

No. 25-146

IN THE
United States Court of Appeals
FOR THE NINTH CIRCUIT

NETCHOICE, LLC,

Plaintiff-Appellant,

v.

ROB BONTA, in his Official Capacity as Attorney General of California,

Defendant-Appellee.

On Appeal from the United States District Court for the Northern
District of California

Civil Action No. 5:24-cv-07885-EJD (Hon. Edward J. Davila)

**BRIEF OF AMICI CURIAE THE AMERICAN FEDERATION OF
TEACHERS AND THE CALIFORNIA FEDERATION OF
TEACHERS IN SUPPORT OF DEFENDANT-APPELLEE**

Alison Gaffney

Counsel of Record

William Dreher

KELLER ROHRBACK L.L.P.

1201 Third Ave., Suite 3400

Seattle, WA 98101

206.623.1900

agaffney@kellerrohrback.com

wdreher@kellerrohrback.com

Additional counsel listed on signature page

Attorneys for Amici Curiae

TABLE OF CONTENTS

INTEREST OF AMICI CURIAE	1
INTRODUCTION	3
ARGUMENT	5
I. Online Businesses Have Intentionally Incorporated Addictive Design Features to Increase Time Spent Online.....	5
II. These Addictive Features Are Fueling a Nationwide Mental Health Crisis Among Children	13
CONCLUSION.....	25

TABLE OF AUTHORITIES

Cases	Page(s)
<i>Twitter, Inc. v. Taamneh</i> , 598 U.S. 471 (2023)	7
 Statutes	
Protecting Our Kids from Social Media Addiction Act	<i>passim</i>
 Other Authorities	
<i>AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health</i> , Am. Acad. of Pediatrics (Oct. 19, 2021), https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/	15
Beatrice Nolan, <i>Kids are waking up in the night to check their notifications and are losing about 1 night’s worth of sleep a week, study suggests</i> , Bus. Insider (Sept. 19, 2022, 5:19 AM), https://www.businessinsider.com/social-media-costing-children-one-night-sleep-study-2022-9	19
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Chaelin K. Ra <i>et al.</i> , <i>Association of Digital Media Use With Subsequent Symptoms of Attention-Deficit/Hyperactivity Disorder Among Adolescents</i> , JAMA 255–63 (2018)	21
Emily A. Vogels <i>et al.</i> , <i>Teens, Social Media and Technology 2022</i> , Pew Rsch. Ctr. (Aug. 10, 2022), https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/	18

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 No. 22-md-03047-YGR (N.D. Cal. Apr. 14, 2023), ECF No. 234-1 6, 10, 20

In re Soc. Media Adolescent Addiction/Personal Inj. Prods. Liab. Litig.,
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INTEREST OF AMICI CURIAE

This brief is submitted on behalf of Amici American Federation of Teachers (“AFT”) and California Federation of Teachers (“CFT”).

The AFT, an affiliate of the AFL-CIO, was founded in 1916 and today represents 1.8 million members in more than 3,000 local affiliates nationwide. AFT members include educators and educational assistants, higher education faculty and administrative staff, nurses and health care workers, and public employees. AFT’s K-12 members are committed to providing their students the highest quality public education consistent with the standards set by the local, state, and federal government.

The CFT is a union of educators and classified professionals affiliated with the AFT. Through its local unions, the CFT represents more than 120,000 educational employees working at every level of public and private education from Head Start to the University of California. In all segments of education, the CFT is committed to promoting high-quality education and to securing the conditions necessary to provide the best services to California’s students.

Amici AFT and CFT are on the front lines of the mental health crisis affecting students nationwide, which has been deeply exacerbated

by the use of psychologically manipulative design features intended to prolong time spent online—features to which children and teens are particularly vulnerable.

All parties have consented to the filing of this brief. No party's counsel authored this brief in whole or in part, and no party's counsel contributed money intended to fund preparing or submitting the brief.

INTRODUCTION

In California and across the country, students are experiencing an unprecedented decline in their mental health and wellbeing. Well before the COVID-19 pandemic, indicators of poor mental health among children and adolescents nationwide were on the rise: declining happiness, life satisfaction, and flourishing, and sharply increasing anxiety, loneliness, depressive symptoms, suicidal ideation, hospitalizations for self-harm and suicide attempts, and completed suicides. The youth mental health crisis plays out every day in our nation's schools, and AFT and CFT members witness the effects.

A significant and growing body of peer-reviewed, scientific evidence has made clear that that crisis is being fueled in large part by kids' addiction to social media platforms like TikTok, Instagram, and Snapchat. These platforms are owned by some of the largest and most profitable companies in the world. And some of the most compelling evidence linking their operations to kids' mental health harms has come from the companies themselves. As a result of federal and state investigations and whistleblowers stepping forward, the public has seen internal documents from some of the largest providers of online services

to children. Those documents reveal that these companies have not only intentionally exploited the insecurities and personal information of children and adolescents, but have also internally researched and documented the extent of the harm caused by their own designs. Kids' addiction to those social media platforms is not by accident; it is by design.

Unwilling to simply sit idly by as the youth mental health crisis deepens, in 2024, California passed the Protecting Our Kids from Social Media Addiction Act (the "Act"). That Act aims to protect children by "ensur[ing] that social media platforms obtain parental consent before exposing children and adolescents to harmful and addictive social media features," SB 976, § 1(g), including algorithmic personalized "feeds" of information to children.

The Act offers much-needed protections for the generations of children growing up without the opportunity to experience a childhood and adolescence that is not in some way mediated by the internet. The AFT and the CFT submit this brief to call the Court's attention to the ongoing youth mental health crisis, the ways in which social media platforms have exacerbated that crisis by intentionally adopting

addictive features inappropriate for, and practically irresistible to, adolescents’ developing brains, and the impact these features have had on schools.

ARGUMENT

I. Online Businesses Have Intentionally Incorporated Addictive Design Features to Increase Time Spent Online

As the District Court correctly recognized, “[a]lgorithms operate personalized feeds, and humans create algorithms to achieve certain purposes.” ER-025. The question posed by the District Court—“What if someone creates an algorithm to maximize engagement, *i.e.*, the time spent on a social media platform?,” *id.*—is no mere hypothetical. An internal document titled “TikTok Algo 101” explained that “in the pursuit of the company’s ‘ultimate goal’ of adding daily active users, it has chosen to optimize for two closely related metrics in the stream of videos it serves: ‘retention’—that is, whether a user comes back—and ‘time spent.’”¹ As one Meta employee put it, “[n]o one wakes up thinking they

¹ Ben Smith, *How TikTok Reads Your Mind*, N.Y. Times (Dec. 5, 2021), <https://www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html>.

want to maximize the number of times they open Instagram that day. But that’s exactly what our product teams are trying to do.”²

These companies are driven to maximize the time users spend online because their revenues are derived almost entirely from surveillance advertising³: either selling ad placements or selling data to advertisers. The amount of time spent online is often referred to as “user engagement.” Under the surveillance advertising business model, increased user engagement translates into higher revenue for an online business in two ways. First, higher user engagement allows an online business to sell its ad placements for a higher price. Advertisers are willing to pay more to place ads on platforms with high user engagement, because more time spent on the platform translates into more ad impressions and likely higher click-through rates and return on

² Plaintiffs’ Amended Master Complaint (Personal Injury) ¶ 302, *In re Soc. Media Adolescent Addiction/Personal Inj. Prods. Liab. Litig.*, No. 22-md-03047-YGR (N.D. Cal. Apr. 14, 2023), ECF No. 234-1.

³ Surveillance advertising, also called targeted advertising, is the practice of targeting individual consumers based on information gleaned from surveilling them. In contrast to “contextual advertising”—where ads are placed based on content, such as ads for bikes alongside an article about cycling—surveillance advertising involves ads placed based on data on the individual viewing the ad, including the individual’s location, networks, searches, purchases, and habits.

investment for the advertisers. Second, higher user engagement allows the online business to collect and sell more user data to advertisers. The longer an individual stays on a platform or website, the more data the social media company is able to collect about that individual to sell to advertisers. In other words, the financial incentives of surveillance advertising all coalesce around a single goal: extending the time users spend online.

As a result, online businesses with revenue from surveillance advertising have designed platforms with features to maximize user engagement and retention. Such features have proven to be alarmingly effective and habit-forming for children and teenagers, with consequences for their mental health, sleep, relationships, and academic performance, among other things. The design features commonly used to increase time spent are automatic functions or driven by machine-learning, including push notifications, never-ending feeds of content “recommended” by algorithms, intermittent variable rewards such as “likes,” or displaying metrics related to activity on the platform. See *Twitter, Inc. v. Taamneh*, 598 U.S. 471, 499 (2023) (describing Google, Twitter, and Facebook’s algorithms as “infrastructure” and stating that

“[o]nce the platform and sorting-tool algorithms were up and running, defendants at most allegedly stood back and watched”). The machine-generated feeds do not represent expressive content or endorsement of any particular message by the businesses; they are designed to maximize time spent on the platform, irrespective of whatever messages may be communicated.

Similarly, displaying the number of likes or other reactions is an automatic feature designed to increase “retention”—hooking users into returning to the platform again and again. As the District Court concluded, there is “little apparent expressive value in displaying a count of the number of total likes and reactions.” ER-033. Yet this feature does real harm, especially for adolescents. In fact, Meta experimented with hiding Like counts, to address the problem of its social media platforms inducing “social comparison,” which “previous internal and external research” has “linked to multiple negative well-being outcomes (e.g., increased loneliness, worse body image, and negative mood or affect)[.]”⁴

⁴ Complaint for Injunctive and Other Relief (*Arizona v. Meta Platforms, Inc.*) ¶ 232, *In re Soc. Media Adolescent Addiction/Personal Inj. Prods. Liab. Litig.*, No. 4:23-cv-05448-YGR (N.D. Cal. Nov. 11, 2023), ECF No. 73-2.

The result was a success: Meta found that hiding Like counts resulted in “less social comparison” and that “negative social comparison decrease[d] more over time” for participants in the experiment.”⁵ But, after assessing the impact of the experiment on user engagement and revenue—including an estimated 1% negative effect on Meta’s advertising revenue—Meta’s leadership decided not to implement this change as a default on the platform.⁶ As a recent whistleblower put it, “[o]ne, Meta knows the harm that kids experience on their platform. And executives know that their measures fail to address it. Two, there are actionable steps that Meta could take to address the problem. And three, they are deciding time and time again to not tackle these issues.”⁷ The Act, by requiring covered entities to hide the number of likes or other forms of

⁵ *Id.* ¶ 246 (alteration in original).

⁶ *Id.* ¶ 250.

⁷ *Former Meta Executive Testifies on Social Media and Youth Mental Health* at 27:30–59, C-SPAN (Nov. 7, 2023), <https://www.c-span.org/video/?531650-1/meta-executive-testifies-social-media-youth-mental-health>; *Protecting Kids Online: Testimony from a Facebook Whistleblower*, Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. Hr’g (Oct. 5, 2021), <https://www.commerce.senate.gov/2021/10/protecting%20kids%20online:%20testimony%20from%20a%20facebook%20whistleblower>.

feedback as a default, prioritizes the mental health of California’s young people over the estimated 1% impact on Meta’s profits.

Snapchat has also conducted internal research on the impact of its design features on children and teens. Snapchat’s design utilizes a variety of social metrics—such as Snapscores, Snap Streaks, and Snap Awards—that reward users when they engage with Snapchat and punish them when they fail to engage with Snapchat. Internal research by Snap Inc. has found these psychological manipulation techniques are highly effective at instilling anxiety about not using Snapchat frequently enough—and even Meta acknowledged, in internal documents, that Streaks are very important for teens and are “addictive.”⁸ Children and teens are particularly susceptible to these techniques.

When users manage to disengage from online platforms, push notifications are designed to bring them back. For young people today, these notifications can be relentless. A study by Common Sense Media and the C.S. Mott Children’s Hospital found that young users “received

⁸ Plaintiffs’ Amended Master Complaint (Personal Injury) ¶¶ 482, 486, *In re Soc. Media Adolescent Addiction/Personal Inj. Prods. Liab. Litig.*, No. 22-md-03047-YGR (N.D. Cal. Apr. 14, 2023), ECF No. 234-1.

a median of 237 notifications” in a “typical day,” and that “[n]otification frequency varied widely, with maximums of over 4,500 delivered and over 1,200 seen[.]”⁹ Nearly a quarter of those notifications “arrived during school hours.”¹⁰ Meta, for example, views notifications as part of its strategy for pursuing “Teen Growth,” noting that the ability to “leverage[e] teens’ higher tolerance for notifications to push retention and engagement,”¹¹ despite also acknowledging that “smartphone notifications caused inattention and hyperactivity among teens, and they reduced productivity and well-being.”¹²

Like the personalized feeds, “Like” counts, “Snapscores,” and push notifications are machine-driven features that do not express any particular viewpoint or message and are employed solely to increase user retention and engagement.

⁹ Jenny S. Radesky *et al.*, *Constant Companion: A Week in the Life of a Young Person’s Smartphone Use* at 6, Common Sense Media (2023), https://www.commonsensemedia.org/sites/default/files/research/report/2023-cs-smartphone-research-report_final-for-web.pdf.

¹⁰ *Id.*

¹¹ Complaint for Injunctive and Other Relief (*Arizona v. Meta Platforms, Inc.*) ¶ 304, *In re Soc. Media Adolescent Addiction/Personal Inj. Prods. Liab. Litig.*, No. 4:23-cv-05448-YGR (N.D. Cal Nov. 22, 2023), ECF 73-2.

¹² *Id.* ¶ 306.

A decrease in user retention and engagement means a decrease in online companies' revenues. Snap Inc., for example, acknowledged in its SEC filings that its revenue could be harmed by, among other things, “a decrease in the amount of time spent on Snapchat, a decrease in the amount of content that our users share, or decreases in usage of our Camera, Visual Messaging, Map, Stories, and Spotlight platforms[.]”¹³ Snapchat's users do not pay to use the platform, of course, so why should a decrease in user engagement have such a direct impact on Snap's bottom line?

The answer, of course, is that for Snap and many other NetChoice members, increasing user engagement to unhealthy and unsustainable levels to drive advertising revenue is not just part of the business model—it *is* the business model. For Google, Meta, TikTok, and Snap Inc., surveillance advertising comprises nearly the entirety of their revenue streams. For Snap Inc., advertising has accounted for approximately 99%

¹³ Snap Inc., Annual Report (Form 10-K) at 15 (Feb. 4, 2025), <https://d18rn0p25nwr6d.cloudfront.net/CIK-0001564408/5c4563f0-758b-428b-9274-1e58f51f6095.pdf>.

its revenue each year since 2018.¹⁴ Meta earned over 98% of its total revenue in 2019—nearly \$70 billion—from advertising.¹⁵

Without the reasonable, content-neutral limitations imposed by the Act, the juggernaut that is surveillance advertising will continue to drive NetChoice’s members to increase user engagement and retention at all costs. And as AFT’s and CFT’s members have experienced firsthand, many of those costs are borne by students, teachers, and schools.

II. These Addictive Features Are Fueling a Nationwide Mental Health Crisis Among Children

Students’ compulsive overuse of online platforms, driven in large part by the personalized algorithms that drive content to their phones, have resulted in concrete, measurable, and substantial harms. Students’ addictions to social media platforms have rewired their brains, permanently altering their attention spans in a way that is likely to impact their future earning capacity and diminish their ability to enjoy such fundamental pleasures as reading a book. Those addictions have

¹⁴ Snap Inc., Annual Report (Form 10-K) at 15 (Feb. 2, 2023), <https://d18rn0p25nwr6d.cloudfront.net/CIK-0001564408/c22ae9bd-7418-456e-82d4-48129de1df54.pdf>.

¹⁵ Rishi Iyengar, *Here’s how big Facebook’s ad business really is*, CNN (July 1, 2020, 9:19 AM), <https://www.cnn.com/2020/06/30/tech/facebook-ad-business-boycott/index.html>.

also meaningfully interfered with their educations—both because they are distracted and because teachers have had to spend increasing time devoted simply to recapturing attention and disciplining students on their phones during class. The excessive time that students spend on social media affects their study time, classroom learning, and participation in extracurricular activities.

In 2023, the U.S. Surgeon General issued an advisory calling attention to the “growing concerns about the effects of social media on youth mental health.”¹⁶ This advisory followed an advisory in 2021 warning that youth are experiencing mental health struggles at crisis levels,¹⁷ as well as a declaration in 2021 of a national emergency in child and adolescent mental health by the American Academy of Pediatrics,

¹⁶ *Social Media and Youth Mental Health: The U.S. Surgeon General’s Advisory* (“Surgeon General’s Advisory”) at 3, U.S. Dep’t Health & Hum. Servs. (2023), <https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf>.

¹⁷ *Protecting Youth Mental Health: The U.S. Surgeon General’s Advisory*, U.S. Dep’t Health & Hum. Servs. (Dec. 6, 2021), <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>.

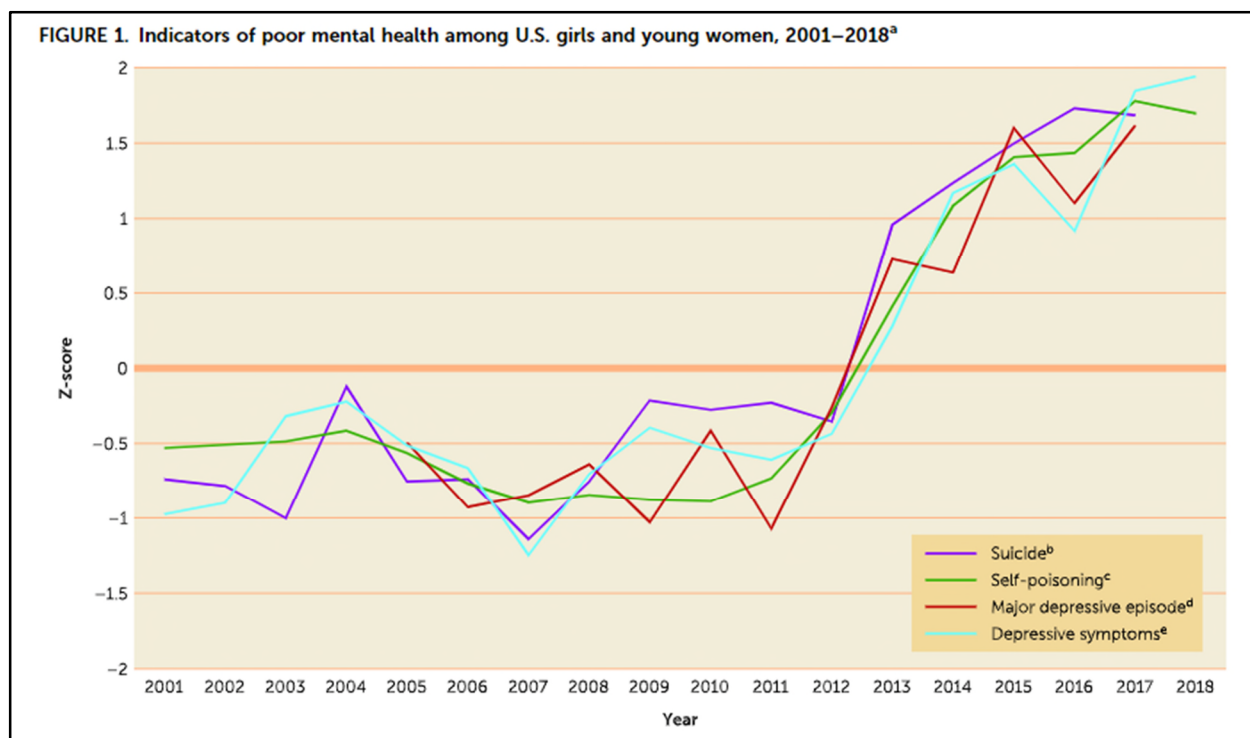
the American Academy of Child and Adolescent Psychiatry, and the Children's Hospital Association in October 2021.¹⁸

The deterioration in youth mental health began long before the COVID-19 pandemic. Beginning in the early 2010s, indicators of poor mental health among adolescents, including rates of anxiety, major depressive episodes, hospital admissions for self-harm, and suicide attempts, increased significantly, especially for adolescent girls.¹⁹ As shown in the graph below, rates of suicide, self-poisoning, major depressive episodes, and depressive symptoms among girls and young women have deviated considerably from the mean since approximately 2012—widely considered the year when smartphone usage truly took off.²⁰

¹⁸ *AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health*, Am. Acad. of Pediatrics (Oct. 19, 2021), <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/>.

¹⁹ Jean M. Twenge, *Increases in Depression, Self-Harm, and Suicide Among U.S. Adolescents After 2012 and Links to Technology Use: Possible Mechanisms*, 2 *Psychiatric Rsch. & Clinical Prac.* 19–25 (2020), <https://psychiatryonline.org/doi/epdf/10.1176/appi.prcp.20190015>.

²⁰ *Id.*



Importantly, public health authorities have identified evidence that time spent on social media platforms—independent of the content seen on those platforms—is an explanatory variable in adolescents’ deteriorating mental health. For example, one longitudinal cohort study found that “adolescents who spent more than 3 hours per day on social media faced *double* the risk of experiencing poor mental health outcomes including symptoms of depression and anxiety.”²¹ Other randomized

²¹ Surgeon General’s Advisory at 6 (citing Kira E. Riehm *et al.*, *Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth*, 76(12) *JAMA Psychiatry* 1266–1273 (2019), doi:10.1001/jamapsychiatry.2019.2325) (emphasis added).

studies have shown that constraining the time spent on social media, without controlling for content, led to mental health improvements.²²

Excessive time spent on social media can lead to poor mental health outcomes because such use creates an addiction and interferes with the lives of students. At the neural level, several studies have demonstrated that algorithmic feeds and certain other social media features “can overstimulate the reward center in the brain and, when the stimulation becomes excessive, can trigger pathways comparable to addiction.”²³ These responses have led social media users to “experience changes in brain structure similar to changes seen in individuals with substance use or gambling addictions.”²⁴ The combination of these design features has proven highly effective in retaining adolescents on the platforms for longer and longer periods of time.

²² *Id.* at 7 (citing Melissa G. Hunt *et al.*, *No more FOMO: Limiting social media decreases loneliness and depression*, 37(10), *Journal of Social and Clinical Psychology*, 751–768 (2018), <https://doi.org/10.1521/jscp.2018.37.10.751>; Hunt Allcott *et al.*, *The Welfare Effects of Social Media*, 110(3) *American Economic Review*, 629-76 (2020), <https://web.stanford.edu/~gentzkow/research/facebook.pdf>).

²³ *Id.* at 9.

²⁴ *Id.* at 9.

The result is a generation of kids who report being addicted to social media. According to a 2023 report by Common Sense Media, 45% of teen girls who use TikTok say they feel addicted to it or use it more than intended at least weekly.²⁵ Similarly, 37% of teen girls said they felt addicted to Snapchat, 34% said they felt addicted to YouTube, and 33% said they felt addicted to Instagram.²⁶ A 2022 report by the Pew Research Center found that, of teens who use at least one social media product “almost constantly,” 71% say quitting would be hard, and nearly one third say quitting would be “very hard.”²⁷

Students’ addiction to social media in turn causes downstream effects, like sleep problems, disruption during class, difficulties maintaining focus or attention, and feelings of exclusion. The literature shows a “consistent relationship between social media use and poor sleep

²⁵ Jacqueline Nesi *et al.*, *Teens and Mental Health: How Girls Really Feel about Social Media* at 6, Common Sense Media (2023), https://www.common sense media.org/sites/default/files/research/report/how-girls-really-feel-about-social-media-researchreport_web_final_2.pdf.

²⁶ *Id.*; see also Surgeon General’s Advisory at 9 (“In a nationally representative survey of girls aged 11–15, one-third or more say they feel ‘addicted’ to a social media platform.”).

²⁷ Emily A. Vogels *et al.*, *Teens, Social Media and Technology 2022*, Pew Rsch. Ctr. (Aug. 10, 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

quality, reduced sleep duration, [and] sleep difficulties . . . among youth,” which have “been linked to altered neurological development in adolescent brains, depressive symptoms, and suicidal thoughts and behaviors.”²⁸ Other studies have documented that children are losing approximately one night’s worth of sleep every week, staying up to use social media or even waking themselves up in the middle of the night to check notifications, driven by fear of missing out.²⁹

Such studies are consistent with internal research by some of NetChoice’s members on harms to the pre-teen and teenage users of their social media platforms. For example, from 2019 to 2021, a team of Meta employees, with expertise in psychology as well as quantitative and qualitative analysis, completed a “teen mental health deep dive” which included focus groups, online surveys, and pairing survey responses with Meta’s data about the time each respondent spent on Instagram and the

²⁸ Surgeon General’s Advisory at 10.

²⁹ Beatrice Nolan, *Kids are waking up in the night to check their notifications and are losing about 1 night’s worth of sleep a week, study suggests*, Bus. Insider (Sept. 19, 2022, 5:19 AM), <https://www.businessinsider.com/social-media-costing-children-one-night-sleep-study-2022-9>.

type of posts viewed.³⁰ The findings of this “deep dive” included the following:³¹

- “We [Instagram] make body image issues worse for 1 in 3 teen girls;”
- One in five teens said that Instagram made them feel worse about themselves;
- “Teens blame Instagram for increases in the rates of anxiety and depression among teens” in recent years—a response that was unprompted and consistent across all groups;
- Two-thirds of teen girls on Instagram experienced negative social comparison;
- “Frequent social comparison is a key driver of subjective well-being and teens say [Instagram] makes this problem worse;”
- 41% of teen users of Instagram in the U.S. and U.K. who reported feeling “unattractive” said the feeling began while using the product;
- 32% of teenage girls said that when they felt bad about their bodies, Instagram made them feel worse;
- About a quarter of teens who reported feeling “[n]ot good enough” said the feeling started on Instagram;
- Many teens said that Instagram undermined their confidence in the strength of their friendships; and
- 13.5% of teen girls on Instagram said the product made thoughts of “suicide and self-injury” worse.

Frequent use of social media is also associated with a statistically significant increase in the likelihood of developing attention-

³⁰ Plaintiffs’ Amended Master Complaint (Personal Injury) ¶ 307, *In re Soc. Media Adolescent Addiction/Personal Inj. Prods. Liab. Litig.*, No. 22-md-03047-YGR (N.D. Cal. Apr. 14, 2023), ECF No. 234-1.

³¹ *Id.* ¶ 308.

deficit/hyperactivity disorder, and having shorter attention spans.³² Unsurprisingly, watching short videos on platforms like TikTok makes it difficult for students to switch to slower activities.³³ “Many studies report that total time on media . . . is associated with adverse *attentional and behavioral* outcomes,” while “[m]edia multitasking has been associated with a broad range of cognitive impairments, most notably in attentional and behavioral control.”³⁴ Studies have linked both indications to lower academic performance in school.³⁵ And this is widespread. According to

³² Chaelin K. Ra *et al.*, *Association of Digital Media Use With Subsequent Symptoms of Attention-Deficit/Hyperactivity Disorder Among Adolescents*, 320(3) JAMA 255–63 (2018), <https://doi.org/10.1001/jama.2018.8931>; Molly Belmont, *Social media, cellphones take toll on kids’ mental health—educators are fighting back*, NYSUT United (Mar./Apr. 2024), <https://united.nysut.org/issue/march-april-2024/disconnected-social-media-cellphones-take-toll-on-kids-mental-health-educators-are-fighting-back/> (34-year elementary school counselor reporting that “[s]ocial media is taking a toll on their self-esteem, their attention span, even their physical health”).

³³ Julie Jargon, *TikTok Brain Explained: Why Some Kids Seem Hooked on Social Video Feeds*, Wall St. J. (Apr. 2, 2022, 9:00 AM), <https://www.wsj.com/articles/tiktok-brain-explained-why-some-kids-seem-hooked-on-social-video-feeds-11648866192?page=4>.

³⁴ Pedro Cardoso-Leite *et al.*, *Media use, attention, mental health and academic performance among 8 to 12 year old children*, PLoS ONE (Nov. 17, 2021), <https://pmc.ncbi.nlm.nih.gov/articles/PMC8598050/pdf/pone.0259163.pdf>.

³⁵ *Id.*

one study, 31% of teens said they lost focus in class because they were checking their cell phones.³⁶

These addiction and overuse impacts are distinct from, and additive to, any mental health impacts from the *content* of the posts seen by adolescents on social media.

AFT and CFT members have been on the front lines of this unfolding crisis. Schools are one of the main providers of mental health services for school-aged children. Indeed, nearly 3.4 million children ages 12–17 received mental health services through a school’s health or counseling center in 2023—more than the number of children who received such services through hospitals, general doctor’s offices, and other outpatient treatment centers combined.³⁷ AFT and CFT members have witnessed firsthand the effects of an unregulated online environment on the health and wellbeing of students, and the

³⁶ Jingjing Jiang, *How Teens and Parents Navigate Screen Time and Device Distractions*, Pew Rsch. Ctr. (Aug. 22, 2018), <https://www.pewresearch.org/internet/2018/08/22/how-teens-and-parents-navigate-screen-time-and-device-distractions/>.

³⁷ National Survey on Drug Use and Health, table 7.4A, SAMHSA (2023), https://www.samhsa.gov/data/sites/default/files/reports/rpt47100/NSDUHDetailedTabs2023_v1/NSDUHDetailedTabs2023_v1/2023-nsduh-detailed-tables-sect7pe.htm#tab7.4a.

corresponding disruption to students' learning and school operations, in California and nationwide.

In July 2023, the AFT and its partners released a report titled "Likes vs. Learning: The Real Cost of Social Media for Schools," detailing how school districts across the country are bearing increased costs to respond to the pervasive classroom influence of social media companies' addictive, risky algorithms.³⁸ It is true that some of those costs are due to the content of these social media sites. Districts have had to add mental health staff and take educational time to address the cyberbullying, harassment, dangerous viral challenges, and social exclusion that the content of social media sites fosters. This increased attention to tackling social media platforms' omnipresent role in children's lives has pulled resources away from the core mission of education.

But school districts have also had to devote money and educational time to addressing the impacts of students' addictions to social media *not* driven by those platforms' content. For example, teachers have had to spend more educational time confiscating phones that are being used to

³⁸ *Likes vs. Learning: The Real Cost of Social Media for Schools*, Am. Fed. Of Teachers (2023), https://www.aft.org/sites/default/files/media/documents/2023/LikesVSLearning_Report.pdf.

access social media during class and otherwise disciplining students. Even if schools implement a policy that requires students to put devices away or physically out of reach during class time, the addictive nature of social media platforms continues to disrupt learning. Students struggle with being separated from the platforms and experience anxiety over missing even a single notification, and this anxiety interferes with students' ability to focus and learn. Students' shorter attention spans increase the need for remedial instruction.

One final point bears emphasis. The impacts of social media use on students' educational outcomes that teachers and school districts are seeing are different in kind, not degree, from prior potentially disruptive influences, like the rise of the internet, or the advent of violent video games. (Indeed, some studies have found positive educational effects from students' reasonable enjoyment of action video games.³⁹) Social media's addictiveness is a different beast entirely. Its influence on the

³⁹ See, e.g., Pedro Cardoso-Leite *et al.*, *Media use, attention, mental health and academic performance among 8 to 12 year old children* at 5, PLoS ONE (Nov. 17, 2021), <https://pmc.ncbi.nlm.nih.gov/articles/PMC8598050/pdf/pone.0259163.pdf> (“larger amounts of video gaming was linked with greater intellectual functioning and school achievement” and the relationship can be “positive, negative or absent” depending on certain factors).

adolescent mind today is pervasive. And it is unlike any other technological advance that the AFT's and CFT's members have encountered. Teachers and parents are not engaged in moral panic over an overblown fad: they are responding to a developing crisis over which they have little control. The Act may not be the whole answer, but it is a significant step toward restoring our students' ability to learn.

CONCLUSION

From the perspectives of AFT and CFT, whose members witness students struggling every day with the consequences of social media platforms designed to be habit-forming, the protections provided by the Act are urgently needed. The Act imposes reasonable limits on automatic, machine-driven features that function only to maximize time spent online, irrespective of content. The AFT and the CFT strongly urge this Court to affirm the parts of the District Court's order denying NetChoice's request for a preliminary injunction.

RESPECTFULLY SUBMITTED this 6th day of March, 2025.

By: /s/ Alison S. Gaffney

ALISON GAFFNEY

Counsel of Record

DEAN N. KAWAMOTO

FELICIA J. CRAICK

WILLIAM DREHER

KELLER ROHRBACK L.L.P.

1201 Third Ave., Suite 3400

Seattle, WA 98101

206.623.1900

agaffney@kellerrohrback.com

dkawamoto@kellerrohrback.com

fcraick@kellerrohrback.com

wdreher@kellerrohrback.com

Attorneys for Amici Curiae

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

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