Sends the user a message

- Updates or adds to their Stories (*i.e.*, temporarily viewable posts)

- Uploads a Reel (*i.e.*, a video post)

---

[20] *See, e.g.*, *When Instagram Sends Push Notifications to Your Device*, INSTAGRAM HELP CTR., https://help.instagram.com/105448789880240 (Last visited Oct. 18, 2023); Avery Hartmans, *These Are the Sneaky Ways Apps Like Instagram, Facebook, Tinder Lure You in and Get You 'Addicted,'* BUS. INSIDER (Feb. 17, 2018), https://www.businessinsider.com/how-app-developers-keep-us-addicted-to-our-smartphones-2018-1#instagram-sends-dozens-of-push-notifications-each-week-and-uses-stories-to-attract-you-1.

[21] *When Instagram Sends Push Notifications to Your Device*, *supra* note 20.

87.   Illustrative examples of notifications appear in the below screenshot:[22]

_____
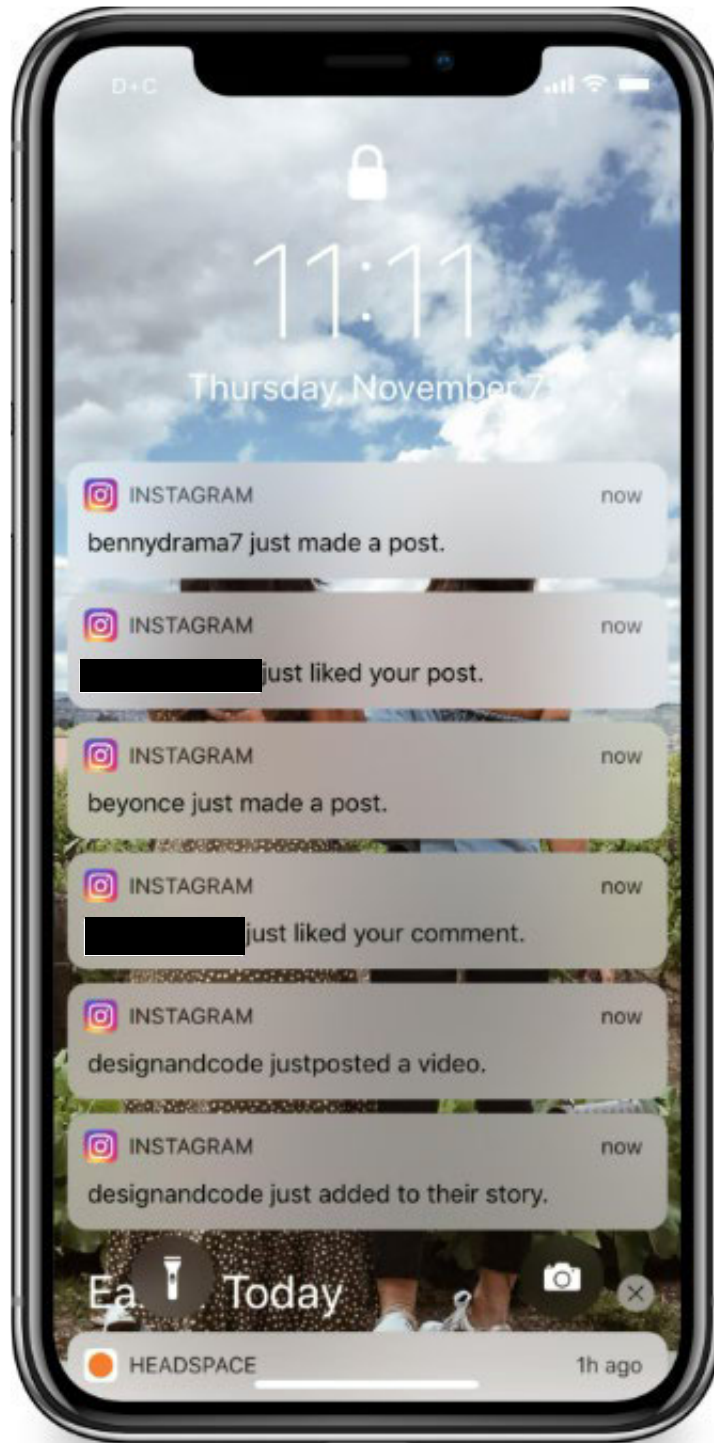
[22] The example refers to "videos" instead of "Reels" because the image originates from 2019, before the "Reels" feature was introduced (in 2020).

88.   Meta has also designed these push notifications so that, by default, when a user receives a push notification, their device vibrates and makes a sound to alert the user and get the user's attention.

89.   In addition, a number displayed on the top corner of the Instagram app icon on a user's mobile device tells a user how many Instagram push notifications the user has not yet seen.

90.   Meta has purposefully and carefully designed these notifications, including the ways they are "pushed" and displayed, to increase time spent on its platform by young users by taking advantage of well-understood neurological and psychological phenomena, including using sounds and vibrations to trigger sudden dopamine releases and preying on youth's social sensitivity and fear of "missing out" on seeing new activity.[23]

91.   As Meta's May 2020 "Teen Fundamentals" research identified, because "[a]pproval and acceptance are huge rewards for teens," notifications are highly effective in encouraging teens to continue coming back to the app over and over again in hopes of receiving an "award," i.e., some type of positive social validation.

92.   The volume of notifications received by young users can be staggering. Recent research shows that about half of 11- to 17-year-olds on social media receive an average of 237 notifications (with some as high as 5,000 notifications) *per day*.[24] Of these, about 30% are received during the school day or in the middle of the night. [25]

---

[23] Trevor Haynes, *Dopamine, Smartphones & You: A Battle for Your Time*, HARV. U. GRADUATE SCH. OF ARTS & SCIS. BLOG (May 1, 2018), https://sitn.hms.harvard.edu/flash/2018/dopamine-smartphones-battle-time/.

[24] Jenny S. Radesky, et al., *Constant Companion: A Week in the Life of a Young Person's Smartphone Use*, COMMON SENSE MEDIA (2023) at 13, 42–43, https://www.commonsensemedia.org/sites/default/files/research/report/2023-cs-smartphone-research-report_final-for-web.pdf.

[25] *Id*.

93.   Meta knows that its constant barrage of notifications is successful in keeping young users returning to its platform at all hours. In a November 2019 internal presentation entitled "[Instagram] Notification Systems Roadshow," Meta's research highlighted that as a result of these "high volume" push notifications, young users are "overload[ed]," "overwhelm[ed]," and compelled to re-open and re-visit the Instagram platform repeatedly throughout the day and at night.

94.   Moreover, while young users can technically navigate to the settings of the app and opt-out of these excessive default notifications, Meta knows, and has data that shows, young users rarely change their settings, and do not find it easy to do so, with users reporting it "overwhelming to try and change" their notification settings." As a result, young users spend more time on Instagram than they otherwise would choose.

95.   Meta's incessant use of notifications to draw young users back to its platform is without historical analogy. In the past, a consumer product competing for the attention of young people did not call, fax, or personally badger them more than 200 times *per day*; nor would the law have allowed such an approach. But that is what Meta's notifications do today.

96.   Meta has pursued its strategy of deploying incessant notifications and alerts to young users, as described above, despite knowing from its own internal research that it causes harm to young users' well-being. As noted in Meta's July 2018 internally circulated research article entitled "Problematic Facebook use: When People Feel Like Facebook Negatively Affects Their Life," these notifications are psychologically harmful to young users by, among other things, "caus[ing] inattention and hyperactivity among teens," and "reduc[ing] productivity and well-being."

b.   Infinite Scroll and Autoplay Stories and Reels

97.   Meta also exploits young users' novelty-seeking minds by using never-ending features such as "infinite scroll," "autoplay," "Stories," and "Reels" to keep them addicted to its platform for excessive amounts of time.

98.   In the fall of 2016, Instagram debuted its "infinite scroll" system of delivering a never-ending stream of posts and advertisements to both a user's main feed (where a user sees posts from people they follow) and "Explore" surface (where a user can search public posts from users they do not follow) within Instagram.

99.   Meta designed the "infinite scroll" feature to endlessly load and/or offer new posts and advertisements for the user to view as the user scrolls down their page feed, removing any need to hit a "next page" button to view more. As a user scrolls down their feed of posts, the platform continuously and perpetually selects and shows more posts to the user.

100.   The "infinite scroll" format makes it difficult for young users to leave the platform, because there is no natural end point for the display of new posts and, as identified in Meta's "Teen Fundamentals" research, exploits the "especially plastic" nature of teen brains to lead them down "rabbit holes."

101.   For example, the platform does not tell a user when they have seen all the new posts from accounts they follow. Instead, the platform continues to seamlessly display and suggest additional posts from other accounts the user does not follow, provoking the young users' well-known social "fear of missing out" of something new or interesting (commonly called "FOMO").

102.   This perpetual stream is designed to "keep [users] scrolling, and purposely

eliminate any reason for [them] to pause, reconsider or leave."[26] The user's experience is turned

into "a bottomless flow that keeps going" and this "flow state," "fully immerse[s]" users, distorts

their perception of time, and "has been shown to be associated with problematic use" of social

media platforms.[27]

103.   Meta also deploys an "autoplay" feature on its Instagram "Stories" to knowingly

exploit young user's "insatiable," "novelty-seeking" minds by continuously playing new and only

temporarily viewable image and video posts in an effort to keep young users on its platform as

long as possible.

104.   Instagram's "Stories" feature allows users to publicly share with other users and

followers a collection of images or recorded short videos.[28]

105.   If accounts that a user follows have posted "Stories," a user will see circles with

those accounts' profile pictures at the top of their home screen, which the user can tap to start

watching that account's posted Stories.

106.   When a user selects to start watching another account's "Stories," Instagram

utilizes an "autoplay" tool so that each image or video "Story" in the collection is displayed in a

continuous slideshow that automatically starts playing as the prior story ends. At various times,

advertisements are also shown to a user interspersed among the Stories they are watching.

Moreover, once a user has finished watching one person's Stories, they are automatically

---

[26] Von Tristan Harris, *The Slot Machine in Your Pocket*, SPIEGEL INT'L (July 27, 2016), https://www.spiegel.de/international/zeitgeist/smartphone-addiction-is-part-of-the-design-a-1104237.html.

[27] Nino Gugushvili, et al., *Facebook Use Intensity and Depressive Symptoms: A Moderated Mediation Model of Problematic Facebook Use, Age, Neuroticism, and Extraversion*, 10 BMC PSYCH. 1, 3 (Nov. 28, 2022), https://doi.org/10.1186/s40359-022-00990-7.

[28] *INSTAGRAM STORIES Share Your Everyday Moments*, INSTAGRAM, https://about.instagram.com/features/stories (Last visited Oct. 18, 2023).

shepherded into the next person's collection of Stories without needing to take any further action.

107.   Much like "infinite scroll," this "autoplay" feature encourages young users to continuously remain on the platform because it does not require user intervention to choose to view and watch the next story, and in fact eliminates user autonomy in making that choice. This reduces so-called "friction" in the user experience (*i.e.*, something that slows down a user from performing an action), and by default and by design, young users are kept on the platform for longer periods of time.

108.   In addition, Instagram purposefully inserts and prominently displays its autoplay "Stories" feature throughout its platform interface to encourage maximum viewing time and addictive use, including having "Stories" be the first thing a user see when you open the app, being housed at the top of the screen, and periodically showing up in the middle of scrolling through a user's feed.

109.   Meta's 2018 internal data showed its "Stories" feature was successful in increasing time spent on its platform, touting statistics that 72% of people on its platform viewed Stories each day, that "[g]rowth is especially strong" among U.S. teens, and that because of this extensive viewership, its "Stories Ads Revenue" had grown to be "20% of daily Instagram revenue."

110.   Meta employees know the powerful, addictive nature of autoplay in maintaining time spent on its platform, and Meta chose to retain these autoplay features even after it became aware that one of its competitors, YouTube, chose to disable autoplay for users under the age of 18.

111.   Meta has also designed its Instagram "Reels" feature to use a similar autoplay function to exploit youth's social sensitivity to "missing out" on new posts. "Reels" are short videos with audio and effects that can be shared with followers or made publicly available to the wider Instagram community.

112.   Like autoplay "Stories," after a user finishes watching a posted Reels video, the platform automatically selects and plays another video without any user intervention or autonomy over whether or what to watch. This auto selection and play continues in perpetuity, with video advertisements interspersed.

113.   In addition, the short-form nature of Reels (between 15 to 90 seconds, as of April 2023) is designed to manipulate a user to keep watching videos by ensuring that a teen user will not get bored and navigate away or close the app, or at least delay user choice to do so.

114.   Meta purposefully designs these unlimited and never-ending aspects of its viewing features based on Meta's research showing teens' novelty-seeking behavior in an effort to attract and ensnare more teens to spend more time on its Instagram platform.

c.   Ephemeral, Time-Limited, and FOMO-Inducing Features

115.   In addition, in order to capitalize off teens' uniquely sensitive "fear of missing out" ("FOMO"), Meta specifically developed features "that increase the possibilities for time-sensitive interactions on [Instagram]."

116.   Meta intentionally designs ephemeral aspects into multiple platform features to exploit and leverage young users' "FOMO" triggered by adolescents' especially sensitive fear of social exclusion, in order to recall young users back to their platform and extend and increase their time spent on the platform.

117.   For example, in addition to employing its continuous "autoplay" tool for its Instagram "Stories" feature (as described above), Meta also purposely designs "Stories" to have

an ephemeral aspect. Meta's ephemeral design makes it so that Stories are only available to view for 24 hours before disappearing from a consuming user's feed.[29,30]

118.   The fact that another user's "Stories" are only viewable for a limited time before disappearing inevitably incentivizes young users to frequently open, return to, and remain on the Instagram platform so they will not "miss out" on viewing all the Stories before they disappear.

119.   Another purposefully designed FOMO-inducing feature is Instagram's "Live" feature, which Meta launched in 2016. Using the "Live" feature, a user can broadcast livestream videos for followers or the public to watch and react to in real time.[31] As the name suggests, however, such videos can only be interacted with during the time that person is going "Live."

120.   Because videos released through "Live" are available in real-time, a young user's failure to quickly join the livestream when it begins means that the user will miss out on the chance to view, comment, and interact with others viewing it.

121.   When an account "goes Live," the Instagram Platform sends out a notification on the mobile devices of users that follow that account that reads, "[@user] started a live video. Watch it before it ends!"[32] This notification is sent even when the user does not have the Instagram app open to induce them re-open and revisit the platform.

122.   As highlighted in a December 2015 strategy email to Meta's executives, including former Instagram CEO Kevin Systrom and CTO Mike Kreiger, Instagram's "Live" feature was specifically intended to appeal to teens in order to maximize young users' time on its platforms,

[29] *Introducing Instagram Stories*, INSTAGRAM (Aug. 2, 2016) https://about.instagram.com/blog/announcements/introducing-instagram-stories.

[30] Josh Constine, *Instagram Launches 'Stories,' a Snapchatty Feature for Imperfect Sharing*, TECHCRUNCH (Aug. 2, 2016), https://techcrunch.com/2016/08/02/instagram-stories.

[31]*Live*, INSTAGRAM HELP CTR., https://help.instagram.com/272122157758915/?helpref=hc_fnav (Last visited Oct. 18, 2023).

[32] *Notification Settings*, INSTAGRAM HELP CTR. (Oct. 18, 2023) https://help.instagram.com/105448789880240.

setting goals "[t]o drive substantial watch time via Live" by "[finding] partners to appeal to teens" and "driving time spent" for teens by "supporting initiatives" around "Live Events."

123. Moreover, Meta knows that these FOMO-inducing features result in problematic and habitual use, contribute to mental health harms to young users, and that young users are unable to extricate themselves because of these platform designs.

124. For example, Meta's October 2019 "Teen Mental Health Deep Dive" research, which surveyed over 2,500 teenagers who use Instagram on at least a monthly basis, found 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."

125. Meta's 2019 "Hard Life Moments — Mental Health Deep Dive" research likewise confirmed these findings, noting that over half of Instagram's teen users report struggling with FOMO—yet Meta continues to use these FOMO-inducing features to increase teens' time spent on its platform.

d. Intermittent Variable Rewards

126. Yet another tactic Meta uses to manipulate young users to prolong their time on its platform and to induce them to return to the platform if they cease using it for a period of time, is deploying intermittent variable rewards ("IVRs")—the same psychological mechanism that underlies the addictive nature of slot machines.[33]

127. IVRs work by providing positive stimuli at random, unpredictable intervals interspersed with neutral stimuli. Whenever a positive stimuli is received (*e.g.*, a notification that someone "liked" your post), users get a psychologically-pleasing dopamine release, which

---

[33] *See, e.g.*, Haynes, *supra* note 23.

keeps a user in a feedback loop to keep checking for more rewarding stimuli. [34] Because of the unpredictability of these intermittent rewards, users never know if their next notification will be the one that makes make them feel really good[35]—which keeps users returning to the platform habitually.[36]

128.   Even when rewards are delivered infrequently, the anticipation of one of these rewards can also be psychologically and/or physiologically pleasing.[37]

129.   Because Meta knows from its May 2020 "Teen Fundamentals" research that teen brains have an "insatiable" need for these "feel good dopamine effects," it has accordingly purposely designed its notification delivery system to randomly award young users with positive dopamine-inducing events (*i.e.*, receiving a notification that someone "liked" your post) interspersed with dopamine gaps (*i.e.*, receiving neutral notification like a product update), allowing for anticipation and craving to develop, which strengthens the desire to keep returning to the platform with each release of dopamine.

130.   Moreover, as a neuroscience researcher explained, Instagram purposefully uses IVRs to sometimes withhold notifications of "likes" on a user's posts to deliver them in "larger bursts":[38]

> So when [a user] makes a post, they may be initially disappointed to find less responses than [] expected, only to receive them in a larger bunch later on. [A user's] dopamine centers are primed by those initial negative outcomes to respond robustly to the sudden influx of

---

[34] Rasan Burhan and Jalal Moradzadeh, *Neurotransmitter Dopamine (DA) and its Role in the Development of Social Media Addiction*, 11 J. OF NEUROLOGY & NEUROPHYSIOLOGY 507–8 (2020), https://www.iomcworld.org/open-access/neurotransmitter-dopamine-da-and-its-role-in-the-development-of-social-media-addiction.pdf.

[35] Mark D. Griffiths, *Adolescent Social Networking: How do Social Media Operators Facilitate Habitual Use?*, 36 J. EDUC. & HEALTH 66 (2018), https://irep.ntu.ac.uk/id/eprint/35779/1/13313_Griffiths.pdf.

[36] Haynes, *supra* note 23.

[37] Griffiths, *supra* note 35.

[38] Haynes, *supra* note 23

social appraisal.[39] This use of a variable reward schedule takes advantage of [users'] dopamine-driven desire for social validation, and it optimizes the balance of negative and positive feedback signals until we've become habitual users. [40]

131.   Meta also incorporates IVRs into the design of its platforms by "link[ing] a user's action (like pulling a [slot machine] lever) with a variable reward."[41] For example, when "we swipe down our finger to scroll the Instagram feed, we're playing a slot machine to see what photo comes next."[42]

132.   Also similar to the tactics employed in slot machines, Meta purposely implements a small delay after a user swipes to refresh their feed before the new information is displayed. This delay is not the result of background technical or computing processes, but rather, is built in by purposeful design—similar to the spinning cogs in a slot machine. This several second delay creates the aspect of suspense and anticipation that is integral to an effective IVR mechanism.

133.   To-date, Meta has employed these IVRs to exploit young users' sensitivity to "feel good dopamine effects" because it knows it is highly effective at hooking young users and keeping them returning to its platform, over and over again.

2.   Meta Knows that the Addiction Caused by Its Design Features Harms Young Users

134.   Meta knows that the cumulative effect of its manipulative and exploitative design features addicts and overwhelms young users who "can't help themselves" from returning to the platform, and that this habitual use causes young users mental and physical harm.

---

[39] *Id.*

[40] *Id*.

[41] Harris, *supra* note 26.

[42] *Id*.

135. Meta's data and research has confirmed that the way it engineered these addiction-inducing Instagram features, as alleged herein, were indeed effective in addicting young users, operated to override young users' ability to self-regulate their time on the platform, and were leading to negative effects on young users' well-being. For example, in October 2019, Meta conducted a "Teen Mental Health Deep Dive" to "get a nuanced understanding of teens' perception of how Instagram effects their mental health," which found that Instagram's teen users "have an addicts' narrative about their use," "recognize the amount of time they spend online isn't good for them," "but at the same time know they lack the willpower to control the time spent themselves."

136. Similarly, in June 2020, Meta's Senior User Experience ("UX") Researcher noted in an internal report entitled "What Makes Teens Tick?" that "our own product foundation research has shown teens are unhappy with the amount of time they spend on our app" and that "[d]ue to the immature [teen] brain, they have a much harder time stopping even though they want to." The report further noted that because "[t]een brains are much more sensitive to dopamine," the risk of "addiction" is higher and that is what "keeps them scrolling and scrolling."

137. Meta has researched and analyzed this type of addictive or "problematic use" reported by young users on its platforms. According to Meta's 2019 "Hard Life Moments — Mental Health Deep Dive" research, which studied "the reach, intensity, [and] impact of Instagram" "[a]cross 13 mental health and well-being issues," "[o]ver 30% of users across age cohorts" told Meta that "Instagram made problematic use worse." Meta researchers defined "problematic use" as "when people feel a lack of control over how they use technology, and this leads to negative life impact (e.g. sleep, parenting, social relationships, or productivity)."

138.   Meta also knows young users' physical health is harmed by this excessive, compulsive "problematic use" induced by its platform design features. Specifically, Meta's researchers noted that "sleep problems" can "be part of [Facebook] addiction" and confirmed "it is true that negative impacts on sleep is one possible outcome of problematic social media use."

139.   In February 2019, Meta's VP of Research, David Ginsberg circulated a summary of external and internal research on Instagram and "Teen Well-Being" to executives, including then-COO Sheryl Sandberg and Head of Instagram Adam Mosseri, which likewise acknowledged that "[w]hen social media use displaces sleep in adolescents (via nighttime social media use), it is negatively correlated to indicators of mental health."

140.   Moreover, Meta knows that its addictive features, such as infinite scroll, and autoplay in Stories and Reels, harm young users because they encourage passive consumption. As one Meta employee stated in October 2021: "because [Stories are] so passive—you can just sit there and watch without interacting with the poster or other people much, and we know that passive consumption is generally worse for wellbeing."

141.   Despite its knowledge of these harms to youth "well-being" as a result of its addiction-inducing design features, Meta purposefully chose, and continues to choose, to employ these tools to exploit, psychologically manipulate, and take advantage of susceptible young users' vulnerabilities to induce more time spent on its platform.

3.   Meta Employs These Addiction-Inducing Features to Drive Revenue

142.   Meta's choice to design and implement these exploitative and manipulative features to addict young users and maximize their time on its platform was not an accidental byproduct of its efforts to grow its base of young users and increase its advertising revenues. Rather, addicting young users to its platform was a central pillar in its growth strategy—and one that Meta doggedly pursued notwithstanding the harm caused to those young users.

143.   Because Meta generates substantially all of its revenue from selling advertising placements to marketers,[43] Meta is incentivized to sustain and increase user time spent on its platforms. More time spent on Meta's platform means more eyes on ads. And more time means more ad impressions (*i.e.*, the number of times an ad was on screen for a target audience[44]), sold to the millions of advertisers on Meta's platform who pay per impression.

144.   Increasing time spent by young users, in particular, is pivotal to Meta achieving its business goal. This is because younger users: (1) are particularly prized by advertisers, Meta's principal revenue source, (2) become long-term customers, and (3) are early adopters and set trends that the rest of society emulates.[45]

145.   Meta has internally highlighted the importance of maintaining the amount of teen time spent on Instagram to its business strategy, warning, "If we lose the teen foothold in the U.S. we lose the pipeline." Notably, Meta's business records show it actively tracks metrics like "Teen time spent," a term denoting how many hours per day teenagers are on Instagram, and that it relies on teenagers to spend an average of three to four hours a day on Instagram, nearly double what adults spend on Instagram.

146.   Meta's product design team's research with respect to "long-term retention" further confirmed that "the young ones are the best ones. . . . You want to bring people to your service young and early."

147.   As a result, Meta has relentlessly focused its efforts on building Instagram, including by deploying the addictive features described above to induce millions of young users

---

[43] Form 10-K, *supra* note 6, at 57.

[44] *Impressions*, *supra* note 15.

[45] Frenkel, *supra* note 17.

to spend hours upon hours of their time—more than they might otherwise want or willingly choose—to the detriment of their own well-being.

148.   And Meta's efforts have been successful. Within a year of Instagram's acquisition by Meta in April 2012, the number of teen Instagram users grew exponentially. In 2012, it was estimated that only one in ten online teens (aged 12 to 17) in the United States visited Instagram monthly.[46] Within just a few years after Meta's acquisition, over 50% of U.S. teens, ages 13–17, said they used Instagram;[47] by 2017, that number had grown to over 75%.[48]

149.   Tellingly, despite Instagram achieving near total (i.e., 90%) teen market penetration by 2019, Meta's goal still was to entice more teens to the platform and keep them on the platform for longer periods of time, over and over again. This was because, according to Meta, the remaining untapped U.S. teen market was "incrementally more valuable to get on the platform" than emerging markets with lower penetration.

150.   As described above, Meta has perniciously achieved this near total teen market domination by unfairly deploying an arsenal of psychologically manipulative addictive-by-design features on its platform to induce young users' addictive and problematic use of its platform—all the while deceptively and unfairly hiding the risky and harmful nature of these features as further described below.

---

[46] Jennifer Van Grove, *Why Teens are Tiring of Facebook*, CNET (Mar. 2, 2013), https://www.cnet.com/tech/services-and-software/why-teens-are-tiring-of-facebook/.

[47] Amanda Lenhart, *Teens, Social Media & Technology Overview 2015*, PEW RESEARCH CTR. (Apr. 6, 2015), https://www.pewresearch.org/internet/2015/04/09/teens-social-media-technology-2015/.

[48] *Instagram and Snapchat are Most Popular Social Networks for Teens; Black Teens are Most Active on Social Media, Messaging Apps*, THE ASSOCIATED PRESS-NORC CTR. FOR PUB. AFFS. RES. (Apr. 2017) https://apnorc.org/projects/instagram-and-snapchat-are-most-popular-social-networks-for-teens-black-teens-are-most-active-on-social-media-messaging-apps/.

B. **Meta Deceptively Represented that Its Platforms Are Safe and Not Addictive, and that Meta Prioritizes Young Users' Well-Being, While Concealing the Platforms' Known Harmful Nature and Impacts on Young Users**

151.	Because candidly disclosing the addictive nature of its platforms' pernicious design features and their harmful impacts on young users would negatively impact its business and reputation, Meta has chosen to deceive.

152.	Meta's deception is pervasive.

153.	Namely, for years, Meta has engaged in an extensive public campaign touting the safety of its platforms for youth, and that it cares deeply for and prioritizes young user safety and well-being, while vehemently denying that its platforms are addictive or harmful.

154.	These representations were deceptive because while Meta publicly reassured parents, families, lawmakers, advertisers, investors, and users that its platforms were safe for young users and designed to promote their well-being, it internally continued to prioritize, develop, and implement features that it knew induced young users' into addictive and habitual use of its platform; deliberately chose not to implement measures it knew could reduce harms to youth; and deliberately concealed its internal research showing higher frequency of harms being encountered on its platform by youth than disclosed in its public reports.

**1.	Meta Lied that Its Platforms Are Not Addictive**

155.	Despite intentionally designing its products to be addictive, and knowing that its addictive design features in fact induce young users' habitual and problematic use, Meta has claimed these features are not addictive at all.

156.	Since at least 2018, Meta has deceptively denied to the public that its social media platforms are designed to be addictive. In 2018, Meta told the BBC that "at no stage does

wanting something to be addictive factor into" the design process for its products.[49] During a

November 2020 congressional hearing, when asked "do you believe your product [*i.e.*, Meta's

platforms] can be addictive," CEO Mark Zuckerberg responded, "we certainly do not design the

product in that way."[50]

157.   In his March 2021 testimony before Congress, Zuckerberg was asked, "Do you

agree that you make money off of creating an addiction to your platforms?" Zuckerberg

definitively and falsely responded, "[N]o. I don't agree with that."[51]

158.   In September 2021, Meta's Global Head of Safety Antigone Davis told Congress,

"I disagree with calling our product addictive. . . . [T]hat's not how we build products."

159.   In December 2021, Head of Instagram Adam Mosseri told Congress, "I don't

believe that research suggests that our products are addictive."[52]

160.   In reality, and as alleged above (including in paragraphs 83, 115, 119, 121–129,

supra) and as further alleged below, as of at least 2016 and even earlier, the company was

designing psychologically addicting features into its Instagram platform, including infinite scroll,

the ephemeral "Live" feature, push notifications, and autoplay Stories and Reels, for the explicit

---

[49] Hilary Andersson, *Beyond The Individual User: Understanding Our Products Through The Household Ecosystem*, BBC (July 4, 2018), https://www.bbc.com/news/technology-44640959.

[50] *Breaking the News: Censorship, Suppression, and the 2020 Election: Hearing Before the S. Comm. on the Jud.*, 116 Cong. (2020) (Statement of Mark Zuckerberg); *See also Facebook CEO Mark Zuckerberg on Whether Products are Addictive: "We Certainly Do Not Design the Product in that Way"*, THE RECOUNT, (Nov. 17, 2020), https://therecount.com/watch/facebook-ceo-mark-zuckerberg-on/2645864077.

[51] *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation: Hearings Before the H. Subcomms. on Commc'n & Tech., Consumer Prot. & Commerce, and Comm. on Energy & Com.*, 117 Cong. at 107:2491-2497 (2021) (Statement of Mark Zuckerberg), https://www.congress.gov/117/meeting/house/111407/documents/HHRG-117-IF16-Transcript-20210325.pdf.

[52] Taylor Hatmaker, *Instagram's Adam Mosseri Defends the App's Teen Safety Track Record to Congress*, TECHCRUNCH (Dec. 8, 2021), https://techcrunch.com/2021/12/08/instagrams-adam-mosseri-senate-hearing-teen-safety.

purpose of increasing the retention of young users and the time spent those users spent on Instagram.

161.   Also as alleged above (including in paragraphs 93, 95 and 115), since at least 2018, and as further alleged below, Meta was aware that these features induced addictive-like behavior and problematic use of Instagram by young users.

162.   A September 2020 chat between some of Meta's data scientists and software engineers provides an illustrative example of just how widespread this understanding was within the company:

> ██████████ : There's a new netflix doco basically saying we're creating a world of addicted monsters [Link to Netflix documentary "The Social Dilemma"] . . . A lot of it is probably true
>
> ***
>
> ██████████ : just from the trailer- i would say i agree [Link to Amazon page for book entitled "Hooked: How to Build Habit-Forming Products by Nir Eyal"] this is consider[ed] a seminal [Product Manager] book for a lot of ppl i know...and its [sic] basically about how to trigger dopamine with your designs
>
> ██████████ : 'Ya it does make me wonder whether we do enough for mental health Especially for teens Who are more susceptible.

163.   Meta likewise knows, through its October 2019 "Teen Mental Health Deep Dive" research, that its platform features successfully addict teens, who report having "an addicts' narrative about their use" and "wish[ing] they could spend less time" but they "can't help themselves."

164.   In the same vein, Meta's CEO, Mark Zuckerberg, deceptively denied that Meta designed its products to be addictive to maximize time spent. At a March 2021 Congressional hearing, in response to a question asking if he agreed "that your business model and the design of your products is to get as many people on the platform as possible and to keep them there for as

long as possible," Zuckerberg deceptively testified that that was not Meta's goal and stated "I don't give our News Feed team or our Instagram team goals around increasing the amount of time that people spend."[53]

165.   In fact, Meta has long internally set goals on increasing time spent by users, including specifically teen users. In a December 2015 email to CFO Susan Li and Chief Strategy Officer David Wehner, Zuckerberg listed Meta's company goals for 2016, including to see "[t]ime spent increase[] by 12%" over the following three years. For Instagram specifically, Zuckerberg wrote that he hoped to see time spent on the Platform increase by 10% between 2016 and 2021.

166.   Meta's 2017 business goals continued to place an "[e]mphasis on driving time spent" and set an "explicit goal around moving time spent" to "drive [] growth."

167.   Moreover, one of Meta's key goals was to specifically target and induce young users to spend ever-increasing amounts of time on its platforms. For example, an internal presentation titled "2017 Teens Strategic Focus" explicitly stated Meta's "goal" as "increas[ing] U.S. teen time spent" and "bet[ting] big on Instagram Direct + stories" "to win back teen interaction."

168.   Since at least 2017, Meta has thus internally continuously looked for opportunities to increase teen time spent, including capitalizing off the addictive nature of its autoplay feature, which Meta found "increases overall time spent" especially for young users. As stated in an April 2017 internal weekly update email regarding initiatives to boost teen time spent:

> We have been investing effort in researching time spent to find opportunities. By comparing long-term tests that always or never auto-play videos, we find that auto-play increases overall time spent for some people and cannibalizes time spent for others. . . . [W]e

---

[53] *Disinformation Nation*, *supra* note 51, at 67:1516–1525

found that auto-play increases time spent for . . . younger people (college and late high school). . . . This shows there is opportunity to grow time spent by personalizing auto-play rules in feed.

169. Thus, contrary to its public representations, Meta's platform features were in fact designed to addict users, especially young users, to increase and maximize the time spent on its platforms for profit, and Meta knowingly concealed this.

2. Meta Lied that It Prioritizes Well-Being Over Profits

170. While Meta deceptively denies its platforms are not addictive, it affirmatively claims that it prioritizes the "well-being" of its young users, even though it knows it has retained platform features that harm young users in order to increase its own revenue and for the same reason Meta has deliberately chosen not to implement feasible changes it knew could reduce such harms.

171. On numerous occasions, Meta has made deceptive statements, representations, and assertions that its top priority is well-being and that it is committed to and/or invests in making Instagram a safe and age-appropriate platform for young users.[54] Specifically, Meta has publicly communicated that its platform features are not harmful, affirmatively stated they are safe, and that the company prioritizes teen safety and well-being over profits, when it knew those statements were deceptive.

172. For example, as early as 2018, at a technology event, Meta employee Eva Chen publicly stated that Meta's "entire focus is focusing on the wellbeing of the community":

---

[54] *See e.g.*, *Instagram Head Says They're 'Rethinking the Whole Experience' of the Platform*, CBS NEWS, (June 26, 2019), https://www.cbsnews.com/news/adam-mosseri-instagram-is-seriously-considering-hiding-likes-apps-head-reveals/; Hatmaker, *supra* note 52; Sangeeta Singh-Kurtz, *Instagram is Building a Team to Stop People From Feeling Bad on Instagram*, QUARTZ (April 3, 2018), https://qz.com/quartzy/1238074/instagrams-new-wellbeing-team-will-address-its-effect-on-mental-health.

"Making the community a safer place, a place where people feel good, is a huge priority for Instagram[,] . . . I would say one of the top priorities."[55]

173.   In June 2019, Head of Instagram Adam Mosseri told CBS in an interview that teen "well-being . . . is our number one priority" and that he was "100 percent" willing to do something that could affect the company's bottom line.[56] He specifically stated, "[w]e will do things that mean people use Instagram less if we think that they keep people safe or generally create a healthier environment." [57]

174.   During a congressional hearing in March 2021, Meta's CEO Mark Zuckerberg was asked, "Do you believe that your platform harms children?" In response, Zuckerberg publicly testified: "I don't believe so. This is something that we study and we care a lot about; designing products that [sic] peoples' well-being is very important to us."[58]

175.   In September 2021, Meta's Global Head of Safety Antigone Davis testified to Congress that she works "to ensure that [Meta] remains a leader in online safety" and that "[a]t [Meta], we take the . . . safety and well-being of all those who use our platform very seriously, especially the youngest people on our services. We work tirelessly to put in [] place the right policies, products, and precautions so they have a safe and positive experience. We have dedicated teams focused on use safety, and we invest significant resources in protecting teens online." She added: "We work constantly to improve safety . . . for young people."

---

[55] Sangeeta Singh-Kurtz, *Instagram is Building a Team to Stop People from Feeling Bad on Instagram*, QUARTZ (April 3, 2018), https://qz.com/quartzy/1238074/instagrams-new-wellbeing-team-will-address-its-effect-on-mental-health.

[56] CBS NEWS, *supra* note 54.

[57] *Id*.

[58] *Disinformation Nation*, *supra* note 51, at 175: 4166–4175.

176.   In October 2021, Mark Zuckerberg publicly responded to Frances Haugen's whistleblower testimony to Congress in a public post on his Facebook profile, which had at least 816,000 views, including by Massachusetts users, stating: "At the heart of these accusations is this idea that we prioritize profit over safety and well-being. That's just not true."[59] Zuckerberg further claimed that "it's very important to me that everything we build is safe and good for kids."[60]

177.   In October 2021, in response to a 60-Minutes exposé on Meta's products and the harms they cause, Meta publicly stated: "protecting our community is more important than maximizing our profits."[61]

178.   In December 2021, Meta's Global Head of Safety Antigone Davis was asked whether Meta had "ever found a change to its platform would potentially inflict harm on users but move[d] forward because the change would also grow users or increase revenue." Davis responded, "It's not been my experience at all at [Meta]. We care deeply about the safety and security of the people on our platform." As further described below, all of the above statements were simply untrue.

a.   Meta Does Not Prioritize Well-Being Because It Repeatedly Decided Not to Invest in Well-Being Initiatives

179.   Contrary to its public assertions that youth well-being is its "number one priority," Meta has repeatedly failed to meaningfully invest in well-being initiatives to address

[59] Salvador Rodriguez, *Zuckerberg Rejects Claims That Facebook Prioritizes Profits Over User Safety*, CNBC (Oct. 5, 2021), https://www.cnbc.com/2021/10/05/zuckerberg-denies-that-facebook-prioritizes-profits-over-user-safety.html.

[60] *Id*.

[61] Clare Duffy, *Facebook Whistleblower Revealed on '60 Minutes,' Says the Company Prioritized Profit Over Public Good*, CNN BUSINESS (Oct. 4, 2021) https://www.cnn.com/2021/10/03/tech/facebook-whistleblower-60-minutes/index.html.

the harms it knows its platform causes to young users. As Instagram executives internally acknowledged in June 2018 in a Policy Priorities presentation, with respect to "protecting young people," Instagram has a dearth of "features we can publicly talk about as proof points of how we are responsible with kids['] data and usage of Instagram."

180. Despite internal recognition that "[Instagram] could stand to prioritize wellbeing higher than it currently is" and that "prioritiz[ing] other goals ahead of user wellbeing and safety" was "dangerous," from 2018–2022, Meta, including its CEO Mark Zuckerberg, consistently chose not to make additional investments to improve young users' well-being.

181. For example, in April 2019, David Ginsberg (then Meta's VP of Product, Choice and Competition) emailed CEO Mark Zuckerberg recommending investments to fund additional engineering staff focused on building well-being "tools/products to address problematic use" on the Instagram and Facebook platforms because "[c]urrent research (internal and external) tells us that . . . there is increasing scientific evidence (particularly in the US…) that the average net effect of [our platforms] on people's well-being" is "negative." Ginsberg highlighted that, according to Meta's research, "problematic use [i.e., addiction], social comparison and loneliness" were the "three negative drivers that occur frequently on [our platform] and impact people's well-being." Ginsburg noted that if this investment in additional staff were not approved, these initiatives would remain under-staffed at Instagram and Facebook.

182. Nevertheless, Meta's Chief Financial Officer, Susan Li, responded that Meta's leadership team declined to fund this initiative.

183. Instagram's and Facebook's top executives, Adam Mosseri and Fidji Simo, respectively, acknowledged that this lack of investment was the "main problem" for improving

well-being, and that as a result, Meta "lack[ed] . . . a roadmap of work that demonstrates we care about well-being."

184.   Continuing into 2021, although it was well known to Meta that its platform caused significant harm to young users, Meta, including CEO Mark Zuckerberg, again declined to fund proposed "well-being" initiatives "strongly endorsed" by its top managers.

185.   For example, in August 2021, members of Instagram's "Well-being Team" reached out to Head of Communications Chris Norton and Vice President of Global Affairs Nick Clegg, recommending investment of staff dedicated to addressing the "currently underinvested" teen well-being areas of "problematic use, bullying+harassment, connections, [and Suicide and Self-Injury (SSI)]" based on input from "key experts and policy stakeholders," and the fact that "[t]hese topics are highly aligned with what teens want Facebook and Instagram to prioritize."

186.   Vice President of Global Affairs Nick Clegg promptly forwarded the ask to CEO Mark Zuckerberg, recommending "additional investment to strengthen our position on wellbeing across the company."

187.   In Clegg's email to Zuckerberg, he emphasized that well-being work is "increasingly urgent" to address "concerns about the impact of our products on young people's mental health." Clegg further stressed to Zuckerberg that "we need to do more and we are being held back by a lack of investment on the product side which means that we're not able to make changes and innovations at the pace required," noting that "our wellbeing work is both under-staffed and fragmented" and "[w]e are not on track to succeed for our core well-being topics (problematic use, bullying & harassment, connections, and SSI)."

188.   Zuckerberg ignored Clegg's request for months. All the while, Meta's leadership continued to espouse the need to invest in well-being.

189.   For example, after Clegg emailed Zuckerberg and in the aftermath of significant media coverage of Meta's harmful effects on young people, Meta VP of Research Pratiti Raychoudhury emailed Clegg, saying, "I feel even more convinced that we need to make more progress on well-being on the product side."

190.   Head of Instagram Adam Mosseri shared that sentiment. In an October 2021 exchange discussing Clegg's well-being plans (to which Zuckerberg had still not responded), Mosseri complained to Meta VP of Product Emily Dalton Smith, "I'm really worried about this. . . . [W]e've been talking about this for a long time but have made little progress."

191.   Dalton Smith agreed. While she acknowledged that Meta had made significant investments in researching its platforms' harmful impacts, she explained that the company's "biggest gap is getting this research into product roadmaps. We got 0 new well-being funding for 2022, so we'll need to tee up the tradeoffs against other priorities." Dalton Smith echoed those feelings in a separate exchange with Raychoudhurry and Meta executive Kang-Xing Jin, emphasizing that "[w]e've made a lot of progress on research . . . . We've not made a lot of progress on getting the research into product."

192.   In November 2021, Clegg sent Zuckerberg a follow-up email to Clegg's August 2021 request to Zuckerberg, reiterating that "this investment is important to ensure we have the product roadmaps necessary to stand behind our external narrative of well-being on our apps." Clegg subsequently noted that the team had "scaled this request back" to include a reduced number of allocated staff.

193.   Meta's CFO Susan Li, however, doomed any hope of approval, tersely responding that staffing was too "constrained" to meet the request.

194. In a clear indicator that Meta was deprioritizing user well-being and safety, in September 2022, Meta disbanded its internal team (i.e., its Responsible Innovation Team) that Meta externally claimed was a central part of its efforts to "proactively surface and address potential harms to society in all that we build."[62] It also terminated at least 16 members of Instagram's well-being group and more than 100 positions related to trust, integrity and responsibility.[63]

195. Given the foregoing, Meta's multiple external public statements stating that young users' well-being was its "top priority" was plainly false.

b. Meta Does Not Prioritize Well-Being Because It Deliberately Chose Not to Implement Measures It Knew Could Reduce Harm to Youth

196. Meta's public claims that it prioritizes youth well-being is further deceptive because when Meta's internal research identified design changes that would, in the company's own judgment, improve well-being, Meta's top executives rejected implementing those design changes because they would decrease time spent on Meta's platform.

i. Vetoing "Project Daisy"

197. One clear example of Meta's refusal to prioritize youth well-being over profits was its intentional decision to retain public display and quantification of its "Likes" feature despite knowing that seeing "Like" counts on users' posts caused harmful negative social comparison in teens. Despite testing design changes to the "Like" feature that it found

---

[62] Jeff Horwitz, *Facebook Parent Meta Platforms Cuts Responsible Innovation Team*, WALL ST. J. (Sept. 8, 2022), https://www.wsj.com/articles/facebook-parent-meta-platforms-cuts-responsible-innovation-team-11662658423; Brandon Vigliarolo, *Meta Disbands Responsible Innovation Team, Spreads it out Over Facebook and Co*, THE REGISTER (Sept. 9, 0222), https://www.theregister.com/2022/09/09/meta_disbands_responsible_innovation_team/.

[63] Hayden Field, et al., *Tech Layoffs Ravage the Teams that Fight Online Misinformation and Hate Speech*, CNBC (May 26, 2023), https://www.cnbc.com/2023/05/26/tech-companies-are-laying-off-their-ethics-and-safety-teams-.html.

effectively improved young users' well-being, it decided to not implement the changes because of potential harm to Meta's bottom line.

198.   Since at least 2013, Meta's Instagram platform has contained a "Like" feature that provides users a quick way to provide visible positive validation or approval of another user's posts by clicking or tapping a heart icon.

199.   To "like" another account's post on Instagram, a user will double-tap the posted image or tap a small heart symbol on that post: ♡ . The heart changes color to reflect that the post has been liked. Below is an example of a post by Taylor Swift, first, when a user has not liked it, and then, when a user has liked it (notice the filled heart):

200.   The number of people who have liked a post is, by default, viewable to anyone who sees the post. In the above example, the post displays that 6,924,663 users have liked Taylor Swift's Instagram post.

201.   Meta knows, as documented in extensive internal studies, that the display of the quantification of "likes" on users' posts is harmful for young users' mental health because seeing such metrics, which signal the popularity of the user and/or their post, induces constant negative social comparisons. For example, Meta conducted an internal study which revealed that "seeing high Like counts is associated with feeling worse (more negative, less positive [social] comparison)." Meta's researchers were "confident of a causal link between [seeing] Like counts and social comparison."

202.   Additional Meta research noted that teen users, in particular, "compare and check like counts frequently, and feel bad about themselves when they see others' posts getting more validation than theirs." Teens thus suffered from "constant negative comparisons" on Instagram because Meta continued showing them "like" counts.

203.   Meta's research further "linked" this constant social comparison "to multiple negative well-being outcomes (e.g., increased loneliness, worse body image, and negative mood or affect)." And Meta further acknowledged that "reduced negative social comparison" "is a measure of well-being in and of itself."

204.   Meta knew this issue among teens was so pervasive that it ran a test program called "Project Daisy," where the "like" counts on Instagram posts were hidden.

205.   There were two pilot versions of "Project Daisy": (1) "Pure Daisy" (wherein the "like" counts on all posts except one's own were hidden), and (2) "Popular Daisy" (wherein the "like" counts on posts from certain highly followed accounts were visible, but the "like" counts on average users' posts were hidden).

206.   The findings of the studies showed that both "Daisy" programs successfully "reduced the negative impact of seeing posts with many Likes."

207. "Pure Daisy" was more effective than "Popular Daisy," but both reduced users' experiences of negative social comparison. Young users told Meta that hiding "like" counts made them care less about the number of "likes."

208. Project Daisy ("Daisy") was noted to have both short and long-term positive effects on young users' well-being—"ha[ving] a statistically significant impact" in achieving "less social comparison," as well as causing "negative social comparison [to] decrease[] more over time."

209. As a result, in October 2020, Meta's researchers recommended implementing Daisy.

210. However, despite this clear research-based recommendation showing that public display, quantification, and viewing of "likes" harmed youth, and that implementing Project Daisy could effectively reduce those harms and improve the well-being of young users, Meta refused approving full implementation of Project Daisy on Instagram or any of its platforms and retained the visible "likes" feature for young users.

211. Meta instead effectively abandoned Daisy, calling it "extremely low on the long list of problems we need to solve." In late 2020, Meta defunded the team that had conducted the project.

212. Meta researchers continued to repeatedly advocate for removing "likes" from Facebook and Instagram as "the right thing to do" based on research on the impact of "likes" on social comparison." Yet, they continually faced resistance within the company. One Meta employee even noted despairingly that if the company wouldn't implement Daisy despite existing research on its positive effects on well-being, she was "doubtful" that Meta would implement "any broad product changes with the purpose of improving user well-being."

213.   During the time of Daisy's test pilot, Head of Instagram Mosseri had publicly plugged to CBS that Meta was considering a potentially "massive change" to the Instagram platform by "hiding 'likes'" and making "'like' counts private" in an effort to prioritize teen well-being and reduce "social comparison. "[64]

214.   Thus, by deciding not to implement Daisy, Meta employees noted that Meta was put "in an awful position" because Mosseri "publicly talked about [Daisy], [and] all but promised we'd do this."

215.   Ultimately, in order to save public face in light of the fact that it was not implementing Daisy, Meta resorted to offering Project Daisy as an "opt-in" option to individual users if they wished to hide "like" counts from their feed, despite Meta employees' recommendation for it to be a default setting.

216.   Meta knew, however, that even an "opt-in" option would not make much of a difference. Meta's researchers noted that making Daisy available as an opt-in setting rather than a default setting "won't actually be effective at reducing [social comparison]" and that an opt-in option "is highly unlikely to be useful." And as a Meta employee acknowledged in an October 2020 email, "the vast majority of [users] will not change the setting, so to me, the decision to not [implement] Daisy means the default should be no Daisy." In other words, Meta knew that making Daisy available only as an opt-in rather than a default setting would essentially yield the same result as not implementing Daisy at all.

217.   Further confirming that an opt-in design would not address the problem, an August 2021 internal Meta document discussing Daisy found "when [D]aisy controls are opt-in,

---

[64] CBS NEWS, *supra* note 54.

only 0.72% of people choose to hide like counts, but when they're opt-out, 35% leave their like counts hidden."

218. Despite these internal findings, Meta publicly continued to make deceptive statements regarding why Daisy wasn't implemented, stating falsely that Daisy was not as effective as Meta hoped it would be.[65]

219. In reality, Meta did not implement Daisy because it "impeded with other agendas" such as maintaining or increasing time spent on the platform, long-term retention, and because implementation would result in "non-trivial revenue impacts."

220. Meta made this decision despite knowing that Daisy "[wa]s one of the clearest things (supported by research) that we can do to positively impact social comparison and well-being on [Instagram]."

221. And Meta made this decision despite knowing that "Daisy is such a rare case where a product intervention can improve well-being for almost everyone that uses our products."

222. As of October 2023, "like" counts on all users' posts on Instagram remain visible by default, including for young users.

ii.   Vetoing Removal of Cosmetic Surgery Filters

223. Meta's public statements that youth well-being is its "top priority" are further deceptive because despite specifically identifying internally that its platform's cosmetic surgery photo filters cause harm to young users (and in particular female young users), it deliberately chose to retain such filters because their removal would decrease user time on the platform.

---

[65] *Giving People More Control on Instagram and Facebook*, INSTAGRAM (May 26, 2021), https://about.instagram.com/blog/announcements/giving-people-more-control.

224.   When a user is creating a post, Meta provides users with "filters" and "effects" to visually alter photos and videos.[66]

225.   The visual alterations of effects and/or filters can be applied to modify physical features. For example, effects and/or filters can simulate makeup, cosmetic surgery, botox, or clearer skin, make a person look like an elf, or add sunglasses. The result is that a young user may post a picture and have it manipulated to reflect how that user may appear if they had cosmetic surgery or other pharmaceutical appearance enhancements, and also can encounter images manipulated with filters in these ways by others.

226.   Meta knows, in particular, that its cosmetic surgery filters and/or effects cause severe harm to young users, especially female users, yet it has continued to offer this feature.

227.   Specifically, in November 2019, Meta's VP of Product Design Margaret Gould Stewart emailed Meta's leadership (including Head of Instagram Adam Mosseri, Head of Facebook Fidji Simo, and Instagram's Head of Policy Karina Newton) asking for support to change Meta's policies to "disallow effects that mimic plastic surgery," including removing plastic surgery filters on Facebook and Instagram, because of mental health experts' concern about the negative "impacts that th[e]se effects were having on mental health and wellbeing, especially for more vulnerable users (youth, women)."

228.   The proposal received unanimous positive support until Meta's Chief Technology Officer Andrew Bosworth later in the email discussion stated that he "mentioned this to Mark [Zuckerberg]" who "might want to review before implementing" because Zuckerberg questioned whether these filters actually "represent[] real harm."

---

[66] Help Center, *Apply Filters to Your Post on Instagram*, INSTAGRAM, https://help.instagram.com/ 453965678013216 (Last visited on Oct. 20, 2023)

229.   In response, Stewart sent a one-pager "on the academic research and external engagement that was conducted before forming the policy recommendations" that "outlines some compelling motivations for formalizing these policies." In the same email, Stewart noted "surprise[]" at the suggestion of pushback by the CEO, as she understood "all teams were in support of these guidelines."

230.   Instagram's Head of Policy Karina Newton further weighed in that "it's been our strong recommendation from comms, marketing, policy, and engagement with nearly 20 outside experts and academics that we pass this policy." She noted that these filters are "overwhelmingly used by teen girls" and any concerns of "not giving people what they want/being paternalistic . . . undermines the seriousness of the subject" as "we're talking about actively encouraging young girls into body dysmorphia . . . that can result in serious issues." She underscored that "the outside academics and experts consulted were nearly unanimous on the harm here."

231.   Instagram's VP of Product Vishal Shah additionally opined that Meta should "fall on the side of being more principled and disallow[] any type of [plastic surgery] effects," even though recognizing it was an "especially challenging" decision since it would impact Instagram's usage metrics given the dominance of camera-based usage with the large number of young people on its platform.

232.   A meeting with CEO Mark Zuckerberg to discuss removing plastic surgery filters was subsequently scheduled for April 2, 2020, and a "Cosmetic Surgery Effects Pre-Read" document and presentation was prepared and circulated in anticipation of that meeting.

233.   The "pre-read" detailed Meta's consultation with "21 independent experts around the world," who "generally agree that these effects are cause for concern for mental health and

wellbeing, especially amongst vulnerable populations (females, youth, those with a history of mental health concerns, etc.)." The document further summarized that "[t]hese extreme cosmetic surgery effects can have severe impacts on both the individuals using the effects and those viewing the images," and "children are particularly vulnerable."

234. On April 1, 2020, one day before the meeting with Zuckerberg was to take place, it was canceled.

235. That same day, by email, Zuckerberg vetoed the proposal to formally ban plastic surgery simulation camera filters and specifically directed staff to "relax" or "lift" the temporary ban that had been in place pending his decision.

236. Zuckerberg stated that there was a "clear[] demand" for the filters, and claimed, falsely, that he had seen "no data" suggesting that the filters were harmful.

237. Zuckerberg's decision caused Stewart to raise concerns, who followed-up with Zuckerberg after his decision stating, "I respect your call on this and I'll support it, but want to just say for the record that I don't think it's the right call given the risks. … I just hope that years from now we will look back and feel good about the decision we made here."

238. As of October 2023, filters that mimic the effects of cosmetic surgery remain available on Instagram, including for young users.

239. Even though Meta clearly knew and agreed that the filters caused young users harm and negatively affected their well-being, it nonetheless continued deploying them on Instagram because they were beneficial to Meta's interests, and contrary to its public representations that youth well-being was its "top priority."

iii. Retaining Algorithmic Amplification of Harmful Content

240. Meta's public statements that youth well-being is its "top priority" are also deceptive because Meta has chosen to maintain algorithms that recommend posts that Meta itself has identified as harmful to young users.

241. Meta's "Community Standards" prohibit many forms of harmful posts including certain content related to suicide, self-injury, eating disorders, or harassment.[67]

242. Despite this prohibition, Meta knows its content recommendation algorithms routinely present young users with the types of harmful posts or accounts that are either prohibited or borderline prohibited by its policies.[68]

243. For example, Meta knows that its "Sensitive Content Controls" and "Safe Search" functions are ineffective at preventing teens from "eas[ily]" finding "borderline and sometimes violating content/accounts" in a search, and that if a teen "start[s] following borderline accounts or interacting with such content, [Meta's] recommendations algorithm will start pushing [the user] down a rabbit hole of more egregious content."

244. Even though Meta's researchers concluded that Meta's recommendation algorithms were actively serving and amplifying such "egregious content" to young users, and experimented with design changes where they saw "a meaningful drop in exposure," Meta did not adopt such changes because doing so would impact the extent to which a young user used the platform and thus harm Meta's bottom line — i.e., because "it came with a clear engagement cost."

---

[67] Transparency Center, *Facebook Community Standards*, META, https://transparency.fb.com/policies/community-standards/ (last visited Oct. 13, 2023).

[68] *See, e.g.*, *Ranking and Design Transparency*, INTEGRITY INST. 21–26 (Sept. 28, 2021), https://static1.squarespace.com/static/614cbb3258c5c87026497577/t/617834ea6ee73c074427e415/1635267819444/Ranking+and+Design+Transparency+%28EXTERNAL%29.pdf.

245.   Moreover, Meta knows that its algorithmic recommendations promote and suggest posts that result in higher levels of negative "appearance comparison," a specific form of negative social comparison meaning "the extent to which people think that Instagram makes them feel worse about their bodies or appearances."

246.   The problem of negative appearance comparison ("NAC") is one that Meta has long known "affects [] a large proportion of teens," but has left unaddressed.

247.   Meta has specifically researched and identified 52 "sensitive" topics and concepts for which "greater exposure to [such] content . . . is associated with more negative appearance comparison (High-NAC)." It uses this "sensitive content definition" to "[m]easure how much sensitive content specific top accounts . . . produce in order to inform decisions about account recommendations," and "[u]nderstand prevalence of sensitive content."

248.   From its research, Meta knows that "women and teen girls see the most" sensitive content, with "1 in 5 pieces of content they see" relating to a sensitive content topic. Meta has also studied "how much sensitive content is 'too much'"—*i.e.,* "the point at which the majority of teen girls experience [negative appearance] comparison." Meta determined that this happens around 11–13% sensitive content, and that accordingly, "approximately 70% of teen girls" see "'too much' sensitive content."

249.   Meta researched how to address this problem, identifying specific non-sensitive topics and concepts that its algorithm could alternatively recommend "that were statistically significantly associated with reductions in negative appearance comparison" and where "[p]eople who saw more of this content felt less pressure to be perfect." Upon information and belief, Meta has not altered its algorithm to do so.

250.   Meta also knows that Instagram's "Explore" feature is where "High-NAC" content is especially prominent and amplified.

251.   A user can access the "Explore" tab from their home screen by tapping the magnifying glass icon: Q located at the bottom of their screen. On the Explore tab, the user is presented with a screen full of various images from posts and Reels that Meta predicts the user might like. All of the images displayed are from accounts that the user is not currently following. A user can click or tap on any of the images and will be taken to the post or Reel.

252.   Meta defined the "amplified exposure" identified in its Explore feature, as "when the change in the amount of High-NAC content [a user] see[s] on Explore increases by at least 25 percentage points (1 additional post out of every 4)." Meta noted that because "High-NAC content consumption overall is [] linked to feeling worse about one's body or appearance," "amplified High-NAC content exposure" could "lead to negative outcomes."

253.   While Meta employees concluded that "[r]educing an individual's exposure to High-NAC content on recommendation surfaces such as Explore . . . may reduce negative appearance comparison for a sizable fraction of people," upon information and belief, Meta has not made such change.

254.   Because Meta has retained its use of algorithms known to recommend content that Meta itself has identified as harmful and/or itself has linked to negative outcomes for young users, despite knowing it could implement design changes that could mitigate or address such known harmful effects, Meta has not prioritized young users' well-being.

iv.   Launching Ineffective Time Management Tools

255.   Rather than implementing design changes that Meta knew, by its own measures, could improve young users' well-being, Meta has introduced tools and features meant to create

the deceptive perception that it takes well-being seriously, while knowing those features would be ineffective.

256. For example, in August 2018, in response to public concerns that excessive and problematic social media use was negatively affecting users' mental health, Meta launched so-called "time-management" tools such as a "Daily Limit" tool and an activity dashboard to monitor "Time Spent" on its platform.[69]

257. The "Daily Limit" tool was a feature that Meta publicly claimed would empower users to restrict the amount of time they spend on Instagram daily.[70] Despite the feature's name, however, the "Daily Limit" tool does not enable users to place an actual restriction on the amount of time they may spend on the app.

258. Instead, Daily Limit only serves a pop-up notification or reminder whenever a user exceeds the maximum amount of time they indicated they want to spend on Instagram each day. Meta designed this feature so that the user can easily dismiss this notification and return unimpeded to using Instagram.

259. Similarly ineffective, the activity dashboard's "Time Spent" tool allows a user to see how much time they have spent on the platform, but nothing more. Meta publicly claims that by merely seeing the amount of time one has spent on the platform, a user can be encouraged to exercise willpower to limit their own use.[71] Meanwhile, Meta's mountains of data demonstrate the dashboard does nothing of the sort, especially for younger users.

---

[69] *New Tools to Manage Your Time on Facebook and Instagram*, META (Aug. 1, 2018), https://about.fb.com/news/2018/08/manage-your-time/.

[70] Josh Constine, *Facebook and Instagram Now Show How Many Minutes You Use Them*, TECHCRUNCH (Aug. 1, 2018), https://techcrunch.com/2018/08/01/facebook-and-instagram-your-activity-time/.

[71] *New Tools to Manage Your Time on Facebook and Instagram*, *supra* note 69.

260. Internally, Meta employees knew, from user feedback, that young users "feel that they are unable to stop themselves from being on [Instagram]," and "the tools we currently have aren't effective at limiting their time on the ap[p]."

261. Meta employees further acknowledged that the Time Spent tool was ineffective because "reach [wa]s low" and the feature [wa]s "not highly trafficked." Meta admitted that this was because the company had not meaningfully invested in promoting the feature, as it "did no in-app education about it and haven't evolved or improved it over time."

262. Yet another ineffective time management tool Meta launched, again in response to public concerns about the harms caused by its platform, was the "Take a Break" tool.[72] The "Take a Break" tool sends users a prompt that appears in their feed when they have spent more than a specified period of uninterrupted scrolling time.[73]

263. However, as with the Daily Limit notification, Meta designed its "Take a Break" reminder to be easily dismissed and to not require any action before allowing a user to scroll right past it for an immediate and quick return to more infinite scrolling.

264. Again, Meta's employees knew that the "Take a Break" feature was ineffective at addressing young users' problematic use. Employees knew that users dismissed the "Take a Break" reminder 40 times more than following its prompt to take a break, which indicated a "super low value." Moreover, Meta's research determined "many people are unaware of filters such as . . . 'Take a Break', and a "design opportunit[y]" could be to make it more "visible" and "increase awareness." But Meta did not take even this small step toward at least acknowledging and increasing awareness of its purported tools to address the problem of overuse.

---

[72] Samantha Murphy Kelly, *Instagram Will Now Tell Users When to Take a Break From Using the App*, CNN (Dec. 7, 2021), https://www.cnn.com/2021/12/07/tech/instagram-take-a-break/index.html.

[73] *Id*.

265.   Despite knowledge of the ineffectiveness of its time management tools, Meta's

public communications deceptively assured youth (and their guardians) that Meta "worked

tirelessly to put in [] place the right policies, products, and precautions so they have a safe and

positive experience." As shown above, this was simply untrue.

3.   Meta Lied That Its Platforms are Safe and Concealed the Frequency of Harm on Its Platforms Known from Its Internal Research

266.   Despite knowing otherwise, Meta goes to great lengths to portray its platforms as

safe. It has buried internal data and research that identifies harms to young users, and it designed

a deceptive public metric to downplay the frequency with which young users encounter harmful

content on its platform.

267.   Meta publicly issues "Community Standards" pursuant to which Meta states that

it removes content that violates its policies, including content related to suicide and self-injury,

bullying and harassment, and eating disorders, among other categories.[74] Meta states it issues its

Community Standards to outline "what is and is not allowed on Facebook and Instagram" as a

way "to help ensure that communities are safe," and that the Community Standards demonstrate

the company's "commitment to safety."[75]

268.   Quarterly, Meta publishes and publicly releases Community Standard

Enforcement Reports ("CSE Reports") on the "Transparency Center" page of its website. These

reports purport to highlight the safety of Meta's platforms by focusing on a metric—known as

"Prevalence"—that Meta knows to be misleading. Specifically, Meta defines its "Prevalence"

metric as quantifying "the frequency at which content that violated our Community Standards

---

[74] *Facebook Community Standards*, META TRANSPARENCY CTR., https://transparency.fb.com/policies/community-standards/ (last accessed Oct. 13, 2023).

[75] *Our Commitment to Safety*, META (May 23, 2019), https://www.facebook.com/business/news/our-commitment-to-safety.

was viewed."[76] As Meta explains, "[a]nother way to think of prevalence is how many views of violating content we didn't prevent"[77] and "people may still see."[78]

269.   Meta has publicly represented that the prevalence statistic in its CSE Reports is its "critical" metric, "because it helps us measure how violations impact people" on its platforms. Meta further espouses its prevalence number as a reliable measure of the safety of its platforms, asserting that the CSE Report's prevalence numbers are "the internet's equivalent" of scientific measurements utilized by environmental regulators to assess the levels of harmful pollutants in the air. For example, in a May 2019 post[79] on its website entitled "Measuring Prevalence of Violating Content on Facebook," Meta stated the following:

> One of the most significant metrics we provide in the Community Standards Enforcement Report is prevalence. . . . We care most about how often content that violates our standards is actually seen relative to the total amount of times any content is seen on [our platforms]. This is similar to measuring concentration of pollutants in the air we breathe. When measuring air quality, environmental regulators look to see what percent of air is Nitrogen Dioxide to determine how much is harmful to people. **Prevalence is the internet's equivalent—a measurement of what percent of times someone sees something that is harmful**.

270.   Notably, Meta's public CSE Reports, including Instagram's CSE Reports in 2021, consistently provide prevalence metrics stating that the frequency with which "someone sees something that is harmful" on its platforms is extremely low.[80]

271.   But Meta's own research and data show the opposite.

---

[76] *An Update on How We Are Doing At Enforcing Our Community Standards*, META, https://about.fb.com/news/2019/05/enforcing-our-community-standards-3/ (last accessed Oct. 22, 2023).

[77] *Prevalence*, META (NOV. 18, 2022) https://transparency.fb.com/policies/improving/prevalence-metric/.

[78] *An Update on How We Are Doing at Enforcing Our Community Standards, supra* note 76.

[79] *Measuring Prevalence of Violating Content on Facebook*, META, (May 23, 2019), https://about.fb.com/news/2019/05/measuring-prevalence/

[80] META, COMMUNITY STANDARDS ENFORCEMENT REPORT Q3, (Nov. 2021).

272. In fact, Meta separately compiles (but does not publicly release) extensive user survey data from its Bad Experiences & Encounters Framework ("BEEF") survey that repeatedly has demonstrated that the frequency with which users see the categories of content violative of Meta's Community Standards on Instagram is in fact much higher than Meta's public CSE Reports indicate.

273. BEEF is an internally-created, statistically representative user survey (comprised of approximately 300,000 respondents), which Meta uses to comprehensively measure and analyze, in a statistically significant manner, the harms users witness or encounter on Instagram.

274. Specifically, the BEEF survey polls users about their exposure to and interactions with content that Meta's Community Standards identify as negative or harmful, including suicide and self-harm, harassment and/or unwanted advances, bullying, and hate speech, among multiple other categories.

275. Meta has internally referred to the data obtained from its BEEF user survey as its "ground truth" measurement, yet does not publicly disclose this data in its CSE Reports or anywhere else.

276. The disparity between Meta's BEEF survey data and its CSE Reports is stark.

277. For example, Meta's third quarter 2021 CSE Report stated that on Instagram, "less than 0.05% of views were of content that violated our standards against suicide & self-injury."[81] In other words, Meta publicly reported less than five (5) views of suicide & self-injury content for every 10,000 views of content.

278. In contrast, Meta's contemporaneous internal BEEF survey data showed that during 2021, 6.7% of all surveyed Instagram users had seen self-harm content within the last

---

[81] *Id.*

seven days. For young users between 13–15 years of age, specifically, 16.9% had seen content relating to self-harm on Instagram within the last seven days.

279. In other words, while Meta's public reports told users, advertisers, and the public that self-harm content on Instagram is extremely rare—*i.e.*, only viewed 0.05% of the time—in reality, Meta knew from its statistically significant BEEF survey data that its users commonly viewed content related to self-harm on Instagram at far higher rates, by multiple orders of magnitude, especially for teens.

280. Another misleading representation is the third quarter 2021 CSE Report's statement that estimating "between 0.05% to 0.06% of views were of content that violated our standards against bullying & harassment [on Instagram]."

281. Again, Meta's contemporaneous internal BEEF survey data told a different story: Among all surveyed Instagram users, 28.3% witnessed bullying on the platform within the last seven days and 8.1% were the target of bullying on the platform within the last seven days.

282. Of the 13 to 15-year-old users, 48.7% reported witnessing bullying within seven days. For users aged 1617, that figure was 50%. And when asked whether they had been the target of bullying within the last seven days, 21.8% of 13 to15-year-olds said yes.

283. Thus, the frequency with which users—particularly Instagram's youngest users— viewed self-harm-related material and experienced or witnessed bullying on Instagram materially exceeded Meta's public representation of the extremely rare "frequency" such content that violated its policies was viewed as stated in its CSE Reports.

284. These are just two of many examples of the large disparity and incongruity between Meta's public CSE Reports and internal survey data.

285.   That Meta zealously guards access to its BEEF survey data makes the misleading representations in its public CSE Reports more pernicious. Meta controls how data about the safety of its platform is released, and therefore the ability for outside parties to verify its claims.

286.   Moreover, Meta's executives were directly warned of this disparity and of the CSE Reports' deceptive nature.

287.   Namely, in October 2021, Arturo Bejar, formerly Meta's Director of Site Integrity, emailed Meta executives Zuckerberg, Sandberg, Cox, and Mosseri, highlighting "a critical gap" between the CSE Reports' prevalence statistic and the actual frequency of harm being experienced by users identified by Meta's "statistically significant survey" data (the BEEF survey data).

288.   Bejar attached Meta's BEEF survey results to his email, showing that users, including young users, viewed harmful content at much higher rates than the company's public reports indicated.

289.   Bejar proposed that Meta shift the focus of its public communications away from its "Prevalence" metric in its CSE Reports, towards a measure, like BEEF survey data, that more accurately conveyed the frequency harmful content was being seen by users on Instagram.

290.   Meta did nothing of the sort.

291.   In fact, Zuckerberg, with whom Bejar worked directly for several years, ignored Bejar's email.

292.   Even after Bejar's email, Meta continued to issue and publicize the prevalence statistic in its CSE Reports as its key metric of the safety of its platforms—even though Meta's executive leadership team knew it had data showing that it vastly under-represented the frequency with which users viewed harmful content on Instagram, and despite Bejar's pleas.

293. During the investigation of this matter, Bejar testified under oath that Meta adopted and maintained this strategy to mislead the public.

294. When asked if he believed "that Mr. Zuckerberg and other company leaders focused on the prevalence metric because it created a distorted picture about the safety of Meta's platforms," Bejar testified "I do."

295. When asked if he thought "Mr. Zuckerberg's public statements about prevalence created a misleading picture of the harmfulness of Meta's platforms," Bejar testified "I do."

296. And when asked if he was "aware of any instances where the company, in [his] view, deceptively minimized the harms users were experiencing on Meta's platforms," Bejar testified: "Every time that a company spokesperson in the context of harms quotes prevalence statistics I believe that is what they are doing, that they're minimizing the harms that people are experiencing in the product."

297. Because letting the world know that it knowingly operates a product that harms youth would hurt its business and reputation, Meta has deceptively concealed this from the public.

4. Meta's Deception and Concealment Was Material

298. Importantly, Meta and its executives' conduct in knowingly misrepresenting, misleading, failing to disclose, and/or concealing to the public, including Massachusetts young users and their families, the manipulative, addiction-inducing nature of its platform design features, its failure to prioritize youth well-being (including failing to implement measures it knew it could take to reduce harms to youth), and the frequency of exposure to types of content Meta itself deems harmful, was material. It was material, *inter alia*, because Meta's deception has prevented young users and their families from taking steps to avoid, mitigate, and/or protect themselves from the harms Meta knew, but concealed, were being caused by its platform.

299.   Had young users and their families known of Meta's psychologically manipulative design features and exploitation tactics and the addiction and harm that those tactics caused, or had been disclosed Meta's "ground truth" metric of the frequency that young users encountered harm on Instagram, they reasonably would have altered or changed their conduct and decisions around using Meta's platform, including deciding not to use the product, restricting use of the product, actively monitoring or regulating use of the product, and changing how they use certain platform settings and features.

300.   Moreover, had advertisers and investors known that the company's business model relied on unfair and deceptive tactics exploiting vulnerable young users who Meta knows are being harmed by its platform and who Meta has repeatedly refused to protect, advertisers and investors would have acted differently, including potentially taking their business elsewhere.

C.   **Meta Unfairly and Deceptively Claims It Excludes Under-13-Year-Old Users While Knowing Many Use the Platform and Failing to Inhibit Such Use**

301.   Meta also claims that children under 13 years old ("Under-13 users" or "U13s") do not use its platform, while knowing many do, and chooses not to take steps that would inhibit that use.

302.   Meta publicly represents, both in its platform's written Terms of Use and in its public statements, that Under-13 users are not allowed on Instagram.

303.   Meta's Terms of Use[82] state that "[y]ou must be at least 13 years old" to use Instagram, and its account registration process requires entering a birthdate indicating someone is 13 years or older to successfully sign up.[83]

---

[82] Terms of Use, *supra* note 13.

[83] Pavni Diwanji, *How Do We Know Someone Is Old Enough to Use Our Apps?*, META (July 27, 2021), https://about.fb.com/news/2021/07/age-verification/.

304.   Meta has also publicly communicated that Under-13 users are not on its platform.

For example, in December 2021, Head of Instagram Adam Mosseri testified to Congress:

"Instagram is built for people 13 and older. If a child is under the age of 13, they are not

permitted on Instagram."[84] At a later time, Mosseri again publicly reiterated: "If kids are under

13, they're not allowed on Instagram and they should not be using our service."[85]

305.   Similarly, during Global Head of Safety Antigone Davis' December 2021

congressional testimony, she testified, "we require everyone to be at least 13 years of age on

Facebook and Instagram . . . . Thirteen-year-olds and above are allowed on Instagram. Under

13-year-olds are not."

306.   When Senator Marsha Blackburn further pressed "[b]ut we know that you are

doing research on children as young as eight and are marketing to eight- to 12-year-olds,

correct?" Davis responds, "We do not market to eight- to 12-year-olds because they're not on

Instagram." When asked to explain internal research showing Meta had looked into quantifying

the number of Under-13 users on Meta's platforms, Davis denied it, stating "that doesn't sound

accurate to me."

307.   In fact, Meta knows that hundreds of thousands of Under-13 users are on

Instagram and knows its lax registration and age-gating efforts enable such use.

1.   Meta Knows Under-13-Year-Olds Are on Instagram and Hides This From the Public

308.   Within the company, Meta's knowledge that Under-13 users are on Instagram has

been an open secret.

---

[84] *Hearing Before the S. Comm. on Com., Sci., and Transport. and Subcomm. on Consumer Prot., Prod. Safety, and Data Sec.*, 117 Cong. at 2 (2021) (Testimony of Adam Mosseri), https://www.commerce.senate.gov/services/files/ 3FC55DF6-102F-4571-B6B4-01D2D2C6F0D0.

[85] Will Feuer, *Facebook Viewed Children as 'Untapped Audience," Documents Reveal*, N.Y. POST BUS. (Sept. 29, 2021), https://nypost.com/2021/09/29/facebook-saw-children-as-untapped-audience-documents-show/.

309.   For example, in August 2021, Meta employees discussed data regarding problematic use of Instagram among the "U[nder-]13 vs U[nder]18" age cohort, showing that Meta knew of the existence of specific Under-13 user accounts and studied time spent on those accounts.

310.   In September 2021, documents showed employees discussing well-being and safety challenges affecting "tweens"—a commonly used term for 8 to12-year-olds. Meta employees specifically acknowledged "tweens" on the platform, noting concerns of "content on [Instagram] triggering negative emotions among tweens and impacting their mental well-being."

311.   Additionally, numerous internal Meta documents reveal that the company is well-aware that because Under-13 users can easily supply a false date of birth when registering for Instagram (and do so in large numbers), that the company's age-gating and/or age verification efforts are ineffective.

312.   For example, in a December 2017 internal chat, an Instagram employee noted that "roughly 90%" of users claiming to be 13 years old had misrepresented their age.

313.   In January 2021, Meta employees internally noted that, for purposes of internal planning and strategy, Meta could not rely on the "stated" age of users who claim to be 13 years old because "they lie about it a TON."

314.   In February 2021, when responding to an email regarding user retention among young people, a Meta employee explained, "[W]e know that stated age = 13 contains a lot of misrepresenters (presumably, those younger than 13)."

315.   Meta knows that because "more than 50% of teens will lie about their age," its age-gating and age verification tools are ineffective at prohibiting Under-13 use.

316. Meta has internally acknowledged that one of the company's "key risks/issues" was that its "[a]ge verification" tools "ha[d] no ground truth to give robust measurement of effectiveness," and that "[a]ge verification (for under 13) has a big backlog."

317. Despite this knowledge, to maintain the fiction in its external representations that Under-13 users are not on its platform, Meta painstakingly conceals its knowledge of Under-13 users on its platform and zealously protects such knowledge from public disclosure.

318. In particular, Meta employees conducting quantitative research related to Instagram users routinely encountered the problem of how to conduct their research without creating a record that Meta knows hundreds of thousands of Instagram users are under the age of 13.

319. Meta's researchers have addressed this problem by carefully and purposely excluding Instagram's Under-13 users from their studies, in order to avoid conclusive documentation of the company's improper allowance of children on their platform.

320. For example, in February 2018, while discussing research on bullying on Instagram, a Meta employee cautioned: "we just want to make sure to be sensitive about a couple of Instagram-specific items. For example, will the survey go to under 13-year-olds? Since everyone needs to be at least 13 years old before they create an account, we want to be careful about sharing findings that come back and point to under 13-year-olds being bullied on the platform."

321. Similarly, on February 5, 2021, a Meta researcher noted that she was specifically "not includ[ing] younger kids (10–12 yos) in this research" because although there were "definitely kids this age on [Instagram]," she was "concerned about risks of disclosure since they aren't supposed to be on [Instagram] at all."

322. Likewise, in 2021, when Meta contracted with a vendor, Answer Lab, to conduct a survey of preteens (i.e., under-13-year-olds), Meta instructed Answer Lab to not inform Meta employees if any of the survey subjects were on Instagram, so that Meta "as a company won't be made aware of under 13 [users]."

323. As shown above, Meta's employees intensely guard the company's knowledge of hundreds of thousands of Under-13 users on its platform because they know it directly conflicts with the company's public representations.

2. Meta Does Not Meaningfully Inhibit or Prevent Under-13 Use

324. While Meta publicly states that Under-13 users are "not allowed on Instagram and [] should not be using our service," and that it is "especially focused" on "keeping underage users off our platforms,"[86] it internally takes no meaningful steps to inhibit, remove, or prevent Under-13 users from signing up and using its platform.

325. As an internal Meta document from 2018 acknowledged: "we do very little to keep U13s off our platform."

326. This internal statement has continued to be true. Up until December 2019, Instagram did not require users to disclose their age or date of birth to create an Instagram account. Under-13 users faced no practical obstacles to creating accounts on Instagram. And Meta knew that its minimum age was "unenforced."

327. And when Meta first launched an "age-gate" in late 2019 (in response to criticism from regulators and the public), it designed it in a way that prompted children under the age of 13 to misrepresent their age. Specifically, Meta's account registration page contained a drop-

---

[86] *Hearing Before the S. Comm. on Com., Sci., and Transport. and Subcomm. on Consumer Prot., Prod. Safety, and Data Sec.*, *supra* note 84.

down menu that automatically generated a date and year of birth representing the user to be 13 years old. The design of the "age-gate" signaled to children the specific date that they could affirm to advance through the registration process, even though the date populated by Instagram was not their actual date of birth.

328. Meta knew that use of an auto-generated 13-year-old birthdate encouraged Under-13 users to claim the suggested birthdate in order to access Instagram.

329. In particular, in a February 2020 email, Meta's Deputy Chief Privacy Officer Rob Sherman flagged for Facebook's and Instagram's top executives (i.e., Simo and Mosseri, respectively), that by providing "a default [age] over 13," Meta was "not taking sufficient steps to enforce" its minimum age rules or "meet obligations to keep under 13s off" its platforms, "especially given the general understanding that an unknown number of u13s are on FB and especially IG, and lying about their age."

330. Sherman advised needed improvements such as "neutral age gating," (i.e., not providing an auto-generated 13-year-old birthdate) "to ensure that we make upfront efforts to enforce our age minimum [on Instagram] and that we do so in a way that does not defeat the purpose of the age gate by clearly signaling to a child the 'right answer.'" He noted that "making the 'right answer' the default is inconsistent with existing guidance on age gating and undermines the value of asking for age." He further highlighted "that simply asking for age at registration is increasingly not viewed as sufficient."

331. Only recently, however, did Meta change Instagram's sign-up page to automatically generate the instant date and year, rather than automatically providing the "right answer," i.e., a date 13 years prior.

332. This change—from an age-gate that encouraged Under-13 users to submit a false date of birth, to an age-gate that permits the user to enter any date of birth (whether false or true)—still does not effectively prevent Under-13 users from using Instagram.

333. This is because a user is only temporarily blocked after making several incorrect attempts at entering a permissible date of birth for a mere 12 hours before permitting them to try again.

334. In addition, even when an Under-13 user successfully defeats Meta's age-gate at account signup (which Meta knows regularly occurs), Meta does not consistently remove Under-13 accounts it discovers—despite its public policy and statements saying that it does.

335. Pursuant to Meta's public written policy, if someone reports that an account belongs to an individual under the age of 13, Meta "will delete the account if we can't verify the account is managed by someone *over* 13 years old."[87] (emphasis added).

336. In fact, and as detailed below, Meta employees don't take action to remove an account unless they can verify that the account actually belongs to an under 13-year-old. This approach results in many underage accounts remaining on the platform. Meta has confirmed this practice, admitting that "[w]here Meta has indicia that the user is not under the age of 13, Meta may automatically permit the user who has been flagged as potentially underage to continue using Instagram."

337. For example, in 2019, a mother reported that her 12-year-old had four different Instagram accounts and stated that she reported the accounts "more than one month ago" but they still were not taken down. Meta employees discussed that the 12-year-old's accounts "were

---

[87] *Report a Child Under 13 on Instagram*, INSTAGRAM HELP CENTER, https://help.instagram.com/517920941588885, (Last visited on Oct. 23, 2023).

ignored" and not removed because they "couldn't tell for sure the user was underage," despite the fact that the mother's report of such fact.

338. Meta knows its dismal lack of enforcement efforts, with internal documents citing "[b]acklogs of actionable information about individuals who have failed age gates," including a "700K [U13] enforcement backlog."

339. Further, Meta internally acknowledged that it has a "[l]ack of U13 proactive age identification and enforcement mechanism[s]" and has identified "Areas of Improvement" for age verification "to block U13s from our services." However, according to internal records, Meta chose not to implement recommended improvements because Meta decided to "not prioritize this work until we have clear legal obligations to do so."

340. In a September 2020 internal email discussing Global Head of Safety Antigone Davis' description of "age assurance" initiatives where Meta was "most vulnerable and nee[ed] to step up [its] efforts," a Meta strategic advisor noted the findings were "quite worrying," and "tends to confirm the impression I have that this area of work is often sidelined and Antigone doesn't have the resources or consistent leadership support that she needs."

341. Indeed, due to lack of "leadership support," Meta relinquished any efforts to engage in any meaningful age-gating or verification.

342. Moreover, Meta has chosen to not implement alternate, more effective age-gating measures and age verification tools that it knew it could take.

343. For example, when an Instagram user attempts to change their age on their account from under 18 to over 18 years old, Meta uses highly-specialized age verification technology from a third-party provider, Yoti, to collect a self-portrait video and image and estimate a user's age based on their facial features which Yoti reports back to Meta. Despite

already employing this age verification technology, Meta has chosen not to require it at account set-up or utilize it to address its massive Under-13 enforcement backlog.

344. Meta's deception about the extent to which it allows and/or its affirmative efforts to exclude under 13-year-olds on its Instagram platform is material. Had young users and their families known about the ineffectiveness of Meta's age-gating mechanism, Meta's lack of efforts to meaningful exclude or inhibit Under-13 users, its failure to remove known Under-13 users and enforce its age restrictions per its written policy, and its enabling of hundreds of thousands of Under-13 users to access and remain on its platform, young users and their families reasonably would have taken their own measures to police inappropriate underage use, including exercising parental controls or implemented use restrictions, engaging in more active or passive monitoring, and/or attempting to regulate use or ensure disuse of Meta's social media platforms.

3. Meta's Deceptive Acts and Practices Unfairly Harm Under-13 Users

345. Meta's decision to misrepresent the Under-13 use of its platform—rather than taking steps to mitigate that use, including an effective age-gate, meaningful enforcement of its minimum age rules, and investment in recommended age assurance improvements—is pernicious, not only because the reason Meta has chosen to deceive is because effective age enforcement would impact its growth and revenue, but also because it knows of the acute harm its platform causes to underage users.

346. Internal communications reveal that Meta has strategically chosen to eschew "implement[ing] measures needed to identify and remove u13 age liars" because doing so could "impact growth"—*i.e.,* Meta's bottom line.

347. Moreover, Meta's practice of enabling Under-13 users to sign-up, remain, and proliferate on its platform (in pursuit of growth) is even more pernicious in light of Meta's own

knowledge of the great harms Instagram's manipulative, exploitative, and addictive design features inflict on its youngest users, as alleged herein.

348. Indeed, an email sent to Instagram's Head of Safety & Wellbeing from Northeastern University Department of Applied Psychology Professor Rachel Rodgers, who was recruited by Meta for its "Youth Advisors" Group, stressed the need to keep Under-13 users off its Instagram platform, expressly advising that:

> [T]he rationale for having an age limit on social media use is not only due to the presence of age-inappropriate content . . . but also that children who are developing fundamentally lack the skill to engage with social media in safe ways. The understanding of marketing intent; empathy; social skills; identity; and of course body image etc. all develop during childhood and adolescence . . . and in my opinion, we would not be serving children well by encouraging them to use social media while these dimensions are still developing. . . . [E]ven with the best protection against "tangible" risk . . . there are inherent aspects of social media that these children will be exposed to . . . that will never disappear."

349. "[O]verall," Professor Rodgers ultimately opined, "the risks to [Under-13] youth outweigh the benefits to them" of being on Instagram.

350. And Professor Rodgers' opinion was not alone. As Instagram's Head of Public Policy Karina Newton highlighted, "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[,] the blue print of the app is inherently not designed for an age group that don't have the same cognitive and emotional skills that older teens do."

351. Despite such knowledge, however, Meta has recklessly and/or deliberately disregarded the existence of hundreds of thousands of Under-13 users on its platforms and allowed them to be subjected to its severe harms.

D. Meta's Unfair and Deceptive Practices Have Caused Substantial and Unjustified Harm to Massachusetts Youth and the Commonwealth

352. Tens of thousands of Massachusetts' youth and children have been, and continue to be, mentally and physically harmed by Meta's intentional, profit-motivated exploitation and manipulation of youth's vulnerabilities to induce addictive overuse of its Instagram platform.

353. The extent of harm to Massachusetts' approximately 400,000 teens,[88] ages 13–17, is substantial.

354. Meta's internal data shows that roughly 80% or more of these 400,000 Massachusetts teens are engaging in daily use of Meta's Instagram platform. For example, from July 2020 to June 2021, Meta reported approximately 320,000 to 370,000 daily active Massachusetts teen users on its Instagram platform; and from October 2022 to April 2023, approximately 340,000 to 360,000 daily active Massachusetts teen users on its Instagram platform.

355. Meta's 2020 internal research also shows that 9% of its U.S. teen users spend two or more hours on Instagram per day; and 4% of its U.S. teen users spend three or more hours on Instagram per day.

356. Therefore, approximately 29,000 Massachusetts teen users in 2020 (i.e., 9% of the 320,000 Massachusetts daily active users on Instagram) spent two or more hours on Instagram per day, with nearly half of those Massachusetts teen users (i.e., 13,000) spending three or more hours on Instagram per day.[89]

---

[88] U.S. Census data reports an estimated 414,508 teens aged 13–17 in Massachusetts in 2020; 410,413 in 2021; and 405,366 in 2022. *Kids Count Data Center*, THE ANNIE E. CASEY FOUND'N (2023), https://datacenter.aecf.org/.

[89] Note, this estimation is based on data regarding the number of daily active Massachusetts teen "users" produced by Meta in pre-suit discovery. While the Commonwealth is aware Meta tracks a separate metric of daily active "people" to account for instances where one person may have multiple user accounts, Meta has not disclosed that data.

357. Massachusetts teens themselves have reported engaging in extensive hours of use. For example, a Westport High School senior conducted a poll among her peers for her senior project to gauge harmful mental health effects of excessive social media use.[90] She found students engaging in up to six hours on the platforms, which she noted as remarkable given it "is the same amount of time we're in school[.]"[91]

358. Massachusetts teens further recognize that this is not by choice. As another Westport High school student described, her social media use on phones "[i]s a habit now, so it's kind of like an addiction more than a choice[.]"[92]

359. The tens of thousands of Massachusetts youth spending excessive hours of time (*i.e.,* 2 or more hours) on Instagram are being subjected to mental and physical harms.

360. Research demonstrates that, for adolescents, after one hour of social media use per day, mental health steeply declines: decreases in happiness and self-esteem occur alongside increases of self-harm, depression, and behavioral challenges.[93] The effect is particularly strong

---

[90] Tiffany Chan, *Westport Schools Joining Nationwide Lawsuit Against Social Media Giants*, CBS NEWS (Mar. 2, 2023), https://www.cbsnews.com/boston/news/westport-schools-joining-nationwide-lawsuit-against-social-media-giants/.

[91] *Id*.

[92] *Id.*

[93] *See, e.g.*, Jean Twenge & W. Keith Campbell, *Media Use Is Linked to Lower Psychological Well-Being: Evidence From Three Datasets*, 90 PSYCH. Q. 311 (Jun. 2019), https://doi.org/10.1007/s11126-019-09630-7; Kira E. Riehm, et al., *Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth*, 76 JAMA PSYCH. 1266–1273 (2019), https://doi.org/10.1001/jamapsychiatry.2019.2325; Amber Barthorpe, et al., *Is Social Media Screen Time Really Associated with Poor Adolescent Mental Health? A Time Use Diary Study,* 274 J. AFFECTIVE DISORDERS 864–870 (Sept. 1, 2020), https://doi.org/10.1016/j.jad.2020.05.106; Mingli Liu, et al., *Time Spent on Social Media and Risk of Depression in Adolescents: A Dose-Response Meta-Analysis*, 19 INT. J. ENVIRON. RES. PUBLIC HEALTH 5164 (2022), https://doi.org/10.3390/ijerph19095164; Amber Barthorpe, et al., *Is Social Media Screen Time Really Associated with Poor Adolescent Mental Health? A Time Use Diary Study,* 274 J. AFFECTIVE DISORDERS. 864–870 (Sept. 1, 2020), https://doi.org/10.1016/j.jad.2020.05.106; and Mingli Liu, et al., *Time Spent on Social Media and Risk of Depression in Adolescents: A Dose-Response Meta-Analysis*, 19 INT. J. ENVIRON. RES. PUBLIC HEALTH 5164 (2022), https://doi.org/10.3390/ijerph19095164.

among adolescent girls.[94]

361.   A longitudinal cohort study of adolescents aged 12–15 that adjusted for baseline

mental health found that adolescents who used social media more than 3 hours per day faced

double the risk of poor mental health outcomes such as depression and anxiety symptoms.[95]

362.   Habitual social media use also affects how young users' brains mature.

363.   Recent research shows that habitually checking social media can alter the brain

chemistry of adolescents, changing the brain's sensitivity to social rewards and punishments,

with implications for long-term psychological adjustment.[96] Specifically, "studies have shown

that people with frequent and problematic social media use can experience changes in brain

structure similar to changes seen in individuals with substance use or gambling addiction."[97]

364.   Research also indicates that going through puberty while being a heavy social

media user interferes with development during a sensitive period for social and emotional

learning, negatively affecting life satisfaction.[98] For example, "[f]requent social media use may

be associated with distinct changes in the developing brain in the amygdala (important for

[94] *See, e.g.*, Cooper McAllister, et al., *Associations Between Adolescent Depression and Self-Harm Behaviors and Screen Media Use in a Nationally Representative Time-Diary Study*, 49 Res. on Child and Adolescent Psychopathology 1623, 1627–1631 (May 25, 2021), https://doi.org/10.1007/s10802-021-00832-x; Jean M. Twenge & Gabrielle N. Martin, *Gender Differences in Associations Between Digital Media Use and Psychological Well-Being: Evidence from Three Large Datasets*, 79 J. of Adolescence 91–102 (Feb. 2020), https://doi.org/10.1016/j.adolescence.2019.12.018.

[95] Kira E. Riehm, et al., *Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth*, 76 JAMA Psych. 1266–1273 (2019), https://doi.org/10.1001/jamapsychiatry.2019.2325.

[96] *See* Office of the Surgeon General, *Social Media and Youth Mental Health, The U.S. Surgeon General's Advisory*, U.S. Dep't of Health and Hum. Servs. (May 23, 2023), https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf (citing Maria T. Maza, et al., *Association of Habitual Checking Behaviors on Social Media With Longitudinal Functional Brain Development*, 177 JAMA Pediatrics 160–167 (2023), https://doi:10.1001/jamapediatrics.2022.4924; Eveline A. Crone & Elly A. Konijn, *Media Use and Brain Development During Adolescence*, 9 Nature Commc'ns 588 (2018), https://doi.org/10.1038/s41467-018-03126-x).

[97] *Id*.

[98] *See, e.g.*, Amy Orben, et al., *Windows of Developmental Sensitivity to Social Media*, 13 Nature Commc'ns 1649 (March 28, 2022), https://doi.org/10.1038/s41467-022-29296-3.

emotional learning and behavior) and the prefrontal cortex (important for impulse control,

emotion regulation, and moderating social behavior), and could increase sensitivity to social

rewards and punishments."[99] As such, "[a]dolescent social media use is predictive of a

subsequent decrease in life satisfaction for certain developmental stages including for girls 11–13

years old and boys 14–15 years old."[100]

365.   Making matters worse, excessive and problematic social media use has been

linked to sleep problems among adolescents,[101] which in turn causes or exacerbates symptoms of

depression and anxiety.[102] "Sleep is essential for healthy development of adolescents[,]" and

"[a] systematic review of 42 studies on the effects of excessive social media use found a

consistent relationship between social media use and poor sleep quality, reduced sleep duration,

sleep difficulties, and depression among youth."[103] Poor sleep also has negative physical effects,

including altered neurological development in adolescent brains, suicidal thoughts and

behaviors,[104] and interfering with the antibody response to vaccines.[105]

---

[99] Office of the Surgeon General, *supra* note 96.

[100] *Id*.

[101] *Id*.; *see also* Hugues Sampasa-Kanyinga, et al., *Use of Social Media is Associated With Short Sleep Duration in a Dose-Response Manner in Students Aged 11 To 20 Years*, 107 ACTA PAEDIATRICA 694, 694–700 (2018), https://doi.org/10.1111/apa.14210.

[102] Megan A. Moreno & Anna F. Jolliff, *Depression and Anxiety in the Context of Digital Media*, HANDBOOK OF ADOLESCENT DIGITAL MEDIA USE & MENTAL HEALTH, 227 (2022), https://doi. org/10.1017/9781108976237.011; Rea Alonzo et al., *Interplay Between Social Media Use, Sleep Quality, And Mental Health In Youth: A Systematic Review*. 56 SLEEP MEDICINE REVIEWS 101414 (Apr. 2021), https://doi.org/10.1016/j.smrv.2020.101414.

[103] Office of the Surgeon General, *supra* note 96, at 10 (citing Rea Alonzo, et al., *Interplay Between Social Media Use, Sleep Quality, And Mental Health In Youth: A Systematic Review*. 56 SLEEP MEDICINE REVIEWS 101414 (Apr. 2021), https://doi.org/10.1016/j.smrv.2020.101414).

[104] Office of the Surgeon General, *supra* note 96, at 10.

[105] Karine Spiegel, et al., *A Meta-analysis of the Associations Between Insufficient Sleep Duration and Antibody Response to Vaccination*, 33 CURRENT BIOLOGY 998 (Mar. 13, 2023), https://doi.org/10.1016/j.cub.2023.02.017.

366. Adolescents who use social media for five or more hours per day are three times more likely than non-users not to sleep enough.[106]

367. Disruptions in length and quality of sleep also negatively affects school performance and productivity. Students who do not get the recommended amount of sleep are more likely to have difficulty completing schoolwork, attention difficulties, and behavioral problems—all of which impact their ability to succeed academically.[107]

368. The extensive time teens spend on social media also displaces time that teens could be spending engaging in "off-screen" protective activities that have been shown to promote health and well-being. The Massachusetts Department of Public Health has identified that for youth, these protective factors are centered on positive interactions with family, school, and community[,]" such as "volunteer/community work, organized activities, and [sitting] down to dinner with their families." "Previous research has demonstrated links between these protective factors and . . . better general health, . . .[and] decreased risk of suicidal ideation[.]"[108]

369. In addition to the human toll on Massachusetts teen users, the costs of Massachusetts teens' excessive and problematic use of Meta's platforms (all orchestrated by Meta's purposefully addictive design) place an undue burden on society and the Commonwealth of Massachusetts. In particular, there has been a marked uptick in school system and heath care expenditures to address the mental and physical health harms Meta has caused in Massachusetts youth.

---

[106] Hugues Sampasa-Kanyinga, *supra* note 101; *see also* Marian Freedman, *Social Media and Sleep Duration—There is a Connection!*, 35 CONTEMP. PEDIATRICS 12 (May 1, 2018), https://www.contemporarypediatrics.com/view/social-media-and-sleep-durationthere-connection.

[107] *Sleep and Health*, CTRS. FOR DISEASE CONTROL AND PREVENTION (2023), https://www.cdc.gov/healthyschools/sleep.htm.

[108] *Results of the Massachusetts Youth Health Survey 2021*, MASS. DEP'T OF PUB. HEALTH (2022), https://www.mass.gov/doc/results-of-the-massachusetts-youth-health-survey-2021/download.

370.   For example, Massachusetts school administrators and teachers overwhelmingly report that use of social media on phones in schools is disruptive, interferes with learning and performance, teaching and student engagement, and fosters negative social interactions.[109] The problem is so pervasive that over 45 Massachusetts public schools and districts have invested in implementing magnetic-locking phone pouches, at an estimated annual cost of approximately $20,000 per school,[110] to reduce use of social media during school hours. The Massachusetts Department of Elementary and Secondary Education ("DESE") has likewise recognized a huge need to address problematic social media and phone use in Massachusetts schools, and in July 2023, launched a pilot grant program, offering up to $800,000 in total funding, to assist school districts in mitigating and/or reducing negative impacts of social media and phone use through age-appropriate, effective, and innovative approaches.[111] Approximately 78 Massachusetts school districts have applied for such funding for FY2024.

371.   Further, schools, which serve as one of the main providers of mental health services for teens and adolescents, are struggling to meet the increasing demand for mental health and other social services, and have invested large sums to meet the demand.

372.   For example, a recent August 2023 survey of Massachusetts superintendents showed at least 94 Massachusetts school districts newly invested additional time and resources to

---

[109] Recording of May 23, 2023 Meeting, MASS. BD. OF ELEMENTARY AND SECONDARY EDUC., at 2:22:20, https://livestream.com/madesestreaming/events/10865571/videos/236316593.

[110] Jeanette DeForge, *Chicopee Cellphone Lock-up Program May Expand to Younger Students* (Mar. 3, 2023), https://www.masslive.com/news/2023/03/chicopee-schools-may-expand-cell-phone-locking-program-to-middle-schools.html

[111] *FY2024: Approaches to Address Student Cellphone Use Pilot Grant*, MASS. DEP'T OF ELEMENTARY AND SECONDARY EDUC. (July 17, 2023), https://www.doe.mass.edu/grants/2024/729/

address social media use in schools and its associated mental and social impacts on students.[112]

Schools reported investments in a myriad of ways, including *inter alia*:

- Hiring additional mental health professionals, guidance and adjustment counselors, school resources officers, and assistant principals;

- Applying for mental health grants and cell-phone use restriction grants;

- Developing and delivering new or additional mental health resources and digital literacy and social emotional curricula;

- Strengthening multi-tiered systems of supports for social and emotional learning; and

- Creating and circulating written materials and hosting education workshops for families regarding the harms of social media use.[113]

373.   Notably, in FY2022 and FY2023, Massachusetts' DESE expended more than $10 million in state grant funding (all of which was allocated) to help Massachusetts school districts build comprehensive mental health systems to adapt, expand, or strengthen multi-tiered systems of support to respond to the social-emotional and behavioral health needs of students.[114] In grant applications, various Massachusetts school districts specified the need for such funding was, in part, because of the need to address the impacts of social media use on students specifically.[115]

374.   Defendants' conduct, as alleged herein, has fueled a mental health crisis for tens of thousands of Massachusetts youth, the cost of which has been borne by the Commonwealth' schools and public health systems at-large. The harm being suffered by Massachusetts youth and families as the result of Meta's unfair and deceptive conduct alleged herein is great, and our

---

[112] Massachusetts Association of School Superintendents, MA School District Survey Results Regarding Steps Taken to Address Cell Phone and Social Media Use and Impacts (Aug. 22, 2023).

[113] *Id.*

[114] FY2023: Supporting Students' Social Emotional Learning (SEL), Behavioral & Mental Health, and Wellness — Competitive Grant (Mental Health Grant), MASS. BD. OF ELEMENTARY AND SECONDARY EDUC. (Nov. 30, 2022), https://www.doe.mass.edu/grants/2023/613-332/ and 211.

[115] Massachusetts Association of School Superintendents, *supra* note 112.

youth "don't have the luxury of waiting years until we know the full extent of social media's impact."[116]

VII.   CONCLUSION

375.   Holding Meta and Instagram accountable for their unfair and deceptive conduct is critical because of the Massachusetts children and youth they have harmed and because of Defendants' repeated, deliberate, unscrupulous, and unconscionable choices to prioritize profit over child and adolescent well-being. Meta and its executives knew more than anyone about the addictive and harmful features of their platform, and of the resulting harms to youth. They knew how to get youth addicted, how to keep youth addicted, and how to generate the most money from the youth trapped and ensnared on their social media platforms. They also knew ways they could mitigate their platforms' addictiveness and mitigate harms to youth—and yet repeatedly chose not to do so—and lied instead. Meta pitted its powers as a Fortune 50 corporation against the vulnerable and susceptible minds of youth in an unfair fight for their time and attention, to the detriment of their health.

VIII.   CAUSES OF ACTION

COUNT ONE

UNFAIR ACTS AND/OR PRACTICES IN VIOLATION OF G.L. C. 93A, § 2 AND 940 CMR 3.16 ET SEQ.

Defendants' Immoral, Unethical, Oppressive, Unscrupulous & Unconscionable Conduct in Knowingly Exploiting and Harming Youth

376.   Plaintiff, Commonwealth of Massachusetts, repeats and realleges the foregoing paragraphs, and incorporates them herein by reference.

---

[116] Office of the Surgeon General, *supra* note 96.

377.   The Consumer Protection Act, G. L. c. 93A, § 2, prohibits unfair or deceptive acts or practices by any person in the conduct of any trade or commerce. Meta and Instagram are each a "person" as defined by G.L. c. 93A, § 1, which includes "natural persons, corporations, trusts, partnerships, incorporated or unincorporated associations, and any other legal entity."

378.   Meta and Instagram are engaged in "trade" or "commerce" as defined by G.L. c. 93A, § 1, which includes "the advertising, the offering for sale, . . . the sale, . . . or distribution of any services . . . directly or indirectly affecting the people of this commonwealth."

379.   Pursuant to her authority under G.L. c. 93A, § 2(c), the Attorney General has promulgated regulations defining specific unfair or deceptive acts and practices under the Massachusetts Consumer Protection Act. Specifically, 940 CMR 3.16 states that "an act or practice is a violation of M.G.L. c.93A, § 2 if . . .[i]t is oppressive or otherwise unconscionable in any respect." 940 CMR 3.16(1).

380.   Defendants' conduct, as alleged in the foregoing paragraphs, in particular paragraphs 71–150 and 352–374, constitute unfair acts and/or practices within the meaning of the Massachusetts Consumer Protection Act, G.L c. 93A, § 2, including because their acts and practices are: (1) offensive to public policy such that they fall within at least the penumbra of some common-law, statutory, or other established concept of unfairness; (2) immoral, unethical, oppressive, unscrupulous, and unconscionable; and/or (3) have caused unjustified, substantial injury to consumers that consumers themselves could not reasonably have avoided.

381.   Defendants' acts and practices, including Defendants' actions taken to induce young users' compulsive, habitual use of and addiction to their social media platforms, in particular Instagram, are offensive to public policy, as defined by statute and common law. The protection of minors from the dangers of addiction and the associated mental and physical harm

89

is a well-established objective underlying public policy in Massachusetts. Defendants' acts and practices alleged herein—including Defendants' intentional, profit-motivated design of psychologically manipulative and exploitative tools to addict especially susceptible youth to its platforms, while knowing that such addictive use severely harms its young users—therefore offend public policy.

382. Defendants' acts and practices to induce young users' addictive and problematic use of their social media platforms, in particular Instagram, are also immoral, unethical, oppressive, unscrupulous, and unconscionable. As described in detail in the foregoing paragraphs, Defendants, at all relevant times, based on their own internal research, had knowledge of the severe harms suffered by young users as a result of addictive use of their platforms and the role their platforms played in exacerbating those harms. Instead of taking meaningful measures to mitigate these damaging effects, Defendants knowingly, deliberately, and recklessly disregarded and turned a blind eye to them in pursuit of profit. Further, Defendants' willful design and use of platform tools and features to target, prey on, exploit, and manipulate, highly vulnerable young users, is unconscionable.

383. Defendants' acts and practices alleged herein also have caused and continue to cause unjustified substantial injury to consumers that could not be reasonably avoided. Namely, Massachusetts young users are suffering severe negative effects from addictive use of Defendants' platforms, including negative effects on sleep and school performance, emotional and behavioral challenges, poor mental health outcomes such as depression and anxiety, and negatively altered brain chemistry. Young users also could not have reasonably avoided the injuries resulting from Defendants' acts and practices, including because Defendants misrepresented and failed to disclose the dangerous nature of their social media platforms, in

90

particular Instagram, and because Defendants utilized psychologically manipulative engagement-inducing features, knowing that young users are especially susceptible to those psychologically manipulative tactics and "can't help themselves."

384.   Moreover, the unwarranted public health and safety risks and harm engendered by use of Defendants' social media platform are not outweighed by any countervailing benefit to consumers or competition. The detrimental, and potential long-term effects on developing youth, in addition to the increased burdens on society, families, schools, and health care systems is substantial.

385.   Specifically, Defendants have willfully, knowingly, and repeatedly violated the Massachusetts Consumer Protection Act, G.L. c. 93A, by engaging in multiple unfair acts and practices that exploited the psychological vulnerabilities of young users and caused harmful outcomes for young users, including but not limited to:

a. Defendants designed, developed, and deployed incessant audiovisual and vibration notifications and alerts, infinite scroll and autoplay functions, and ephemeral aspects to its platform features to exploit and cultivate young users' "fear of missing out" in order to recall young users to their platforms, overcome their autonomy, and induce them to spend more time than they would otherwise choose; and

b. Defendants employed and utilized psychologically manipulative "variable reinforcement schedules," to trigger dopamine releases in young users, unfairly inducing them to engage excessively, problematically, and addictively with their products—much like a gambler at a slot machine—to the extent of physical and mental harm.

91

386. Defendants engaged in the above unfair actions despite knowing that the addiction caused by its manipulative design features harmed young users and that they were sacrificing young users' well-being in the pursuit of profit.

387. Each unfair act or practice engaged in by Defendants as recited above and throughout this Complaint constitutes a separate violation of G.L. c. 93A, § 2.

388. Massachusetts consumers and youth are suffering, have suffered, and will continue to suffer unjustified substantial injury as a result of Defendants' violations of Massachusetts consumer protection laws. Absent injunctive relief by this Court, Defendants are likely to continue to injure consumers and harm the public interest.

COUNT TWO

DECEPTIVE ACTS AND/OR PRACTICES IN VIOLATION OF G.L. C. 93A, § 2

Defendants' Willful Misrepresentations Regarding the Addictive Nature of their Platform, their Prioritization of Youth Safety and Well-Being, and Frequency of Harm Viewed on their Platform

389. Plaintiff, Commonwealth of Massachusetts, repeats and realleges the foregoing paragraphs, and incorporates them herein by reference.

390. The Consumer Protection Act, G. L. c. 93A, § 2, prohibits unfair or deceptive acts or practices by any person in the conduct of any trade or commerce. Meta and Instagram are each a "person" as defined by G.L. c. 93A, § 1, which includes "natural persons, corporations, trusts, partnerships, incorporated or unincorporated associations, and any other legal entity."

391. Meta and Instagram are engaged in "trade" or "commerce" as defined by G.L. c. 93A, § 1, which includes "the advertising, the offering for sale, . . . the sale, . . . or distribution of any services . . . directly or indirectly affecting the people of this commonwealth."

392.   Defendants' conduct, as alleged in the foregoing paragraphs, in particular

paragraphs 151–300, constitute deceptive acts or practices within the meaning of the

Massachusetts Consumer Protection Act, G.L c. 93A, § 2, including because Defendants made

material statements, representations, omissions, and/or concealed information in a way that had

the capacity or tendency to mislead consumers such that they would have acted differently from

the way they otherwise would have acted.

393.   In numerous instances, Defendants' public statements and communications

knowingly misrepresented, directly or indirectly, expressly or by implication, that their platforms

were not addictive, that they prioritized young users' well-being over profits, and that their

platforms were safe, while concealing and/or misrepresenting their internal knowledge that the

frequency of harmful material encountered by young users on their platform was far more

pervasive than Defendants' public statements revealed.

394.   Specifically, Defendants have willfully, knowingly, and repeatedly violated the

Massachusetts Consumer Protection Act, G.L. c. 93A, § 2 by engaging in multiple deceptive acts

and practices that duped young users, their families, and the public regarding the safety of their

platforms and Meta's efforts in prioritizing well-being, including but not limited to,

misrepresentations, omissions and/or active concealment to Congress, news media, and the

general public, including Massachusetts youth and residents, that falsely and misleadingly

asserted that:

    a. Defendants' social media platforms, including Instagram, are not designed to be

        addictive when they are so designed;

b. Defendants prioritized young users' well-being, when in fact Defendants repeatedly chose not to invest in well-being initiatives and chose not implement measures they knew could reduce harms to youth; and

c. Defendants' social media platforms, including Instagram, are safe for young users while concealing their internal research showing the high frequency young users viewed content on its platforms that Defendants had identified as harmful.

395. Defendants' deception regarding the addictive nature of their product, their prioritization of young users' well-being, and the frequency users encountered content on its platform that it had identified as harmful has prevented young users and their families from taking steps to protect their health and well-being.

396. Each deceptive act or practice engaged in by Defendants as recited above and throughout this Complaint constitutes a separate violation of G.L. c. 93A, § 2.

397. Massachusetts consumers and youth are suffering, have suffered, and will continue to suffer unjustified substantial injury as a result of Defendants' violations of Massachusetts consumer protection laws. Absent injunctive relief by this Court, Defendants are likely to continue to injure consumers and harm the public interest.

COUNT THREE

UNFAIR AND DECEPTIVE ACTS AND/OR PRACTICES IN VIOLATION OF G.L. C. 93A, C. 2

Defendants' Willful Misrepresentation That They Exclude Under-13 Users From Their Platform While Knowing Many Are on Their Platform and Not Inhibiting Such Use

398. Plaintiff, Commonwealth of Massachusetts, repeats and realleges the foregoing paragraphs and incorporates them herein by reference.

399.   The Consumer Protection Act, G. L. c. 93A, § 2, prohibits unfair or deceptive acts or practices by any person in the conduct of any trade or commerce. Meta and Instagram are each a "person" as defined by G.L. c. 93A, § 1, which includes "natural persons, corporations, trusts, partnerships, incorporated or unincorporated associations, and any other legal entity."

400.   Meta and Instagram are engaged in "trade" or "commerce" as defined by G.L. c. 93A, § 1, which includes "the advertising, the offering for sale, . . . the sale, . . . or distribution of any services . . . directly or indirectly affecting the people of this commonwealth."

401.   Defendants' conduct, as alleged in the foregoing paragraphs, in particular paragraphs 301–351, constitute unfair and deceptive acts or practices within the meaning of the Massachusetts Consumer Protection Act, G.L c. 93A, § 2.

402.   Namely, Defendants' conduct is deceptive because despite publicly claiming that they exclude Under-13 users from their platform and engage in efforts to inhibit underage use, Defendants: (1) knew that hundreds of thousands of Under-13 users were on their platform; (2) knew that their age-gating measures were ineffective and age restriction rules were not meaningfully enforced; (3) failed to utilize more effective age verification measures that they knew they could take; and (4) intentionally failed to invest in recommended age assurance improvements because it would affect the company's growth and revenue.

403.   Moreover, Defendants' conduct is unfair because in addition to refusing to meaningfully engage or invest in age enforcement efforts for profit-motivated reasons, Defendants unscrupulously and unconscionably did so while knowing that the inherent design of their platform had especially harmful impacts on underage users who fundamentally lacked the mental development and skills to engage with their platform in safe ways. Defendants therefore have knowingly allowed these underage users to be subjected to substantial and unjustified harm

95

caused by its psychologically manipulative and addition-inducing features that could not have been reasonably avoided.

404.   Defendants' deception regarding their failure to meaningfully exclude or inhibit Under-13 users, their failure to remove known Under-13 users and enforce its age restrictions per its written policy, and their enabling of hundreds of thousands of Under-13 users to access and remain on its platform, has prevented young users and their families from engaging in measures to protect young users' health and well-being.

405.   Each unfair and deceptive act or practice engaged in by Defendants as recited above and throughout this Complaint constitutes a separate violation of provided G.L. c. 93A, § 2.

406.   Massachusetts consumers and youth are suffering, have suffered, and will continue to suffer unjustified substantial injury as a result of Defendants' violations of Massachusetts consumer protection laws. Absent injunctive relief by this Court, Defendants are likely to continue to injure consumers and harm the public interest.

COUNT FOUR

PUBLIC NUISANCE

407.   Plaintiff, Commonwealth of Massachusetts, repeats and realleges the foregoing paragraphs and incorporates them herein by reference.

408.   Under Massachusetts common law, a defendant is liable for the tort of public nuisance when their conduct unreasonably interferes with a right common to the general public, such as interference with public health, public safety, public peace, and public comfort or convenience.

409. The Massachusetts Attorney General is empowered to bring a *parens patriae* action on behalf of the Commonwealth for abatement of a public nuisance.

410. The Commonwealth has a special relationship with, and responsibility to, its residents, including in particular, upholding the public health, safety, and welfare of Massachusetts adolescents, youth, and children. *See, e.g.*, *Prince v. Massachusetts*, 321 U.S. 158, 165–66 (1944) (the State has a duty to "guard the general interest in youth's well-being," "to protect the welfare of children," and to see that they are "safeguarded from abuses" which might prevent their "growth into free and independent well-developed men and citizens."); *Ginsberg v. State of N.Y.*, 390 U.S. 629, 640–41 (1968) (State "has an independent interest in the well-being of its youth").

411. Through their conduct as described in this Complaint, including by purposefully designing, developing, and promoting features and tools to addict youth and induce problematic use of their social media platforms, including Instagram, Defendants have knowingly created, substantially contributed to, and/or were substantial participants in maintaining a public nuisance of youth addiction to their platforms, which has significantly interfered with the public health, safety, peace, comfort, and convenience by causing severe negative mental and physical health harms in the tens of thousands of Massachusetts youth who spend excessive amounts of time on Defendants' social media platforms.

412. Specifically, Defendants engaged in deceptive and unfair misrepresentations that concealed the addictive nature of its social media platforms for youth, contributing directly to a youth mental health crisis in Massachusetts, which has resulted in unjustified substantial public injuries.

413.   Additionally, Defendants knowingly and unconscionably manipulated, exploited, and preyed upon vulnerable youth's developing brains by purposely designing and employing platform tools and features that utilized addictive, habit-forming dopamine response patterns, triggered youth's "fear of missing out," and incessantly recalled young users back to its platforms to prolong and maximize their time spent on their platforms to the extent of causing serious psychological and physical harm.

414.   The public nuisance created by Defendants' actions is substantial and unreasonable. Defendants' actions have caused, and continue to cause, significant and long-lasting harm to children, teens, and youth in Massachusetts, and the larger Commonwealth and public. At the very least, the significant injuries caused by Defendants include but are not limited to:

   a. A crisis of youth addiction in the approximately 29,000 Massachusetts youth, 13–17, who use Defendants' Instagram platform two or more hours per day, and the associated negative mental, physical, and social health impacts on such Massachusetts teens from such problematic use;

   b. Health care costs borne by Massachusetts youth, their families, schools, health care providers, and the Commonwealth and its subdivisions for prevention, treatment, and recovery related to mental and physical harms to youth caused by the addiction induced by Defendants' platforms;

   c. Public education-related costs borne by Massachusetts youth, their families, schools, communities, and the Commonwealth and its subdivisions, including resources expended to combat loss of productivity, disruption and poor school

performance related to excessive and addictive social media use by Massachusetts youth; and

d. Special public costs borne solely by the Commonwealth and its subdivisions in its efforts to abate the nuisance and to support the public health, safety, and welfare.

415. The harm inflicted by Defendants' acts and practices greatly outweigh any potential social utility their products and services may provide to children.

416. Moreover, because of Defendant's extensive internal research identifying the harms occurring to youth engaging in excessive and problematic use of their platforms, Defendants knew or had reason to know that the development, design, and operation of their addictive and psychologically manipulative platform features would create a public nuisance.

417. Defendants' unfair and deceptive conduct was unreasonable, and at a minimum, negligent and reckless with regard to Defendants' knowledge of the risks associated with addictive use of its social media platform to young users and their lack of efforts to mitigate or address such problems despite knowing measures they could take to reduce harms to youth.

418. But for Defendants' conduct, Massachusetts consumers, and in particular youth, would not be suffering severe mental and physical harm and injury, which was the foreseeable result of Defendant's intentionally addictive platform designs and features specifically targeted at young users to support their goals of maximizing young users' time on their platforms to drive revenue.

419. The Commonwealth must pay the public costs to abate the harms being suffered by Massachusetts youth engaging in addictive, excessive, and problematic use of Defendants' platform purposefully induced by Defendants' psychologically manipulative and exploitative design features and tools. These public costs include, but are not limited to, a myriad of

treatment, prevention, intervention, and recovery initiatives to address the severe mental and physical impacts experienced by Massachusetts youth, such as suicides and suicidal ideation, self-harm, sleep disorders, eating disorders, body image issues, anxiety, and depressive symptoms. It also includes the additional expenditures and investments made by Massachusetts public schools to combat the negative impacts of problematic social media use on students and their school performance, and public grant funding awarded to school districts to address the same.

420.   Absent injunctive relief by this Court to abate Defendants' ongoing conduct, Defendants are likely to continue to injure Massachusetts consumers and youth and harm the public interest.

IX.   PRAYERS FOR RELIEF

WHEREFORE, Plaintiff Commonwealth of Massachusetts respectfully requests that the Court grant the following relief:

A.   Determine that all Defendants engaged in unfair and deceptive acts and practices in violation of G.L. c. 93A, § 2, and the regulations promulgated thereunder;

B.   Permanently enjoin all Defendants from continuing to engage in unfair and deceptive acts and practices in violation of G.L. c. 93A, § 2 and from engaging in future actions that constitute a public nuisance;

C.   Order all Defendants to pay full and complete restitution to every person who has suffered any ascertainable loss by reason of Defendants' unlawful conduct;

D.   Order all Defendants to pay civil penalties of up to $5,000 for each and every violation of G.L. c. 93A, § 2;

E.   Award the Commonwealth costs and attorneys' fees, pursuant to G.L. c. 93A, § 4;

F.   Determine that all Defendants created a public nuisance;

G.   Order all Defendants to abate the nuisance, to reimburse the cost of the

Commonwealth's abatement efforts, and to pay compensatory damages for harms

caused by the nuisance;

H.   Order Defendant to produce an accounting of monies collected from

Massachusetts consumers pursuant to the fraudulent, deceptive, and/or unlawful

conduct alleged in the Complaint; and

I.   Award any and all other additional relief as the Court may determine to be just

and proper.

X.   JURY DEMAND

The Commonwealth demands a trial by jury on all issues so properly tried.

Respectfully Submitted,

COMMONWEALTH OF MASSACHUSETTS
By its Attorney,
ANDREA JOY CAMPBELL
ATTORNEY GENERAL

/s/ Christina Chan
Christina Chan, BBO# 677703
Jared Rinehimer, BBO# 684701
Liza Hirsch, BBO# 683273
Aaron Davis, BBO# 706637
Cassandra Thomson, BBO# 705942
Kaitlyn Karpenko, BBO# 708124
Assistant Attorneys General
Public Protection & Advocacy Bureau
One Ashburton Place
Boston, MA 02108
(617) 727-2200
christina.chan@mass.gov
jared.rinehimer@mass.gov
liza.hirsch@mass.gov
aaron.davis@mass.gov
cassandra.thomson@mass.gov
kaitlyn.karpenko@mass.gov

DATE: October 24, 2023