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8 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
9 **IN AND FOR THE COUNTY OF SAN MATEO**

10 LAURA ASHMAN,) Civil Action No. 22-CIV-03178
11)
12 Plaintiff,) **COMPLAINT**
13 vs.)
14 INSTAGRAM LLC and META PLATFORMS,)
INC., f/k/a FACEBOOK, INC.,)
15 Defendants.)
16)

17 Laura Ashman (“Plaintiff”), for her Complaint against Instagram LLC and Meta Platforms,
18 Inc. f/k/a Facebook, Inc. (together, “Meta” or “Defendants”), alleges as follows:

19 **INTRODUCTION**

20 1. In October 2003, a sophomore at Harvard College named Mark Zuckerberg hacked
21 into the websites of Harvard’s residential dorms to collect photos of students. He then designed a
22 website called “Facemash” that invited users to rank the “hotness” of female students by comparing
23 their photos side-by-side. In just one day, Facemash users cast over 22,000 votes judging the looks
24 of Harvard’s student body. This was precisely the point of Facemash, as its homepage made clear:
25 “Were we let in for our looks? No. Will we be judged on them? Yes.” When interviewed about
26 Facemash, Zuckerberg stated, “I’m a programmer and I’m interested in the algorithms and math
27 behind it.” Zuckerberg was summoned to appear before Harvard’s disciplinary body but not
28 expelled.

1 2. Eighteen years later, Mark Zuckerberg has become one of the richest men in the
2 world, with a reported net worth of approximately \$65 billion. Zuckerberg sits atop the vast
3 fortunes of Meta, the tenth most valuable company in the world. Not only is Zuckerberg Meta’s
4 CEO, he also personally controls a majority of the voting rights of its stock. In 2021, Meta’s
5 income from operations exceeded \$46 billion, up 43% from the prior year. The crown jewel of
6 Meta’s product line is Instagram, an application for viewing and sharing photos and videos. Every
7 month, nearly 2 billion people actively use Instagram—including over 70% of American teens ages
8 13 to 17.

9 3. Zuckerberg’s power and fortune have changed exponentially since his Harvard days.
10 His willingness to exploit others for personal gain has not. Like Facemash before it, Instagram is
11 designed to capitalize on its users’ insecurities—in particular, young people’s craving for social
12 acceptance and attention, and their desire to be judged attractive by their peers. Unlike Facemash,
13 Instagram utilizes complex algorithms and behavioral cues to addict pre-teen and teenage children
14 to maximize their use of the product. Unlike Facemash, Instagram is no dorm room experiment,
15 and its harmful effects have not been confined to one college campus.

17 4. The Instagram business model is straightforward. Defendants systematically harvest
18 hundreds of data points about Instagram users—including when, where, how, and for how long each
19 individual uses the product; their age, gender, education, job title, city, and community; and their
20 prior purchases, device usage, interests, and hobbies. Defendants use these data principally in two
21 ways. First, they let advertisers exploit these data to micro-target ads to specific audiences and even
22 people. In exchange, advertisers pay Defendants handsomely—over \$33 billion in the fourth
23 quarter of 2021 alone. Second, Defendants use the data to make Instagram as addictive as possible
24 to each of its users. Defendants leverage a user’s data to personalize the product’s stream of photos
25 and videos for that user, as well as the content and timing of notifications sent to a user. The goal is
26 to prompt further “engagement,” meaning more views of advertisements and more revenue for
27 Defendants.
28

1 5. Unfortunately, Defendants’ engagement-driven business model and Instagram’s
2 intentionally addictive product design have created a public health crisis for pre-teen and teenage
3 girls. Defendants’ extraordinary financial success has come at the expense of children’s well-being.

4 6. In September 2021, the Wall Street Journal began publishing a series of reports
5 based on internal documents leaked by former Facebook product manager Frances Haugen. The
6 documents are disturbing. They reveal that, according to Defendants’ own researchers, 13.5% of
7 U.K. girls reported more frequent suicidal thoughts after starting to use Instagram, 17% of teen girls
8 reported worsening eating disorders after using Instagram, 32% of teen girls who felt bad about
9 their bodies were made to feel even worse by Instagram, and over 40% of Instagram users who
10 reported feeling “unattractive” said that feeling began while using Instagram.

11 7. Internal Meta presentations from 2019 and 2020 were unsparing in their conclusions
12 about the harms caused by Instagram: “We make body image issues worse for one in three teen
13 girls.” “Mental health outcomes related to this can be severe.” “Aspects of Instagram exacerbate
14 each other to create a perfect storm.”

15 8. Defendants could have and should have redesigned Instagram to limit its use by
16 minors, the demographic most at risk from its faulty design. Instead, Defendants did the opposite.
17 Prompted by declining “global teen penetration” on Facebook, Defendants turned to Instagram to
18 bolster their relevance with young consumers and beat back competition from TikTok and Snapchat
19 (the latter of which had turned down a \$3 billion acquisition offer from Zuckerberg in late 2012).
20 Driven by what they described internally as the “ultimate goal [of] messaging primacy with U.S.
21 tweens,” a “valuable but untapped audience,” Defendants leaned into Instagram’s addictive quality,
22 designing new features to increase pre-teen and teen dependency on the product. Meanwhile,
23 Defendants buried their researchers’ findings and persisted in their efforts to convince the American
24 public that Instagram is safe for kids.
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1 9. Haugen’s revelations make clear that Defendants “engage” children by addicting
2 them to an app that deliberately exploits the neurobiology of their developing brains. Studies show
3 that, starting around age 10, children’s brains undergo a fundamental shift that spurs them to seek
4 social rewards, including attention and approval from their peers. In addition, the region of the
5 brain that regulates emotion, the prefrontal cortex, does not mature until early adulthood. Instagram
6 takes advantage of this developmental stage in children, and all the insecurities, status anxieties, and
7 beauty comparisons that go with it. Leading pediatric health experts concur that the resultant harms
8 are widespread, serious, long-term, and in tragic instances even fatal.

10 10. Laura Ashman is a 21-year-old resident of Fredericksburg, Virginia. She first began
11 using Instagram in 2013, when she was 12 or 13 years old. In keeping with Instagram’s goal and
12 design, the frequency and intensity of Laura’s usage increased as she started high school, until she
13 was using the product up to 10 hours a day. Laura’s use was so extensive that she would stay
14 awake into the early morning to continue scrolling. As a result of her addiction to Instagram, Laura
15 started skipping school and avoiding her schoolwork. When her parents attempted to take her
16 smartphone away from her, Laura would become distraught, leading to fights with her family. Over
17 time, Laura went from earning straight A’s to failing most of her classes, barely earning grades
18 sufficient to graduate from high school.

21 11. It was during this period of addiction that Laura started to harm herself. When she
22 was in the eighth grade, Laura used the razorblade from a pencil sharpener to cut herself. This self-
23 harming behavior rapidly increased in frequency and severity—and to this day, Laura wears the
24 scars of her self-harm, up and down her arms and legs. During her freshman year, Laura attempted
25 to take her own life, the first of three such attempts.

26 12. Laura’s use of Instagram led her to develop a serious eating disorder and depression,
27 in addition to her cutting and suicide attempts. As a result, Laura has been hospitalized at multiple
28 facilities for emergency mental health interventions, spent three months in residential treatment,

1 participated in three partial-hospitalization treatment programs, and received care from intensive
2 outpatient treatment programs—all in addition to continuous outpatient psychiatric and
3 psychological treatment, which has included a wide range of medications to manage her symptoms.

4
5 13. Plaintiff brings this lawsuit to hold Defendants to account for knowingly unleashing
6 onto the public a defectively designed product that is addictive, harmful, and at times fatal to
7 children. Zuckerberg’s motto is to “move fast and break things.” As shown below, he and his
8 companies succeeded in breaking this young woman’s childhood.

9 **PARTIES**

10 14. Plaintiff Laura Ashman is a citizen and adult resident of Virginia, where she has
11 lived at all relevant times.

12 15. Defendant Meta Platforms, Inc., formerly known as Facebook, Inc., is a Delaware
13 corporation with its principal place of business in Menlo Park, California. Meta owns and operates
14 the Instagram social media product, which it makes widely available to users throughout the United
15 States through a website and applications for mobile devices.

16 16. Defendant Instagram LLC is a Delaware limited liability company with its principal
17 place of business in Menlo Park, California. Instagram LLC is a wholly owned subsidiary of Meta
18 Platforms, Inc. and, in concert with its corporate parent, operates and makes available to the public
19 the Instagram social media product.

20 **JURISDICTION AND VENUE**

21 17. This Court has subject-matter jurisdiction over this case pursuant to the California
22 Constitution, Article VI, § 10, and is a court of competent jurisdiction to grant the relief requested.

23 18. This Court has personal jurisdiction over Defendant Meta Platforms, Inc. because it
24 is headquartered and has its principal place of business in the State of California. This Court has
25 personal jurisdiction over Defendant Instagram LLC because its principal place of business is in the
26 State of California.
27
28

1 22. Facebook also disclosed that the proliferation of smartphones could materially affect
2 its ongoing prospects. “[O]ur users could decide to increasingly access our products primarily
3 through mobile devices. We do not currently directly generate any meaningful revenue from the use
4 of Facebook mobile products, and our ability to do so successfully is unproven. Accordingly, if
5 users continue to increasingly access Facebook mobile products as a substitute for access through
6 personal computers, and if we are unable to successfully implement monetization strategies for our
7 mobile users, our revenue and financial results may be negatively affected.” *Id.* at 13.

9 23. On or around April 1, 2012, Zuckerberg called Kevin Systrom, one of the co-
10 founders of Instagram, offering to purchase his company.

11 24. Instagram was a mobile-based product that had grown exponentially since its launch
12 a year and a half earlier. By April 2012, Instagram had approximately 27 million users. When
13 Instagram released an Android version of its app—right around the time of Zuckerberg’s call—it
14 was downloaded more than a million times in less than a day.

15 25. On April 9, 2012—just days after Zuckerberg’s overture to Systrom—Facebook, Inc.
16 purchased Instagram, Inc. for \$1 billion in cash and stock. This purchase price was double the
17 valuation of Instagram, Inc. implied by a Series B round of funding closed days earlier by the
18 company.
19

20 26. Facebook, Inc. held its initial public offering less than two months after acquiring
21 Instagram, Inc.
22

23 27. Zuckerberg’s willingness to pay a premium for Instagram was driven by his instinct
24 that the Instagram product would be vital to reaching a younger, smartphone-oriented audience—
25 and, as such, critical to his company’s going-forward success.

26 28. Notably, around this time frame, studies began to confirm the addictiveness of social
27 media—and the negative consequences it can have for adolescents.
28

1 asked to create a new account, which involves entering an email address, adding a name, and
2 creating a password and username.

3 34. The prospective user is then invited to press a colorful button that says “Sign up.” In
4 small print above this button, the user is informed: “By tapping Sign up, you agree to our Terms,
5 Data Policy and Cookies Policy.” The text of those policies is not presented on the sign-up page.
6



1 While the words “Terms,” “Data Policy,” and “Cookies Policy” are slightly bolded, the user is not
2 informed that they can or should click on them, or otherwise told how they can access the policies.

3 35. The rare teenager with the foresight to click on the words “Terms” or “Data Policy”
4 would be informed about the scope but misled about the purpose of Defendants’ data collection.
5 They would receive no warning whatsoever that Instagram is designed to be addictive, or that
6 Defendants know Instagram creates a serious safety risk for kids.

7
8 36. Instagram’s Data Policy (current as of July 25, 2022) makes clear that Defendants
9 collect a breathtaking amount of data from Instagram’s users, including:

- 10 a. “the content, communications and other information you provide when you use our
11 Products, including when you sign up for an account, create or share content, and
12 message or communicate with others;”
13
14 b. “information in or about the content you provide (like metadata), such as the location
15 of a photo or the date a file was created;”
16
17 c. “information about the people, accounts, hashtags and Facebook groups, and Pages
18 you are connected to and how you interact with them across our Products, such as
19 people you communicate with the most or groups you are part of;”
20
21 d. “information about how you use our Products, such as the types of content you view
22 or engage with; the features you use; the actions you take; the people or accounts you
23 interact with; and the time, frequency and duration of your activities,” including
24 “when you’re using and have last used our Products, and what posts, videos and
25 other content you view on our Products;”
26
27 e. “information about you, such as when others share or comment on a photo of you,
28 send a message to you, or upload, sync or import your contact information;”
f. “information from and about the computers, phones, connected TVs and other web-
connected devices you use that integrate with our Products,” including “information

1 about operations and behaviors performed on the device, such as whether a window
2 is foregrounded or backgrounded, or mouse movements;”

3 g. “Bluetooth signals, and information about nearby Wi-Fi access points, beacons, and
4 cell towers;”

5 h. “information such as the name of your mobile operator or ISP, language, time zone,
6 mobile phone number, IP address, connection speed and, in some cases, information
7 about other devices that are nearby or on your network;” and

8 i. “information about your online and offline actions and purchases from third-party
9 data providers who have the rights to provide us with your information.”
10

11 37. On July 26, 2022, Defendants updated their Data Policy (rebranding it as a “Privacy
12 Policy”). This updated policy makes clear that the scope of information Defendants collect about
13 Instagram users has not materially changed.
14

15 38. While the Data Policy indicates the scope of user information collected by
16 Defendants through the Instagram product, it is far less forthcoming about the purposes for which
17 this data is collected and its consequences for younger users.

18 39. The Data Policy presents those goals as benign and even positive for its users—“[t]o
19 create personalized Products that are unique and relevant to you” and to “make suggestions for you
20 (such as groups or events you may be interested in or topics you may want to follow).”
21

22 40. The Data Policy says nothing about Defendants’ real motives—personalizing the
23 product to maximize its potential for addiction, creating a dependency that keeps users on longer
24 and more frequently, so that more advertisements are viewed and Defendants can collect more
25 money from advertisers (their true customers). *See supra* ¶ 4. The more time that individuals spend
26 using Instagram, the more Defendants learn about the user, the more advertisements they can
27 deliver, and the more money they can make. This addiction is driven, in part, by the algorithms that
28

1 power Instagram, which are designed to induce compulsive and continuous scrolling for hours on
2 end.

3 41. The Data Policy also contains no warnings whatsoever that use of the product at the
4 intensity and frequency targeted by Defendants creates known risks of mental, emotional, and
5 behavioral problems for children, Defendants’ key audience.
6

7 42. Instagram’s collection and utilization of user data begins the instant she presses
8 “Sign Up.” At that point, Instagram prompts a new user to share a substantial amount of personal
9 data. First, Instagram asks the user to share her personal contacts, either by syncing contacts from
10 her phone and/or syncing her “Friends” from Facebook—“We’ll use your contacts to help you find
11 your friends and help them find you.” Next, Instagram asks the new user to upload a profile photo.
12 After that, Instagram asks the user to “Choose your interests” so that she can “Get started on
13 Instagram with account recommendations tailored to you.” And finally, Instagram invites the new
14 user to “Follow accounts to see their photos and videos in your feed,” offering a variety of
15 recommendations. After sign-up is completed, Instagram prompts the new user to “post” either a
16 photo or a short video.
17

18 43. Instagram’s collection and utilization of user data continues unabated as a new user
19 begins to use the product. Specifically, Instagram tracks a host of behavioral data—ranging from
20 what the user looks at, to how long they hover over certain images, to what advertisements they
21 click on or ignore—to build out a comprehensive and unique fingerprint of the user’s identity. As
22 the user continues to use Instagram, the product’s algorithm works silently and passively in the
23 background to refine this fingerprint, by continuously monitoring and measuring patterns in their
24 behavior. Instagram’s algorithm is sophisticated enough that it can leverage existing data to draw
25 educated inferences about even the user behavior it does not track firsthand. Instagram’s
26 comprehensive data collection allows it to target and influence its users in order to increase their
27 “engagement” with the product.
28

1 44. The Instagram product consists primarily of a never-ending and personalized feed of
2 photographs, video snippets, and advertisements, which Instagram’s proprietary algorithms generate
3 and deliver to each user. In the app’s “Home” pane, this feed includes (but is not limited to) photos
4 and videos posted by Instagram users that the user has elected to “follow.” In the app’s “Explore”
5 pane, the feed consists almost exclusively of photos and videos from users the user has *not* elected
6 to “follow.” In both cases, Instagram’s algorithms create the feed by evaluating the user’s data to
7 determine what material will maximize their attention and time spent using the product. Behavioral
8 training via the intermittent rewards programmed into the app keep users endlessly scrolling,
9 oftentimes despite their desire to put their phone down and move onto other activities.

11 45. To further drive user engagement (and thereby drive advertising revenue), Instagram
12 also utilizes a series of engineering features that are carefully designed to exploit users’
13 neurobiology in order to dominate their attention. These product features are deliberately addictive,
14 particularly to teenagers. Defendants do not warn prospective or current users about these features
15 or their safety risks.

17 46. Instagram uses intermittent variable rewards (“IVR”) to train teen and pre-teen users
18 to use their product compulsively. IVR is based on insights from behavioral science dating back to
19 research conducted by B. F. Skinner in the 1950s, who found that laboratory mice respond most
20 voraciously to unpredictable rewards. In one famous experiment, mice that pushed a lever received
21 a variable reward (a small treat, a large treat, or no treat at all). Compared with mice who received
22 the same treat every time, the mice who received only occasional rewards were more likely to
23 exhibit addictive behaviors such as pressing the lever compulsively. Slot machines have exploited
24 this principle in humans for years by delivering rewards using intermittent variable reward ratios.

26 47. Like a slot machine, Instagram is carefully engineered to induce compulsive behavior.
27 It does this by methodically spacing out dopamine triggering stimuli with dopamine gaps.
28 Dopamine is a “feel-good” hormone that is part of the body’s reward system, and the human brain

1 is hard-wired to seek out activities that release it, including eating, drinking, positive social
2 interactions, and other activities that aid survival.

3 48. One aspect of Instagram that triggers the release of dopamine in the brain is the
4 “likes” feature, which allows users to indicate that they “like” a post and prominently displays the
5 number of times a post has been liked by other users. As New York University professor and social
6 psychologist Adam Alter has explained, Instagram’s “like” feature gives users a dopamine hit
7 similar to drugs and alcohol: “The minute you take a drug, drink alcohol, smoke a cigarette . . . ,
8 when you get a like on social media, all of those experiences produce dopamine, which is a
9 chemical that’s associated with pleasure. When someone likes an Instagram post, or any content
10 that you share, it’s a little bit like taking a drug. As far as your brain is concerned, it’s a very
11 similar experience.”
12

13 49. Every time a response to a stimulus (e.g., using Instagram), results in a reward (e.g.,
14 receiving likes), dopamine is released in the brain and associations between the stimulus and the
15 feel-good reward become stronger through a process called long-term potentiation. Paradoxically,
16 as Skinner’s experiments demonstrate, intermittent variable rewards create stronger associations
17 than fixed rewards. Because brains are wired to search for the next reward, depriving the brain of
18 the dopamine-releasing stimulus causes anticipation and craving to develop, strengthening
19 addiction.
20

21 50. Like the mice in Skinner’s experiments, humans who receive intermittent rewards
22 are more likely to exhibit compulsive behavior. In fact, a slot machine user may experience a
23 rewarding feeling just from the anticipation that comes in the moments after he has pulled the lever
24 and before he finds out whether he has won or lost. Similarly, Instagram users feel compelled to
25 continue using the app or check it regularly in hopes of getting a dopamine hit that will satisfy their
26 craving. Unlike a slot machine, which delivers rewards at random, Instagram is designed to
27 purposefully withhold and release rewards on a schedule its algorithms have determined is optimal
28

1 to heighten a user’s craving and keep them coming back for more. For example, Instagram’s
2 notification algorithms sometimes withhold “likes” on a user’s posts and then later deliver them in a
3 large burst of notifications.

4 51. The “like” feature has an especially powerful effect on teenagers. Researchers at
5 UCLA who used magnetic resonance imaging to study the brains of teenage girls as they viewed
6 Instagram posts found that their perception of a photo changed depending on the number of likes
7 the photo had generated. The fact that an image was highly liked—regardless of its content—
8 instinctively caused the girls to prefer that image. As the researchers put it, teens react to perceived
9 “endorsements,” never mind that Instagram likes are often fake, purchased, or manufactured.
10

11 52. Several other product features employed by Instagram collectively lead to negative
12 mental health outcomes for teenagers, in part because they are designed to addict that demographic
13 to the product and in part because they prey on teenagers’ desire for validation and need for social
14 comparison. These include but are not limited to the following tools:
15

16 a. Instagram makes available and promotes the use of photograph filters that allow
17 users to manipulate photos to make themselves look thinner or meet other perceived
18 standards of beauty. Instagram tools with names like “Slim & Skinny,” “Body
19 Plastic Surgery,” “FaceTune,” and “Perfect365” can help users “solve” body image
20 problems by slimming waists, thinning noses, lengthening legs, enhancing breasts,
21 increasing muscle, changing skin tone, removing skin blemishes, and whitening
22 teeth. These tools create and exacerbate body image problems among teens and pre-
23 teens, who are not always able to tell when such filters have been applied, and who
24 find themselves judging their own bodies against others’ unrealistic and enhanced
25 images.
26

27 b. Instagram’s algorithms prioritize not only photos and videos that may appeal to the
28 user based on her data, but also photos and videos that have prompted high levels of

1 engagement by other users because they are provocative or stimulative. The intent
2 of engagement-based ranking is not to entertain or inform, but once again to drive
3 further use of the product. This is accomplished by taking advantage of two distinct
4 features of brain chemistry. First, stimulative content drives users to comment, then
5 remain in a heightened state of anticipation for a potential dopamine pay-off—
6 comments to their comment, which are inherently unpredictable in content and
7 timing. Second, engagement-based ranking takes advantage of the fact that there are
8 multiple types of dopamine neurons that are connected with distinct brain networks
9 and have distinct roles in motivational control. In addition to the dopamine reward
10 loop triggered by positive feedback, other dopamine neurons are impacted by salient
11 but *non*-rewarding experiences that are aversive and alarming. By preying on the
12 user’s dopamine cycle in these two distinct ways, Instagram’s algorithm keeps users
13 “engaged” on the product as long as possible.
14

15
16 c. Instagram uses expiring posts to promote compulsive use. For example, the “Home”
17 interface of the app displays a scrollable list of “Stories” from followed Instagram
18 users. Stories are photos and videos that automatically disappear after 24 hours and
19 do not otherwise appear in a user’s feed. Teen users must access Instagram daily or
20 risk missing out on these temporary posts. Similarly, if the user leaves the
21 application for more than a few minutes, the photos and videos the user viewed
22 recently in Feed, Reels, and Explore disappear and the stream resets at the top of the
23 screen. This design choice can make users reluctant to exit or stop using the app
24 even briefly. For impressionable teens, Instagram isn’t something you can just put
25 down and pick up again later without missing out.
26

27 d. Instagram thwarts efforts by teens to moderate their compulsive usage by
28 affirmatively contacting them outside of the app, by text and email, to notify them of

1 posts and other activity in the application that they may have missed. This includes
2 posts by followed users, other posts Instagram’s algorithms have selected for the
3 teens, and alerts that another user has liked or commented on a post made by the
4 user. These strategically timed notifications are intended to lure users back on to
5 Instagram. In addition, Instagram notifies the sender of a direct message when the
6 recipient of the message has read it, putting pressure on the recipient to respond right
7 away. Instagram is aware that one type of notification it commonly sends, “What
8 You Missed,” leads to feelings of isolation, exploits users’ fear of missing out, and
9 increases compulsive use in minors. These and other types of behavioral nudges are
10 engineered to recapture the attention of teens who manage to step away. In this way,
11 individualized notifications promote dependency on Instagram and push teens to
12 increase their usage.

- 13
14
15 e. Instagram presents photographs and video clips interspersed with ads to users in a
16 never-ending stream, known as the “scroll” or “infinite scroll.” Anytime a user
17 scrolls to the seeming end of a list, Instagram’s algorithms select and display
18 additional photos, videos, or ads they predict will hold the user’s attention. Infinite
19 scroll contributes to Instagram’s addictiveness by supplying users with an endless
20 stream of stimuli that may trigger a dopamine hit, keeping them using the product
21 and further strengthening their addiction.

22
23 53. Features like those described above are designed to exploit users’ natural tendency to
24 compulsively return to the source of pleasure in anticipation of receiving another hit of dopamine—
25 which Instagram’s algorithm strategically withholds and delivers to optimize engagement.
26 Teenagers who attempt to discontinue or taper Instagram use may experience symptoms of
27 withdrawal common to other addictions, such as cravings, anxiety, irritability, insomnia, depression,
28 anger, and emotional and behavioral instability. Over time, the threshold needed to trigger a

1 dopamine response increases, and teens may need to continue using Instagram excessively just to
2 feel normal. Some users describe mindlessly scrolling through their Feed for hours to satisfy their
3 craving for the intermittent pleasure of an occasional dopamine-inducing post or “like.”

4 54. Features like those described above also increase dependency on the product by
5 prompting heavy users to withdraw from the real world. Users’ inability to live up to the edited,
6 idealized images presented in others’ photos can prompt a sense of social isolation, and a
7 compulsive need to use Instagram as the only means to access the fake world constructed by its
8 algorithm.

9
10 55. Instagram’s inclusion of the features mentioned above is not happenstance. Their
11 effectiveness in keeping users “engaged” (addicted) rests on principles of behavioral psychology
12 that Defendants and their employees have actively studied. In the 2000s, key former and present
13 employees of Defendants—including both of Instagram’s co-founders—studied and mastered these
14 principles, and techniques used to exploit them, through a program at Stanford known as the
15 Persuasive Technology Lab.

16
17 56. Minors are particularly susceptible to the behavioral manipulation techniques taught
18 at the Persuasive Technology Lab and intentionally built into the code of Instagram. Minors’ frontal
19 lobes are not fully developed, resulting in diminished impulse control, emotional immaturity,
20 underdeveloped psychological resiliency, and inconsistent decision-making capacity. As such, they
21 are uniquely susceptible to feelings of withdrawal after a dopamine hit and uniquely susceptible to
22 “curing” that withdrawal through additional usage, which makes them easy targets for a reward-
23 based system like Instagram.

24
25 57. Instead of avoiding these vulnerable consumers, Defendants have pursued them
26 aggressively. Since its acquisition by Meta, Instagram has experimented with a host of additional
27 features to drive pre-teen and teenage engagement and, in doing so, increase advertising revenues.
28

1 58. In December 2013, Instagram added Direct, a feature that allows users to send
2 photos to specific people directly from the app. This function allowed Instagram to compete against
3 messaging services like Snapchat that were gaining popularity among teens and pre-teens.

4 59. In June 2015, Instagram opened the product to all advertisers, weaving
5 advertisements into users' Feeds.

6 60. In August 2016, Instagram introduced Stories, another feature intended to compete
7 against Snapchat. Systrom has admitted that the feature was copied from another Snapchat feature
8 popular with children called "Snapchat Stories."

9 61. In December 2016, Instagram added the ability to "like" comments to photographs
10 (symbolized by a heart emoji). The "Like" button intensified and multiplied the volume of
11 feedback that teen users received (or didn't receive) on their photographs, further exploiting their
12 desire to compare themselves to others. The number of "likes" became a source of additional
13 motivation by users to seek social acceptance and validation.

14 62. In April 2017, Instagram introduced another feature with obvious appeal to children,
15 an offline mode that allows users to view posts and interact with the application even when they do
16 not have access to an internet connection.

17 63. In 2018, Systrom and Instagram co-founder Mike Krieger resigned from Instagram,
18 and Facebook named Adam Mosseri, a 10-year veteran of Facebook, as Instagram's new head.

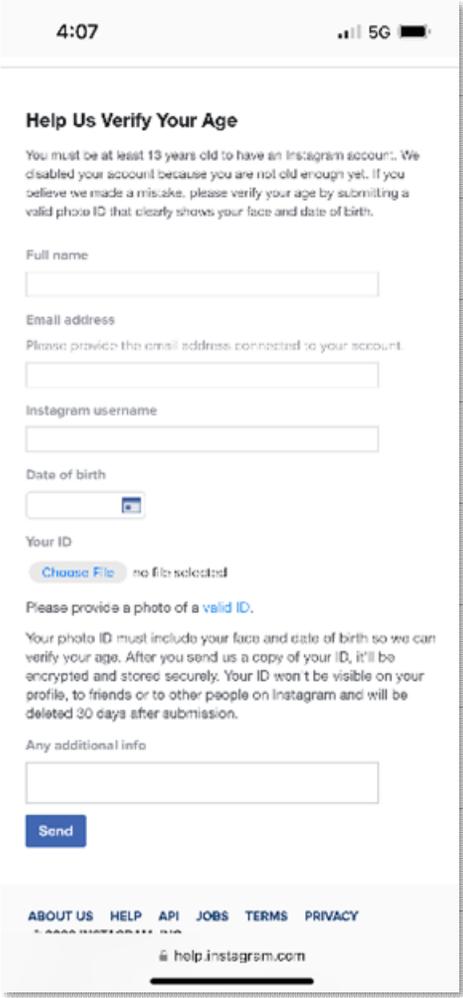
19 64. Under Mosseri's leadership, Instagram has continued to roll out new product features
20 focused on pre-teen and teenage engagement. In 2018, Facebook allotted most of its global annual
21 marketing budget to targeting 13- to 15-year old children, a marketing demographic it calls "early
22 high school." According to Defendants, these users represent the platform's "teen foothold" for its
23 "US pipeline." Defendants have expressly sought to maximize metrics like "teen time spent" on the
24 Instagram product.
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1 account creation. But even then, Defendants did not ask *existing* users to disclose their ages,
2 effectively grandfathering in underage users. Defendants did not attempt to correct *that* problem
3 until August 30, 2021. And Defendants did not attempt to begin actually verifying the ages of its
4 users until this year.

5 70. Even today, Defendants do not as a default matter require users to verify their ages
6 upon signing up to use the product. Defendants routinely allow pre-teens to misrepresent their ages
7 as 13 or 40 or any other age—without so much as asking for proof. This is analogous to letting a
8 teenager enter a nightclub and buy alcohol simply because he says he is over 21.

9 71. Notably, other online products and games employ a substantially more robust
10 verification scheme before granting children access. Defendants could employ such a system at
11 relatively low cost. Indeed, Defendants have such tools at their disposal. Perversely, they employ
12 age verification when a user self-reports they are *younger* than 13. In that case, Defendants provide
13 a user with what amounts to an appeal right: “if you believe we made a mistake, please verify your
14 age by submitting a valid photo ID that clearly shows your face and date of birth”:
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72. That is, instead of asking users to prove they are really *over* 13, Defendants ask them if they are really sure they are *under* 13. At best, this reflects a completely upside-down view of Defendants’ duty of care, using age verification to screen *in* minor users but not to screen them *out*. At worst, Defendants’ “are you sure you’re really under 13” question invites pre-teens to falsify their identification to gain access to Instagram.

Instagram’s Role in Creating a Public Health Crisis

73. Given Instagram’s intentionally addictive features, Defendants’ aggressive efforts to market Instagram to children, Defendants’ knowledge of behavioral engineering principles, and scientific research published as early as 2016 (*see infra*), Defendants should have known its product presented safety risks to kids. But even holding that aside, Defendants have *actually* known since at

1 least 2019 that Instagram is addictive and has a corrosive effect on the well-being of pre-teen and
2 teenage users.

3 74. Meta has an internal research team comprised of employees with expertise in
4 computer science, psychology, and quantitative and qualitative analysis. From 2019 to 2021, this
5 team conducted a “teen mental health deep dive” which included focus groups, diary studies, and
6 online surveys.

7
8 75. One large-scale study conducted by Defendants’ researchers surveyed tens of
9 thousands of Instagram users and paired the results with data that Defendants harvested about the
10 time each respondent spent on Instagram and the type of content they viewed.

11 76. The evidence collected by Meta’s own research team is damning. Among other
12 findings, Defendants’ researchers learned that:

- 13 • 32% of teenage girls said that when they felt bad about their bodies, Instagram made
14 them feel worse;
- 15 • One in five teens say that Instagram makes them feel worse about themselves;
- 16 • Teenagers who struggle with mental health say that Instagram worsens those
17 problems;
- 18 • Teenagers blame Instagram for the increase in anxiety and depression among teens
19 in recent years—a response that was unprompted and consistent across all groups;
- 20 • Among teens who reported suicidal thoughts, 13% of British users and 6% of
21 American users traced the desire to kill themselves to Instagram;
- 22 • 40% of teen users of Instagram in the U.S. and U.K. who reported feeling
23 “unattractive” said the feeling began while using the product;
- 24 • About a quarter of teens who reported feeling “not good enough” said the feeling
25 started on Instagram; and
- 26 • Many teens said Instagram undermined their confidence in the strength of their
27 friendships.
- 28

1 77. Importantly, Defendants’ researchers concluded that Instagram—not social media
2 more broadly—was principally to blame. In March 2020, Defendants’ researchers noted that, as
3 compared to competitors like Snapchat, VSCO, and YouTube, Instagram combines a high degree of
4 realism and a high degree of formality. As a result, “[s]ocial comparison is worse on Instagram.”
5 Moreover, the researchers were clear in explaining that Instagram itself—not the photographs,
6 captions, or hashtags shared on it—was responsible for this problem. In one chart illustrating the
7 “High” amount of “Body, Appearance Comparison” on Instagram, researchers cited as contributing
8 factors “Product mechanics (addicting)” and “Explore, discover, stalk (down the rabbit hole).” In
9 another slide, researchers noted the particular problems with Instagram’s Explore feature, as it
10 contains “Tons of body image triggers” that are “Intimidating” to users.

11 78. Children are developmentally unprepared for the psychological ramifications of peer
12 judgment and online comparisons. When directed at this population, the Instagram algorithm is a
13 more dangerous, advanced, and self-reinforcing version of the “hotness” ranking system that
14 powered Zuckerberg’s Facemash website.

15 79. Defendants’ internal researchers were not only clear about the fact that Instagram
16 causes a high level of social comparison for teenagers; they were clear-eyed that the consequences
17 were dire. They observed that the addictive nature of the Instagram product, combined with a
18 tendency for users to share only the best moments and a “pressure to look perfect,” can send teens
19 on a spiral that includes anger, withdrawal, insecurity, and body dysmorphia—“a series of emotions
20 that in many ways mimic[s] stages of grief.” They further warned that “[u]sers experience of [this]
21 downward spiral is exacerbated by our platform.” “Comparisons on Instagram can change how
22 young women view and describe themselves,” they noted, changing a girl’s self-perception from
23 “multi-dimensional” and “centered” to “not in control,” “dark,” boxed in,” “low esteem,” and
24 “anxious.” The researchers’ conclusions were stark: “Mental health outcomes related to this can be
25 severe,” and can include “eating disorders,” “body dysmorphia,” “body dissatisfaction,”
26 “depression,” and “loneliness.”

27 80. Frances Haugen explained all this succinctly to Congress: “Facebook’s own research
28 says Instagram is actually distinctly worse than, say, TikTok or Snapchat or Reddit, because TikTok

1 is about doing fun things with your friends. Snapchat is about faces and augmented reality. Reddit
2 is vaguely about ideas. But Instagram is about bodies and about comparing lifestyles.”

3 81. Defendants’ internal research is consistent with several scientific and medical studies
4 finding that social media use—particularly multiple hours of social media use a day—correlates
5 with and in fact causes negative body image and mental, physical, and developmental health issues
6 among teens. Collectively, these studies show that 1) increased social media use can lead to body
7 dissatisfaction, anxiety, depression, and self-harming behaviors such as eating disorders; and 2)
8 Instagram exacerbates this dissatisfaction, particularly among adolescent girls, due to its focus on
9 edited, “idealized” body images.

10 82. In 2016, a study of more than 450 teens found that greater social media use,
11 nighttime social media use, and emotional investment in social media—such as feeling upset when
12 prevented from logging on to social media—were each linked with worse sleep quality and higher
13 levels of anxiety and depression.

14 83. In 2017, British researchers asked 1,500 teens to rate how each of the major social-
15 media platforms affected them on certain well-being measures, including anxiety, loneliness, body
16 image, and sleep. Instagram scored as the most harmful.

17 84. In 2018, the Campaign for Commercial-Free Childhood sent Zuckerberg a letter
18 signed by 118 public health advocates explaining that a growing body of research demonstrates that
19 excessive use of digital devices and social media is harmful to children and teens. The letter noted
20 the results of a 2014 study of girls between the ages of 10 and 12, which found that the more they
21 used social networking sites, the more likely they were to idealize thinness, to have concerns about
22 their bodies, and to have dieted.

23 85. In 2018, a randomized control study exposed 220 female undergraduate students to a
24 set of thin-ideal or average images paired with a low or high number of likes presented in an
25 Instagram frame. Results showed that exposure to thin-ideal images led to greater body and facial
26 dissatisfaction than average images. Moreover, greater investment in Instagram likes was
27 associated with more appearance comparison and facial dissatisfaction.
28

1 86. In 2018, a *Journal of Social and Clinical Psychology* study examined a group of
2 college students whose use of Instagram, Facebook, and Snapchat was limited to 10 minutes per day
3 per platform. The study found that this limited-use group showed “significant reductions in
4 loneliness and depression over three weeks” compared to a control group that used social media as
5 usual.

6 87. In 2018, a systematic literature review of nine studies published in the *Indian*
7 *Journal of Psychiatry* concluded that social networking platforms “contribute to increased exposure
8 to and engagement in self-harm behavior, as users tend to emulate self-injurious behavior of others
9 online, adopt self-injurious practices from self-harm videos, or are encouraged and acclaimed by
10 others, thus normalizing self-injurious thoughts and behavior.”

11 88. A 2019 study of more than 6,500 adolescents in the United States ranging in age
12 from 12 to 15 years old found that adolescent social media use of 30 minutes or more a day was
13 associated with an increased risk of depression and anxiety. Notably, this association remained
14 significant even *after* adjusting for demographics, past alcohol and marijuana use, and history of
15 mental health problems.

16 89. Another 2019 study of more than 10,000 teens from 13 to 16 years old in England
17 found that girls who used social media more than 5 hours a day were three times more likely than
18 nonusers to experience clinically significant symptoms of depression, even after adjusting for past
19 mental health struggles. A 2020 analysis of the same teens found that heavy social media users
20 were twice as likely to engage in self-harming behaviors such as cutting.

21 90. A 2019 survey of American adolescents ages 12-14 found that a user’s displeasure
22 with their body could be predicted based on their frequency of social media use and based on the
23 extent to which they engaged in behaviors that adopt an observer’s point-of-view (such as taking
24 selfies or asking others to “rate one’s looks”). This effect was more pronounced among girls than
25 boys.

26 91. In 2020, a study of Australian adolescents found that investment in others’ selfies
27 (through likes and comments) was associated with greater odds of meeting criteria for
28

1 clinical/subclinical bulimia nervosa, clinical/subclinical binge-eating disorder, night eating
2 syndrome, and unspecified feeding and eating disorders.

3 92. A 2022 study of Italian adolescent girls (12-17) and young women (18-28) found
4 that Instagram’s image editing and browsing features combined with an emphasis on influencer
5 interactions promulgated unattainable body ideals that caused users to compare their bodies to those
6 ideals. These trends were more prominent among adolescent girls, given their higher susceptibility
7 to social pressures related to their bodies and given the physical changes associated with puberty.

8 93. Eating disorders expert Bryn Austin, a professor in Harvard University’s Department
9 of Social and Behavioral Sciences, has explained why Instagram is particularly and uniquely
10 harmful to teens: “From experimental research, we know that Instagram, with its algorithmically-
11 driven feeds of content tailored to each user’s engagement patterns, can draw vulnerable teens into a
12 dangerous spiral of negative social comparison and hook them onto unrealistic ideals of appearance
13 and body size and shape.”

14 94. Dr. Jean Twenge, a professor of psychology at San Diego State University,
15 underscored the significance of the risks Instagram poses to teen girls, saying: “For some people it
16 might be tempting to dismiss this as teen girls being sad, [but] we’re looking at clinical-level
17 depression that requires treatment. We’re talking about self-harm that lands people in the ER.”

18 95. Dr. Angela Guarda, the director of the eating-disorders program at Johns Hopkins
19 Hospital and an associate professor of psychiatry in the Johns Hopkins School of Medicine, said it
20 is common for her patients to say they learned from social media tips on how to restrict food intake
21 or purge. She estimates that Instagram and other social-media apps play a role in the disorders of
22 about half her patients.

23 96. Even the United States Surgeon General has identified social media as a contributing
24 cause of America’s “youth mental health crisis.”

25 97. With respect to the crisis, the Surgeon General’s recent findings are bleak. In a
26 December 2021 report, the Surgeon General stated that, from 2009 to 2019, the share of high school
27 students who reported persistent feelings of sadness or hopelessness increased by 40%, to more than
28

1 1 in 3 students. Suicidal behaviors among high school students also increased by 36% during that
2 same time period, with 19% seriously considering attempting suicide. Between 2007 and 2018,
3 suicide rates among youth ages 10-24 in the U.S. increased by a staggering 57%.

4 98. The situation is particularly dire for young girls. According to federal data, more
5 than one in four adolescent girls experienced a major depressive episode at some point during 2020
6 —representing a twofold increase since 2010. Rates of depression among young women have risen
7 steadily since 2012, suggesting the cause or causes of their struggles are the result of persistent
8 phenomena.

9
10 99. With respect to social media’s role in this crisis, the Surgeon General was direct: “In
11 these digital public spaces, which [are] privately owned and tend to be run for profit, there can be
12 tension between what’s best for the technology company and what’s best for the individual user or
13 for society. Business models are often built around maximizing user engagement as opposed to
14 safeguarding users’ health and ensuring that users engage with one another in safe and healthy
15 ways.”

17 **Defendants’ Attempted Cover-Up**

18 100. Defendants should have known and have actually known for years that the Instagram
19 product has a toxic effect on teens, and in particular teen girls. Defendants have also known for
20 years that they have an opportunity—and a responsibility—to do something about that problem, as
21 an internal Meta presentation from November 2019 made clear: “Negative social comparison and
22 related issues with body image are especially crucial to tackle given the high ranking among teens.”
23 “Negative social comparison is a unique opportunity area for Instagram to tackle given its relatively
24 higher reach, intensity *and our assumed responsibility.*”

25
26 101. Unfortunately, Defendants did not live up to their assumed responsibility. They did
27 not warn consumers about these risks and potential harms. Nor did they take affirmative measures
28 to respond to their researchers’ findings by substantially and timely altering their product, adjusting

1 the product algorithms, warning parents, or establishing safeguards to limit or eliminate its usage by
2 children.

3 102. Instead, Defendants downplayed or outright ignored warnings from internal and
4 external research highlighting Instagram’s myriad safety risks while emphasizing its perceived
5 positive attributes—not just through marketing materials, but through statements made to Congress
6 by Defendants’ highest-ranking executive.

7
8 103. On April 10, 2018, Mark Zuckerberg testified before the U.S. Senate Committee on
9 Commerce, Science, and Transportation. When asked whether his companies “[h]ire consulting
10 firms to help them figure out how to get more dopamine feedback loops so that people don’t want to
11 leave the platform,” he replied, “No . . . that’s not how we talk about this or how we set up our
12 product teams. We want our products to be valuable to people, and if they’re valuable, then people
13 choose to use them.”

14
15 104. Zuckerberg’s statement to Congress was deceptive at best. Several months earlier,
16 Facebook’s founding president Sean Parker explained that Zuckerberg and other Facebook founders
17 understood they were “exploiting a vulnerability in human psychology” through their products:
18 “The thought process that went into building these applications, Facebook being the first of them . . .
19 was all about: ‘How do we consume as much of your time and conscious attention as possible?’
20 And that means that we sort of give you a little dopamine hit every once in a while, because
21 someone liked or commented on a photo or post or whatever. And that’s going to get you to
22 contribute more content, and that’s going to get you . . . more likes and comments.” “The inventors,
23 creators – it’s me, it’s Mark, it’s Kevin Systrom on Instagram, it’s all of these people – understood
24 this consciously.”

25
26 105. On December 23, 2020, Defendants were asked by the Senate Committee on the
27 Judiciary whether they could “determine whether increased use of its platform among teenage girls
28 has any correlation with increased signs of depression [or anxiety].” Defendants answered “No.”

1 Defendants were also asked what research they had conducted internally on the mental health
2 impacts of social media use. Defendants responded that “[t]he effects of social media are still being
3 studied.”

4 106. Both of these responses were misleading. Defendants concealed the fact that,
5 according to their internal studies, Instagram “make[s] body image issues worse for one in three
6 teen girls” and that “[m]ental health outcomes related to this can be severe.” Furthermore,
7 Defendants have long understood the power of their products to manipulate the mental health of
8 their users. For example, through an experiment conducted on over 600,000 Facebook users in
9 January 2012, Facebook, Inc. determined it could influence the mood and emotions of its users by
10 only showing them positive or negative posts. The head data scientist leading that research effort
11 for Facebook concluded: “These results indicate that emotions expressed by others on Facebook
12 influence our own emotions, constituting experimental evidence for massive-scale contagion via
13 social networks.”
14

15
16 107. On March 25, 2021, Mark Zuckerberg testified before the U.S. House of
17 Representatives Committee on Energy and Commerce. Zuckerberg was asked point blank, “Do you
18 believe that your platform harms children?” In response, he testified, “I don’t believe so. This is
19 something that we study and we care a lot about; designing products that improve peoples’ well-
20 being is very important to us. And what our products do is help people stay connected to people
21 they care about, which I think is one of the most fundamental and important human things that we
22 do, whether that’s for teens or for people who are older than that.”
23

24 108. Zuckerberg’s statement to Congress was misleading. He failed to mention that,
25 according to Meta’s internal studies, one in five teens say that Instagram makes them feel worse
26 about themselves, and about a quarter of teens who reported feeling “not good enough” said the
27 feeling started on Instagram.
28

1 109. During the same hearing, Zuckerberg misled the public by claiming that users spend
2 more time on Instagram not because it is engineered to be addictive, but simply because it is an
3 excellent product. He testified: “I have heard a lot of people say that we are optimizing for keeping
4 people on the service. The way we view this is that we are trying to help people have meaningful
5 social interactions. People come to social networks to be able to connect with people. If we deliver
6 that value, then it will be natural that people will use our services more.”
7

8 110. Zuckerberg’s statement to Congress was misleading given Defendants’ internal
9 research reporting that young Instagram users feel addicted to the app and lack the wherewithal to
10 limit their use of it.

11 111. Zuckerberg’s litany of misrepresentations did not stop there. During the same
12 hearing, Zuckerberg claimed, “I don’t give our News Feed team or our Instagram team goals around
13 increasing the amount of time people spend [on the products].”
14

15 112. This testimony—which echoed similar refrains from Zuckerberg during a November
16 2020 Senate hearing—was misleading if not an outright lie. Internal documents leaked by Haugen
17 show that Defendants have actively monitored and focused on the metric “teen time spent” and
18 designed new Instagram features to boost that metric.

19 113. Finally, Zuckerberg misled the public regarding the ability of pre-teens to access
20 Instagram. Zuckerberg told Congress: “There is clearly a large number of people under the age of
21 13 who would want to use a service like Instagram. We currently do not allow them to do that.”
22 Zuckerberg also stated: “We don’t allow children under the age of 13 on the services that run
23 advertising.”
24

25 114. These statements were misleading, given Defendants’ failure to implement age
26 verification mechanisms despite its ability to do so, given its knowledge that pre-teens use
27 Instagram, and given Defendants’ “ultimate goal [of] messaging primacy with U.S. tweens.”
28

1 115. In advance of his March 25, 2021 testimony, Zuckerberg signed a False Statements
2 Certification indicating his understanding that “knowingly concealing material information from
3 this committee/subcommittee, is a crime (18 U.S.C. § 1001).”

4 116. In addition to Zuckerberg’s misleading statements to Congress, Defendants have
5 made statements to the press, and put forward marketing materials directed at parents and kids,
6 which have downplayed scientific and medical research concerning the safety risks of Instagram.
7 For example, a “Parent’s Guide” published by Defendants in or around February 2021 misleadingly
8 stated, “When it comes to spending time on Instagram, there’s no right or wrong answer when it
9 comes to how much is too much or just right.” Similarly, a March 17, 2021 blog post by
10 Defendants stated, “Protecting young people on Instagram is important to us. . . . We have dedicated
11 teams focused on youth safety, and we work closely with experts to inform the features we
12 develop.” And in May 2021, Mosseri told reporters that the research he had seen suggested
13 Instagram’s effects on teen well-being are likely “quite small.”
14
15

16 117. Statements like these convey the impression that there is no need to limit children’s
17 exposure to Instagram and that, in any event, Defendants have made Instagram a sufficiently safe
18 environment for youth. Defendants knew this to be false based on their own research.

19 118. Following Frances Haugen’s revelations in the fall of 2021, Defendants faced
20 increasing scrutiny from regulators and the public. Defendants’ efforts to defend their actions did
21 little more than highlight their willingness to prioritize profit over the safety of children. During a
22 podcast interview in September 2021, for instance, Instagram CEO Adam Mosseri stated: “We
23 know that more people die than would otherwise because of car accidents, but by and large, cars
24 create way more value in the world than they destroy . . . And I think social media is similar.”
25

26 119. On December 7, 2021—the day before Mosseri was scheduled to testify before
27 Congress—Defendants rolled out new safety tools and features on Instagram, purportedly “to keep
28 young people even safer on Instagram” and to “rais[e] the standard for protecting teens and

1 supporting parents online.” For example, Defendants introduced a “Take A Break” feature (which
2 users need to enable affirmatively) through which Instagram prompts users to take a break from
3 Instagram if they have been scrolling on the product for a certain amount of time—like a snooze
4 button on an alarm. The other features Instagram introduced included unspecified restrictions on
5 what content is algorithmically force-fed to teens and tools for parents to view and manage the time
6 their teens spend on the app.
7

8 120. Upon information and belief, Defendants could have implemented more effective
9 safety features and could have done so months if not years earlier. They did so on December 7, 2021
10 only because they felt pressured by Haugen’s revelations and Mosseri’s upcoming testimony.
11

12 121. In any event, Defendants’ new measures were criticized by many as insufficient and
13 belated.
14

15 122. Senator Richard Blumenthal criticized Instagram’s rollout of its new safety features,
16 saying, “Instagram’s baby steps fall short of protecting kids. A PR gambit within hours of its CEO
17 testimony is no substitute for real action.” Senator Blumenthal also noted that, just weeks earlier,
18 his staff had registered an account for a 13-year-old girl and proceeded to follow some dieting and
19 pro-eating disorder accounts. Very soon thereafter, Instagram’s algorithm began almost exclusively
20 recommending that the young teenager follow more and more extreme dieting accounts—with
21 names like “I have to be thin,” “Eternally starved,” and “I want to be perfect.”
22

23 123. Jeff Chester, the executive director of the Center for Digital Democracy, which
24 advocates for privacy, civil, and human rights, called for Instagram to release its research and
25 algorithms for an independent audit, saying: “Facebook is not getting the message. It can’t engage
26 in piecemeal efforts. It can’t promise to do better. It needs to publicly say what changes it’s going
27 to make and turn those changes over to policymakers and independent experts around the world.”
28

124. Instagram knows safety measures that rely on teens’ self-control are particularly
likely to fail. One Meta researcher admitted: “Teens told us that they don’t like the amount of time

1 they spend on the app but feel like they have to be present. They often feel ‘addicted’ and know
2 that what they’re seeing is bad for their mental health but feel unable to stop themselves.”

3 **Plaintiff’s Experience with Instagram**

4 125. Laura Ashman is a 21-year-old resident of Fredericksburg, Virginia. She first began
5 using Instagram in 2013, when she was 12 or 13 years old. In keeping with Instagram’s goal and
6 design, the frequency and intensity of Laura’s usage increased as she started high school, until she
7 was using the product up to 10 hours a day. Laura’s use was so extensive that that she would stay
8 awake into the early morning to continue scrolling. As a result of her addiction to Instagram, Laura
9 started skipping school and avoiding her schoolwork. When her parents attempted to take her
10 smartphone away from her, Laura would become distraught, leading to fights with her family. Over
11 time, Laura went from earning straight A’s to failing most of her classes, barely earning grades
12 sufficient to graduate from high school.
13
14

15 126. It was during this period of addiction that Laura started to harm herself. When she
16 was in the eighth grade, Laura used the razorblade from a pencil sharpener to cut herself. This self-
17 harming behavior rapidly increased in frequency and severity—and to this day, Laura wears the
18 scars of her self-harm, up and down her arms and legs. During her freshman year, Laura attempted
19 to take her own life, the first of three such attempts.
20

21 127. Laura’s use of Instagram led her to develop a serious eating disorder and depression,
22 in addition to her cutting and suicide attempts. As a result, Laura has been hospitalized at multiple
23 facilities for emergency mental health interventions, spent three months in residential treatment,
24 participated in three partial-hospitalization treatment programs, and received care from intensive
25 outpatient treatment programs—all in addition to continuous outpatient psychiatric and
26 psychological treatment, which has included a wide range of medications to manage her symptoms.
27
28

1 128. Plaintiff did not and could not have known about Defendants’ misconduct until
2 September 2021, when major media outlets like the Wall Street Journal began publishing internal
3 company documents leaked by Haugen. Furthermore, Defendants’ concealment of its internal
4 findings prevented Plaintiff from learning about Defendants’ misconduct earlier. As such,
5 Plaintiff’s complaint is timely.

6 129. Pursuant to California Family Code § 6710, Plaintiff hereby expressly disaffirms any
7 contract she may have made with any of the Defendants, or that Defendants may claim she made
8 with them, prior to reaching the age of 18.

9 **PLAINTIFF’S CLAIMS**

10 **COUNT I: Strict Product Liability (Design Defect)**

11 **(Against All Defendants)**

12 130. Plaintiff restates each of the allegations in the preceding paragraphs as if fully set
13 forth herein.

14 131. Instagram is a product. Defendants have admitted as much to the Securities and
15 Exchange Commission. *See, e.g.*, Meta, Form 10-K (Feb. 3, 2022) at 3 (“The term ‘Family’ refers
16 to our Facebook, Instagram, Messenger, and WhatsApp products.”), 15 (referring to “significant
17 revenue-generating products like Facebook and Instagram”). Meta’s website makes this clear. *See*
18 Facebook, *What are the Meta Products?*, available at
19 https://www.facebook.com/help/1561485474074139/?helpref=uf_share (last accessed July 7, 2022)
20 (“The Meta Products include ... Instagram”). Defendants’ Data Policy refers to Instagram as a
21 “product” over 70 times. *See, e.g.*, Instagram Help Center, *Data Policy*, available at
22 <https://help.instagram.com/155833707900388> (last accessed July 19, 2022) (“People in your
23 networks can see signals telling them whether you are active on our Products, including whether
24 you are currently active on Instagram, Messenger or Facebook, or when you last used our
25 Products.”).
26
27
28

1 132. Defendants are responsible for the design and manufacture of the Instagram product.
2 Defendants employ dozens of individuals for this purpose, who they call “Product Managers.”

3 133. Defendants are responsible for distributing the Instagram product to end-users.
4 Among other affirmative steps, they have made the product available for download via online
5 marketplaces referred to as “stores,” like the Apple App Store and Google Play Store.
6

7 134. Defendants are responsible for marketing the Instagram product to end-users, and its
8 marketing efforts have intensified. In 2021, Defendants spent approximately \$390 million
9 marketing Instagram—over five times what it spent in 2018.

10 135. The context of Instagram’s distribution and use is “analogous to the distribution and
11 use of tangible personal property.” Restatement (Third) of Torts: Prod. Liab. § 19(a). Like tangible
12 personal property, Instagram is manufactured by a team of product designers (who Defendants call
13 “Product Managers”), distributed to the public through retail channels (the Apple App “Store” and
14 the Google Play “Store”), marketed to the public for their personal use, and obtained by consumers
15 from stores for their personal use.
16

17 136. The Instagram product is defective in design because it fails to meet the safety
18 expectations of its ordinary consumers when used in its intended or reasonably foreseeable manner.
19 Children and teenagers are among the ordinary consumers of Instagram. Indeed, Defendants
20 aggressively market Instagram to pre-teen and teenage consumers. Pre-teen and teenage
21 consumers, and their parents and guardians, do not expect Instagram to be psychologically and
22 neurologically addictive when it is used in its intended manner by its intended audience. They do
23 not expect Instagram’s algorithms to make the product progressively more stimulative, in order to
24 maximize young consumers’ usage time. They do not expect Defendants’ profits to be directly tied
25 to the strength of this addictive mechanism and dependent on teen consumers spending several
26 hours a day using the product.
27
28

1 137. The Instagram product is also defective in design because, on balance, the benefits of
2 its design to young consumers do not outweigh its inherent risk of danger to those consumers. The
3 benefit of Instagram’s design, at least according to Defendants, is that its algorithms prioritize
4 photos and videos that young users are likely to want to see. The inherent risks of danger of
5 Instagram’s design are that it is psychologically and neurologically addictive to young consumers,
6 gradually amplifies the intensity of material it displays to promote the product’s additional usage,
7 and requires consumers to spend more and more time with the product to satisfy their cravings.
8 These risks can lead to a cascade of negative effects including but not limited to dissociative
9 behavior, withdrawal symptoms, social isolation, damage to body image and self-worth, and
10 profound mental health issues for teenage consumers. The dangers outpace the benefits by a mile.

11
12 138. Defendants know and have known about feasible and relatively inexpensive changes
13 to Instagram that will make it safer, such as robust age verification, strict time limits that lock out
14 young users to prevent binge usage, creating a beginning and end to a user’s “Feed,” and blocking
15 usage for minors during school hours or late at night. Instead of implementing such features,
16 Defendants chose to profit off Instagram’s intentionally addictive features, without regard to their
17 adverse consequences for the product’s pre-teen and teen users. Instead of prioritizing children’s
18 safety, Defendants prioritized higher revenue through a pipeline of young users.

19
20 139. Even though Defendants should have known and likely did know about the safety
21 risks of Instagram for years—and actually, demonstrably knew about those risks beginning at least
22 in 2019—they did not begin to deploy even voluntary safety features for children until their
23 wrongdoing was exposed by Frances Haugen in the fall of 2021. Even today, Instagram’s safety
24 features are insufficient to prevent widespread harm to pre-teen and teenage users.

25
26 140. The defective design of the Instagram product was the proximate cause of injuries to
27 Plaintiff. Due to Instagram’s intentionally addictive design, Plaintiff developed and continues to
28 suffer from suicidal ideation, generalized anxiety disorder, major depressive disorder, anorexia, and

1 insecurities and desire for validation. These features can lead to a cavalcade of negative mental,
2 social, behavioral, and even physical outcomes.

3 146. Even though Defendants knew about these potential risks, ordinary consumers of
4 Instagram, which again include children and teenagers, would not and could not have known.
5 Instagram's addictive mechanism is buried in complex and proprietary algorithms that are
6 undisclosed to the public. Defendants intentionally hid from users their research detailing
7 Instagram's negative effects on teen mental health.
8

9 147. Defendants have not posted, and to this day still do not post, any warnings that
10 minors' use of Instagram can lead to serious harms. They do not post or display any warnings that
11 the Instagram product ingests and analyzes user data with the goal of making itself progressively
12 more addictive to the user. And they fail to provide any such warnings to parents or guardians
13 when their children become users of Instagram.
14

15 148. New users of Instagram can identify themselves as teenagers, begin to use Instagram,
16 and use the service indefinitely, without any time or usage limitations—without ever receiving a
17 safety warning, and without ever having to provide information so that Defendants can warn their
18 parents or guardians.

19 149. Defendants' failure to warn Plaintiff or her guardians about the risks presented by
20 Instagram was a substantial factor in the injury that Plaintiff suffered. Plaintiff developed and
21 continues to suffer from suicidal ideation, generalized anxiety disorder, major depressive disorder,
22 anorexia, and related mental health problems. This has resulted in years of in-patient and residential
23 treatment, medication, ongoing therapy and counseling, and permanent disfiguring physical scars.
24

25 150. Defendants' conduct was carried on with a willful and conscious disregard of the
26 safety of Plaintiff and other minor users of Instagram. Defendants knew and, based on the existing
27 scientific and medical literature, should have known about the risks to minors associated with
28 Instagram. Yet they chose to ignore those risks, downplay any safety issues in public statements,

1 conceal their internal findings, fail to warn minors and their parents, and delay implementation of
2 feasible product safety features. Defendants' decision to prioritize profits over children's safety and
3 health is outrageous and justifies an award of exemplary damages pursuant to California Code
4 § 3294, in such a sum that will serve to deter Defendants and other social media companies from
5 similar conduct in the future.

6
7 **COUNT III: Negligence (Design Defect)**

8 **(Against All Defendants)**

9 151. Plaintiff restates each of the allegations in the preceding paragraphs as if fully set
10 forth herein.

11 152. Defendants are responsible for the design, manufacture, and marketing of Instagram.
12 Instagram is a product.

13 153. At all relevant times, Defendants have owed a duty to exercise reasonable care and
14 caution for the safety of children using the Instagram product, including Plaintiff.

15 154. Defendants owe a heightened duty of care to minor users of Instagram because
16 children's brains are not fully developed, resulting in a diminished capacity to make responsible
17 decisions regarding their frequency and intensity of social media usage. Children are also more
18 neurologically vulnerable than adults to the addictive aspects of Instagram, such as the peer
19 approval that comes from amassing follows and likes. That is so because, during adolescence,
20 dopamine levels are at a functional high, leading to elevated patterns of exploration and novelty-
21 seeking, which serve to increase usage on Instagram.

22 155. Defendants owe a particularly heightened duty of care to pre-teen users (those under
23 the age of 13), whose personal information is accorded special protection under federal law. *See* 15
24 U.S.C. § 6501 *et seq.*

25 156. Defendants failed to use reasonable care in designing Instagram. At all times
26 relevant to the matters at issue in this Complaint, they knew or should have known that usage of
27
28

1 Instagram by minors could lead to addiction and, in turn, serious health consequences like
2 depressive symptoms, social anxiety and isolation, body image concerns, self-harm, decreased self-
3 esteem, developmental and educational deficits, and suicidality. They also knew or should have
4 known that these harms are even more severe for pre-teen users (those under the age of 13), whose
5 brains are even less fully developed.
6

7 157. Defendants easily could have, but to this day have failed to, implement safety
8 measures to mitigate the addictive attributes and resulting harm that their product causes minors. In
9 addition, Defendants easily could have, but to this day have failed to, implement safety measures to
10 prevent pre-teens from accessing their product.

11 158. As a direct and proximate result of Defendants' breached duties, Plaintiff developed
12 and continues to suffer from suicidal ideation, generalized anxiety disorder, major depressive
13 disorder, anorexia, and related mental health problems. This has resulted in years of in-patient and
14 residential treatment, medication, ongoing therapy and counseling, and permanent disfiguring
15 physical scars.
16

17 159. Defendants' conduct was carried on with a willful and conscious disregard of the
18 safety of Plaintiff and other minor users of Instagram. Defendants knew and, based on the existing
19 scientific and medical literature, should have known about the risks to minors associated with
20 Instagram. Yet they chose to ignore those risks, downplay any safety issues in public statements,
21 conceal their internal findings, fail to warn minors and their parents, and delay implementation of
22 feasible product safety features. Defendants' decision to prioritize profits over children's safety and
23 health is outrageous and justifies an award of exemplary damages pursuant to California Code
24 § 3294, in such a sum that will serve to deter Defendants and other social media companies from
25 similar conduct in the future.
26
27
28

1 scientific and medical literature, should have known about the risks to minors associated with
2 Instagram. Yet they chose to ignore those risks, downplay any safety issues in public statements,
3 conceal their internal findings, fail to warn minors and their parents, and delay implementation of
4 feasible product safety features. Defendants' decision to prioritize profits over children's safety and
5 health is outrageous and justifies an award of exemplary damages pursuant to California Code
6 § 3294, in such a sum that will serve to deter Defendants and other social media companies from
7 similar conduct in the future.
8

9 **COUNT V: Negligence (Infliction of Emotional Distress)**

10 **(Against All Defendants)**

11 167. Plaintiff restates each of the allegations in the preceding paragraphs as if fully set
12 forth herein.
13

14 168. Defendants have owed a duty to exercise reasonable care and caution for the safety
15 of children using the Instagram product, including Plaintiff. Defendants breached their duty to
16 exercise reasonable care through their negligent design of Instagram and their failure to warn
17 Plaintiff of any attendant safety risks from usage of Instagram.

18 169. As a direct and proximate result of Defendants' negligence, Plaintiff suffered serious
19 emotional distress. Specifically, Plaintiff developed and continues to suffer from suicidal ideation,
20 generalized anxiety disorder, major depressive disorder, anorexia, and related mental health
21 problems. This has resulted in years of in-patient and residential treatment, medication, ongoing
22 therapy and counseling, and permanent disfiguring physical scars.
23

24 170. Defendants are further liable to Plaintiff for punitive damages based upon their
25 extreme departure from the ordinary standard of conduct and their reckless disregard for the well-
26 being of minor users. Defendants' actions are morally blameworthy, given their failure to change
27 Instagram to avoid harm to Plaintiff despite their internal research demonstrating the harms
28

- 1 B. Enter an order that Defendants are jointly and severally liable;
- 2 C. Award Plaintiff actual and compensatory damages to compensate Plaintiff for injuries
- 3 sustained as a result of her use of the Instagram product, including, but not limited to,
- 4 physical pain and suffering, mental anguish, loss of enjoyment of life, emotional
- 5 distress, expenses for hospitalizations, medical treatment, therapy, and counseling, and
- 6 other economic harm that includes, but is not limited to, lost earnings and loss of earning
- 7 capacity;
- 8 D. Award exemplary and/or punitive damages;
- 9 E. Award reasonable attorneys' fees;
- 10 F. Award costs of litigation;
- 11 G. Award pre-judgment and post-judgment interest at the lawful rate;
- 12 H. Award any other relief as this court may deem equitable and just.

13 DATED: August 4, 2022

14
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BE FILED*