

Note

Legislation #FortheKids: Passing a Federal Age-Appropriate Design Code Act to Protect Adolescent Mental Health

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ABSTRACT

Social media platforms profit on their addictive designs that harm the mental health of adolescent users. Up to forty percent of platforms' users, and therefore a large percentage of their profits, are minors. Some of the elements used to increase profit include targeted advertising and engagement-driven algorithms, which promote harmful content to young users. Research links this content to an increase in mental health disorders, including depression, anxiety, and eating disorders, in America's youth.

Revelations through reporting, congressional hearings, and quantitative research reveal the detrimental extent of social media's influence. The uncovering of these harms led to hundreds of lawsuits against social media companies. These lawsuits, especially those focused on mental health disorders, use a product liability theory to hold companies accountable for their "defective design." Both Congress and the states responded to the increased public attention on these platforms with youth-centric social media legislation. California passed a statute, the California Age-Appropriate Design Code Act, focused on the design of these platforms.

This Note argues that Congress must enact a Federal Age-Appropriate Design Code Act to combat the harm social media platforms cause to minors. The legal system provides insufficient remedy for these harms because the product liability theory is scarcely tested, and mental health damages are difficult to prove. Social media platforms cannot be trusted to self-regulate because of the financial incentives to use engagement-based algorithms. California's statute, and other federally proposed legislation, can be a basis for a more effective federal bill. A Federal Age-Appropriate Design Code Act that applies to users under eighteen and remedies design defects of platforms would protect adolescents from the mental

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health harms caused by these social media companies.

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INTRODUCTION

At age thirteen, Olivia opened her first Instagram account to communicate with friends and share photos.¹ She enjoyed making recipes

¹ This narrative is based on a complaint consolidated in the product liability Multi-District Litigation (“MDL”) and it is embellished with personal experiences of the many individuals who interact with, and have been harmed by, social media platforms. *See infra* Section II.B. The complaint details a young girl, CN, and her experience using Meta platforms. Complaint at 1–2, C.N. v. Meta Platforms, Inc., No. 4:22-cv-04283 (N.D. Cal. Jul 25, 2022). A pseudonym is used to represent CN and the experiences of others that are combined in this narrative.

with her family and frequently messaged new ideas to her mom’s account.² In 2016, shortly after Olivia began using Instagram, Meta—then known as Facebook—acquired the company and implemented an algorithm-based newsfeed.³ This new feature changed the content this young girl saw from unassuming to dangerous.⁴ She was flooded with information about achieving negative caloric intake, photos of emaciated influencers, and users providing her with tips on how to hide restrictive eating.⁵ Her explore page featured hashtags like #pro-ana—pro-anorexia—and #thinspo—thinspiration.⁶ Olivia never searched for this content when she began using Instagram, but Meta’s design promoted this information.⁷ Two years after joining Instagram, Olivia was diagnosed with a severe eating disorder and later hospitalized for heart failure.⁸ After four years of treatment, she is slowly working to regain trust of her body, food, and mind.⁹

This young girl’s experience is not unique. Over a hundred plaintiffs are now suing several social media platforms for their detrimental effects on adolescent mental health.¹⁰ There is a correlation between the increase in mental illnesses among minors and social media use.¹¹ Discussion on this topic surged after the Wall Street Journal published “the Facebook Files”—

² Complaint, *C.N.*, *supra* note 1, at 51.

³ Elle Hunt, *New Algorithm-Driven Instagram Feed Rolled Out to the Dismay of Users*, *GUARDIAN* (June 7, 2016, 12:58 AM). Facebook renamed itself to Meta in October 2021. Press Release, Meta, *Introducing Meta: A Social Technology Company* (Oct. 28, 2021), <https://about.fb.com/news/2021/10/facebook-company-is-now-meta/> [<https://perma.cc/E997-56WF>].

⁴ Complaint, *C.N.*, *supra* note 1, at 52.

⁵ *Id.*

⁶ *Id.*

⁷ *Id.* Users promoting restrictive dieting and other eating disorder content are not unique to Instagram. See Suku Sukunesan, Minh Huynh & Gemma Sharp, *Examining the Pro-Eating Disorders Community on Twitter via the Hashtag #Proana: Statistical Modeling Approach*, 8 *JMIR MENTAL HEALTH* 1, 3–4 (2021) (explaining the prominence of #proana on Twitter and how pro-eating disorder accounts attract users).

⁸ Complaint, *C.N.*, *supra* note 1, at 66.

⁹ *Id.* at 67.

¹⁰ See *infra* Section II.B. Mental health disorders, such as eating disorders, cannot be attributed to one cause. *Mental Disorders*, *WORLD HEALTH ORG.* (June 8, 2022), <https://www.who.int/news-room/fact-sheets/detail/mental-disorders> [<https://perma.cc/5LE7-RLNS>] (“At any one time, a diverse set of individual, family, community, and structural factors may combine to protect or undermine mental health.”). However, research indicates the adolescent mental health crisis increased since children became daily users of social media. *Platform Transparency: Understanding the Impact of Social Media: Hearing on S. 797 Before the Subcomm. on Priv., Tech., and the L. of the S. Comm. on the Judiciary*, 117th Cong. 5 (2022) [hereinafter *S. 797 Hearing*] (statement of Jonathan Haidt, Professor of Ethical Leadership, N.Y.U. Stern School of Business).

¹¹ See *S. 797 Hearing*, *supra* note 10, at 5 (statement of Prof. Jonathan Haidt); U.S. DEP’T OF HEALTH & HUM. SERVS., *SOCIAL MEDIA AND YOUTH MENTAL HEALTH: THE U.S. SURGEON GENERAL’S ADVISORY* 4, 6–8 (2023).

a release of Meta's internal studies documenting its apps' negative effects on young users.¹² The Senate Judiciary Committee held several hearings addressing the issue,¹³ Congress proposed legislation to make the Internet a safer place for children,¹⁴ and plaintiffs filed dozens of complaints alleging that they developed mental illnesses from their use of social media platforms.¹⁵ Even the companies themselves made some updates following this explosion of information and public criticism.¹⁶ Despite these changes, young users are still harmed by addictive technology and algorithms.¹⁷

A Federal Age-Appropriate Design Code should be enacted to protect minors from the harmful effects of social media. This statute would create a necessary alternative to tort remedy as sufficient recovery cannot be achieved through the judicial system. Congressional action is the only way to fix the design of social media platforms. Companies will make some minor adjustments before continuing to prioritize profits over the mental health of America's youth. This Note analyzes the harms discussed by product liability suits and the way Congress can respond to these harms with legislation.

Part I of this Note explains social media design and the rise in public conversation about the harmful effects of social media on the mental health of minors. Part II explores product liability actions in the judicial system that challenge social media platforms for both physical and mental health harms. Part II also describes the limitations of a judicial remedy to social media's harmful effects on adolescents, including statutory restrictions and the difficulty of proving mental health damages in court. Part III analyzes the

¹² Georgia Wells, Jeff Horwitz & Deepa Seetharaman, *Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show*, WALL ST. J. (Sept. 14, 2021, 7:59 AM), <https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739> [<https://perma.cc/9EFC-DSKU>].

¹³ See *infra* Section I.A.

¹⁴ See *infra* Section III.

¹⁵ See *infra* Section II.B.

¹⁶ See, e.g., Joe Hernandez, *TikTok Sets a New Default Screen-Time Limit for Teen Users*, NPR (Mar. 1, 2023, 5:51 PM), <https://www.npr.org/2023/03/01/1160317717/tiktok-teens-screen-time-limit-mental-health> [<https://perma.cc/6327-658M>]; Lauren Feiner & Rohan Goswami, *Instagram Just Got an Update that Gives You More Control Over What You See in Your Feed*, CNBC (Jan. 19, 2023, 11:09 AM), <https://www.cnbc.com/2023/01/19/instagram-got-an-update-that-gives-users-more-control-over-their-feeds.html> [<https://perma.cc/2JVB-UZZD>]; Anne D'Innocenzio, *Facebook Unveils New Controls for Kids Using Its Platforms*, ASSOCIATED PRESS (Oct. 10, 2021), <https://apnews.com/article/business-nick-clegg-state-of-the-union-address-176ff8062ba0aab24dd01d250e524296> [<https://perma.cc/GD64-J2Z3>].

¹⁷ For example, Instagram now blocks certain hashtags promoting harmful behavior, but users look to other hashtags for the same content, ultimately circumventing content moderation. Ysabel Gerrard, *Beyond the Hashtag: Circumventing Content Moderation on Social Media*, 20 NEW MEDIA AND SOC'Y 4492, 4496 (2021).

legislative proposals attempting to regulate platforms and addresses the benefits and shortcomings of these legislative solutions. Part III also briefly acknowledges the First Amendment challenges to these statutes and proposed bills. Part IV argues that a Federal Age-Appropriate Design Code Act is the most effective way to address the harm social media platforms cause to children's mental health.

I. SOCIAL MEDIA PRODUCT DESIGN AND ADOLESCENT MENTAL HEALTH DISORDERS

While social media has existed since the 1990s, its effects on the health of minors grew exponentially with the introduction of algorithms in the 2010s.¹⁸ Algorithms were introduced to Facebook in 2009 but began dominating social media platforms in 2016.¹⁹ These ranking systems frequently change and are unique across platforms, but all function to promote the most relevant and engaging posts to users.²⁰ To use algorithms, platforms must collect user data, including age, gender, location, and the type of posts they engage with.²¹ Algorithms create a “feed” for users which recommends photos, videos, and other content along with advertisements promoted by the social media platforms.²²

These algorithms and other aspects of social media design are now believed to be a major culprit in the declining mental health of adolescent users.²³ The increased accessibility of social media platforms and use of algorithms led to a growing awareness of social media's effects on mental health.²⁴ In the past five years, journalists and legislatures began to uncover the enormous impact of apps like Instagram, TikTok, and Snapchat on

¹⁸ Hannah Trivette, *A Guide to Social Media Algorithms and SEO*, FORBES (Oct. 14, 2022, 7:15 AM), <https://www.forbes.com/sites/forbesagencycouncil/2022/10/14/a-guide-to-social-media-algorithms-and-seo/?sh=3f5d955452a0> [<https://perma.cc/ZZ9T-3PYN>]; *Social Media*, ENCYCLOPEDIA BRITANNICA, <https://www.britannica.com/topic/social-media> [<https://perma.cc/5H2V-9WX2>]; Joanna Stern, *Social-Media Algorithms Rule How We See the World. Good Luck Trying to Stop Them*, WALL ST. J. (Jan. 17, 2021, 7:00 AM), <https://www.wsj.com/articles/social-media-algorithms-rule-how-we-see-the-world-good-luck-trying-to-stop-them-11610884800>.

¹⁹ Both Instagram and Twitter introduced the use of algorithms to user's timelines in June and February of 2016, respectively. Hunt, *supra* note 3; Press Release, Twitter, An Improved Timeline for Consumers and Brands, TWITTER (Feb. 10, 2016), https://blog.twitter.com/en_us/a/2016/an-improved-timeline-for-consumers-and-brands [<https://perma.cc/929G-FJHA>].

²⁰ Trivette, *supra* note 18.

²¹ *Id.*

²² Complaint at 3, *Murden v. Meta Platforms, Inc.*, No. 3:22CV01511, 2022 WL 2752454 (S.D. Ill. July 13, 2022).

²³ *Id.* at 5.

²⁴ *S. 797 Hearing*, *supra* note 10, at 5 (statement of Prof. Jonathan Haidt).

minors.²⁵ Both recent Senate Judiciary Committee hearings and developing empirical research detail the influence of social media on adolescent mental health.²⁶

A. *Senate Judiciary Committee Hearings on Social Media*

The discussion of social media's influence on mental health escalated in the fall of 2021 following the Wall Street Journal's "Facebook Files" release.²⁷ The Wall Street Journal's investigation uncovered Meta's own research, conducted over a three year period, which shows that Meta recognized its platforms' harmful effects.²⁸ An extensive portion of Meta's research focused on its apps' influence on body image issues for teen girls.²⁹ Specifically, a slide deck obtained from Meta's March 2020 research confirmed "[t]hirty-two percent of teen girls said that when they felt bad about their bodies, Instagram made them feel worse . . . [c]omparisons on Instagram can change how young women view and describe themselves."³⁰ In October 2021, following the Wall Street Journal's reporting, the Senate Committee on Commerce, Science, and Transportation held a pair of hearings, both entitled "Protecting Kids Online."³¹ Frances Haugen, a former product manager of algorithmic systems at Meta, testified and reiterated Meta's deliberate, harmful choices on its platforms: ". . . I am here today because I believe that Facebook's products harm children, stoke divisions, weaken our democracy and much more. . . . [W]ithout careful and responsible development, the Internet can harm as much as it helps."³²

Congress also heard from representatives of Snapchat, TikTok, and YouTube as part of the hearing.³³ These representatives described their

²⁵ See generally *The Facebook Files: A Wall Street Journal Investigation*, WALL ST. J., <https://www.wsj.com/articles/the-facebook-files-11631713039?mod=bigtop-breadcrumb> [<https://perma.cc/588E-2KFJ>] [hereinafter *The Facebook Files*]; *S. 797 Hearing*, *supra* note 10.

²⁶ *S. 797 Hearing*, *supra* note 10.

²⁷ *The Facebook Files*, *supra* note 25.

²⁸ See Wells et al., *supra* note 12.

²⁹ *Id.*

³⁰ *Id.* One slide obtained by the Journal from 2019 stated "[w]e make body image issues worse for one in three teen girls Teens blame Instagram for increases in the rate of anxiety and depression." *Id.*

³¹ *Protecting Kids Online: Testimony from a Facebook Whistleblower Before the Subcomm. on Consumer Prot., Prod. Safety, and Data Sec. of the S. Comm. on Com., Sci., and Transp.*, 117th Cong. (2021) [hereinafter *Whistleblower Testimony*]; *Protecting Kids Online: Snapchat, TikTok, and YouTube Before the Subcomm. on Consumer Prot., Prod. Safety, and Data Sec. of the S. Comm. on Com., Sci., and Transp.*, 117th Cong. (2021) [hereinafter *Social Media Testimony*].

³² *Whistleblower Testimony*, *supra* note 31, at 19 (statement of Frances Haugen).

³³ *Social Media Testimony*, *supra* note 31 (testimony of Jennifer Stout, Vice President of Global Public Policy, Snap, Inc.); *id.* (testimony of Michael Beckerman, Vice President

platforms as “an antidote to social media,”³⁴ as apps allowing users to “express themselves creatively and find their community,”³⁵ and as places which “give everyone a voice.”³⁶ Each of the three companies also discussed ways their platforms have evolved to protect young users.³⁷ TikTok’s approach for teen users gives optional “family pairing” controls (screen time management, restricted content mode, search settings, etc.), creates some automatic privacy settings (default private accounts, comments restricted to “no one” or “Friends,” disabled livestreaming for users under sixteen, etc.), and adds a new push notification limitation for users at 9pm (for teens 13–15) or 10pm (for teens 16–17).³⁸ YouTube discussed its new “Workout Badges” created to help encourage “playful movement.”³⁹ Given social media’s influence on teen girls’ body image, this response reads as tone deaf, or at least lacking nuance.⁴⁰ Noticeably absent from these protections for teen users is a ban on targeted advertising, data collection, or any change in their addictive algorithms.⁴¹

B. *Empirical Connection Between Social Media and Mental Health Disorders*

As algorithms became more prominent, the research community has examined the harmful influence of internet platforms.⁴² Researchers like Angela Guarda looked into the influence of apps like Instagram on young girls.⁴³ As director for the eating disorders program at Johns Hopkins

and Head of Public Policy, Americas, TikTok); *id.* (testimony of Leslie Miller, Vice President, Government Affairs and Public Policy, YouTube).

³⁴ *Id.* at 1 (testimony of Jennifer Stout).

³⁵ *Id.* at 1 (testimony of Michael Beckerman).

³⁶ *Id.* at 1 (testimony of Leslie Miller).

³⁷ *See, e.g., id.* at 3 (testimony of Leslie Miller) (describing the development of YouTube Kids and YouTube supervised experiences).

³⁸ *Id.* at 4–5 (testimony of Michael Beckerman).

³⁹ *Id.* at 6 (testimony of Leslie Miller).

⁴⁰ Wells et al., *supra* note 12.

⁴¹ *See infra* Section III.

⁴² For comprehensive, open-source literature reviews of published articles discussing the link between social media and mental health disorders, see Jonathan Haidt, Jean Twenge & Zach Rausch, Adolescent Mood Disorders Since 2010: A Collaborative Review (last updated Dec. 12, 2023) [hereinafter Haidt & Twenge, Adolescent Mood Disorders] (unpublished manuscript), <https://tinyurl.com/TeenMentalHealthReview>; Jonathan Haidt, Jean Twenge & Zach Rausch, Social Media and Mental Health: A Collaborative Review (last updated Dec. 12, 2023) [hereinafter Haidt & Twenge, Social Media and Mental Health] (unpublished manuscript), [tinyurl.com/SocialMediaMentalHealthReview](https://perma.cc/W9BM-YXQL) [https://perma.cc/W9BM-YXQL].

⁴³ Wells et al., *supra* note 12; *see also* Angela S. Guarda, *Treatment of Anorexia Nervosa: Insights and Obstacles*, 94 *PHYSIOLOGY & BEHAVIOR* 113 (2008) (discussing the lethal danger of anorexia nervosa and the difficulty in treating those suffering from it).

Hospital, Guarda noticed that her patients commonly learn tips on how to restrict food intake or how to purge on social media apps.⁴⁴ Guarda estimates Instagram and similar apps “play a role in the disorders for about half” of her patients.⁴⁵ Importantly, researchers do not claim these apps are solely responsible for the development of eating disorders but recognize that for the most vulnerable population, social media can escalate the problem.⁴⁶

In the early 2010s, researchers began comparing rates of mental health disorders before 2009 to rates from 2010–2019.⁴⁷ In this period, studies saw increases in mental health disorders for teens between 50 and 150 percent, depending on the disorder, gender, and subgroup.⁴⁸ This increase presents even more acutely in young girls and for mood disorders.⁴⁹ The base rate for mood disorders is higher in girls than boys, so a doubling of the rate of disorders results in more sick girls than boys, especially for self-harm, which is a common way of manifesting anxiety.⁵⁰ Several correlational studies link frequent social media use to mood disorders.⁵¹ The correlation is curvilinear: social media use from 0–2 hours does not result in an increase in poor mental health, but as usage increases to 3–4 hours, the increase in mental illness

⁴⁴ Wells et al., *supra* note 12.

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ Researchers compared the time period before teens were daily users of social media to 2019, the last full year before COVID-19 escalated social media use and mental health disorders. *S. 797 Hearing, supra* note 10, at 3 (statement of Prof. Jonathan Haidt); *see also* Jean M. Twenge, Thomas E. Joiner, Megan L. Rogers & Gabrielle N. Martin, *Increases in Depressive Symptoms, Suicide-Related Outcomes, and Suicide Rates Among U.S. Adolescents After 2010 and Links to Increased New Media Screen Time*, 6 *CLINICAL PSYCH. SCI.* 3, 8 & fig.1 (2017) (noting that “[b]etween 2009/2010 and 2015, 33% more adolescents exhibited high levels of depressive symptoms . . . , and 31% more died by suicide,” a trend largely driven by the dramatic increase in depressive symptoms among women).

⁴⁸ Jean M. Twenge, A. Bell Cooper, Thomas E. Joiner, Mary E. Duffy, Sarah G. Binau, *Age, Period, and Cohort Trends in Mood Disorder Indicators and Suicide Related Outcomes in a Nationally Representative Dataset, 2005–2017*, 128 *J. ABNORMAL PSYCH.* 185, 188 (2019).

⁴⁹ Mood disorders specifically include depression and anxiety. Yvonne Kelly, Afshin Zilanawala, Cara Booker & Amanda Sacker, *Social Media Use and Adolescent Mental Health: Findings from the UK Millennium Cohort Study*, 6 *ECLINICAL MED.* 59, 62–63 (2019).

⁵⁰ Jean M. Twenge & Gabrielle N. Martin, *Gender Differences in Associations Between Digital Media Use and Psychological Well-Being: Evidence from Three Large Datasets*, 79 *J. ADOLESCENCE* 91, 100 (2020).

⁵¹ Haidt & Twenge, *Social Media and Mental Health, supra* note 42, at § 1.1 (collecting sources indicating an association between social media use and poor mental health outcomes).

sharply rises.⁵² Importantly, researchers do not link this trend to more willingness to self-diagnose or overdiagnosis.⁵³

There are publications expressing skepticism about the link between social media use and mental health.⁵⁴ One widely cited study used statistics to determine social media harmfulness on teen mental health was negligible, is independent of other effects, and is “too small to warrant policy change.”⁵⁵ This study, however, was challenged for making certain analytical decisions that resulted in lower effects than other analyses on the same dataset.⁵⁶ Increasingly, researchers, including many original skeptics, agree that a statistically significant correlation exists for the relationship between social media use and well-being.⁵⁷

Lawsuits against social media companies focus on their designs, claiming an active, not passive, influence of these platforms on mental health.⁵⁸ For minors, algorithms “exploit users’ diminished decisionmaking capacity, impulse control, emotional maturity, and psychological resiliency.”⁵⁹ Minors and their parents all too often fail to appreciate the impact of addictive platforms on a developing brain.⁶⁰ In fact, much of this population only learned of these harms following the congressional hearings and Frances Haugen’s testimony, even though research uncovered these effects years earlier.⁶¹

II. THE IMPORTANCE AND LIMITATIONS OF MENTAL HEALTH PRODUCT

⁵² Jean M. Twenge, Andrew B. Blake, Jonathan Haidt & W. Keith Campbell, *Commentary: Screens, Teens, and Psychological Well-Being: Evidence From Three Time-Use-Diary Studies*, 11 FRONTIERS PSYCH. 1, 1–2 & fig.1 (2020); Haidt & Twenge, *Social Media and Mental Health*, *supra* note 42, at 218 (quoting Sunkyung Yoon, Mary Kleinman, Jessica Mertz & Michael Brannick, *Is Social Network Site Usage Related to Depression? A Meta-Analysis of Facebook-Depression Relations*, 248 J. AFFECTIVE DISORDERS 65, 65 (2019)); *S. 797 Hearing*, *supra* note 10, at 5 (statement of Prof. Jonathan Haidt).

⁵³ *See S. 797 Hearing*, *supra* note 10, at 5 (statement of Prof. Jonathan Haidt).

⁵⁴ *See, e.g.*, Amy Orben & Andrew K. Przybylski, *The Association Between Adolescent Well-Being and Digital Technology Use*, 3 NATURE HUM. BEHAV. 173 (2019).

⁵⁵ *Id.* at 175; *S. 797 Hearing*, *supra* note 10, at 7 (statement of Prof. Jonathan Haidt).

⁵⁶ Jean M. Twenge, Jonathan Haidt, Thomas E. Joiner & W. Keith Campbell, *Understanding Digital Media Harm*, 4 NATURE HUM. BEHAV. 346, 346 (2020).

⁵⁷ Haidt & Twenge, *Social Media and Mental Health*, *supra* note 42, at 218 (quoting Yoon et al., *supra* note 52, at 65); *S. 797 Hearing*, *supra* note 10, at 7 (statement of Prof. Jonathan Haidt); Amy Orben, *Teenagers, Screens and Social Media: A Narrative Review of Reviews and Key Studies*, 55 SOC. PSYCHIATRY & PSYCHIATRIC EPIDEMIOLOGY 407, 409 (2020).

⁵⁸ *See infra* Section II.B.

⁵⁹ *Complaint, Murden*, *supra* note 22, at 9.

⁶⁰ *Id.* at 5.

⁶¹ *Id.*

LIABILITY LAWSUITS

Empirical studies and the Senate hearings led to countless lawsuits alleging various harms caused by social media platforms.⁶² In these lawsuits, plaintiffs seek redress under a product liability theory for both physical harm⁶³ and mental health harm.⁶⁴ These theories are complicated by statutory restrictions on holding companies liable for the content on their platforms. In 2023, for example, the Supreme Court held that plaintiffs could not use the Antiterrorism Act to find social media companies liable for aiding and abetting a terrorist attack.⁶⁵ This setback does not, however, suggest that there has been no success in imposing liability on social media companies. The year prior, an appeals court reversed dismissal of the complaint in *Lemmon v. Snap, Inc.*—where plaintiffs used product liability theory to vindicate the death of minors in a car accident.⁶⁶ Now, lower courts are flooded with product liability actions alleging harms caused to adolescent mental health by social media platforms.⁶⁷

After addressing Section 230 of the Communications Decency Act and these different types of lawsuits, this Part considers how Section 230 and the *Lemmon* decision are important, but not dispositive, for the mental health product liability lawsuits. This Part then considers the limitations of the judicial system for mental health claims.

A. Section 230 of the Communications Decency Act

Section 230 of the Communications Decency Act (“CDA”), passed in 1996, protects “interactive computer services” from being treated as publishers or speakers of third-party content.⁶⁸ Thus, social media companies

⁶² *E.g., In re Soc. Media Adolescent Addiction/Pers. Inj. Prod. Liab. Litig. (Adolescent Social Media Product Liability Cases)*, 637 F. Supp. 3d 1377 (J.P.M.L. 2022) (mem.).

⁶³ *Lemmon v. Snap, Inc.*, 995 F.3d 1085, 1087 (9th Cir. 2021).

⁶⁴ *Adolescent Social Media Product Liability Cases*, 637 F. Supp. 3d at 1378.

⁶⁵ *Twitter, Inc. v. Taamneh*, 598 U.S. 471, 478 (2023). The Antiterrorism Act imposes civil liability on “any person who aids and abets, by knowingly providing substantial assistance, or who conspires with the person who committed such an act of international terrorism.” *Id.* (quoting 18 U.S.C. § 2333).

⁶⁶ *Lemmon*, 995 F.3d at 1087. On remand, the district court denied defendants’ motion to dismiss, holding that the plaintiffs “adequately alleged that the design of” a Snapchat camera filter that displayed the users’ real-time speed “encouraged Plaintiffs to engage in reckless driving.” *Lemmon v. Snap, Inc.*, No. CV 19-4504-MWF (KSx), 2022 WL 1407936, at *1 (C.D. Cal. Mar. 31, 2022).

⁶⁷ *Adolescent Social Media Product Liability Cases*, 637 F. Supp. 3d at 1377 (consolidating twenty-eight cases across seventeen districts and noting that fifty-six cases across twenty-four districts arose since the consolidation of the case).

⁶⁸ 47 U.S.C. § 230(c)(1). An interactive computer service is “any information service, system, or access software provider that provides or enables computer access by multiple users to a computer server” which courts have interpreted to include providers like Google

use Section 230 as a defense to lawsuits involving third party content on their apps.⁶⁹ While the product liability lawsuits discussed in Section II.B attempt to circumvent Section 230 altogether, Section 230 will still likely be used as a defense by social media companies.⁷⁰ Courts largely interpret Section 230 to create immunity for those who provide access to content but not those who create content.⁷¹ Yet lawmakers now question the viability of this interpretation given the way platforms can manipulate content provided to users.⁷²

In 2023, the Supreme Court declined to rule on the scope of Section 230.⁷³ In *Gonzalez v. Google*,⁷⁴ plaintiffs claimed that platforms' algorithms constitute content creation and should not enjoy Section 230 immunity.⁷⁵ The argument followed that Google, through its YouTube platform, was directly and secondarily liable for the murders in two ISIS terrorist attacks.⁷⁶ The Supreme Court did not reach a conclusion on this matter—the Justices remanded the case based on their decision in *Twitter v. Taamneh*.⁷⁷ Even if *Twitter* survived and the Court reached the merits on *Gonzalez*, it is unlikely that the case would revolutionize Section 230. In oral argument, Justice Kagan agreed that Section 230 is a “pre-algorithmic” statute, but questioned

and Facebook. 47 U.S.C. § 230(f)(2); VALERIE C. BRANNON & ERIC N. HOLMES, CONG. RSCH. SERV., R46751, SECTION 230: AN OVERVIEW 3 (2021). Section 230 also has a “Good Samaritan” provision that is outside the scope of this Note. This provision provides immunity to platforms when they moderate content in good faith, with the intent of creating safer online environments. 47 U.S.C. § 230(c)(2); Sabine Neschke, Danielle Draper, Sean Long, Sameer Ali & Tom Romanoff, *Gonzalez v. Google: Implications for the Internet's Future*, BIPARTISAN POL'Y CTR. (Nov. 29, 2022), <https://bipartisanpolicy.org/blog/gonzalez-v-google> [<https://perma.cc/P8L4-LL2W>].

⁶⁹ BRANNON & HOLMES, *supra* note 68, at 42.

⁷⁰ *See infra* Section II.B.

⁷¹ BRANNON & HOLMES, *supra* note 68, at 1.

⁷² *Id.* at 30. In 2021, Congress introduced twenty-six bills to repeal, revise, or narrow Section 230 requirements. *Id.*

⁷³ *Id.* at 21.

⁷⁴ 2 F.4th 871, 890 (9th Cir. 2021), *vacated and remanded*, 598 U.S. 617 (2023) (*per curiam*).

⁷⁵ *Id.* at 890.

⁷⁶ *Id.* at 880.

⁷⁷ 598 U.S. 471 (2023). *Gonzalez*, 598 U.S. at 622 (finding that “plaintiffs’ complaint— independent of Section 230—states little if any claim for relief” because “the allegations underlying their secondary-liability claims are materially identical to those at issue in *Twitter*”). The Ninth Circuit remanded the case to the district court for further proceedings. *Gonzalez v. Google, LLC*, 71 F.4th 1200, 1202 (9th Cir. 2023). In *Twitter*, the Justices found that plaintiffs failed to state a claim because the social media companies—Twitter, Google, and Facebook—did not meet the standard set forth by the Court for “aiding and abetting” under the Antiterrorism Act. 598 U.S. at 478, 506.

whether YouTube’s recommendations are truly more influential than any other generic internet algorithm.⁷⁸

B. *Product Liability Theory and Mental Health Disorders*

Prior to the Supreme Court’s remand of *Gonzalez*, the Ninth Circuit ruled on another social media case based on a theory of product liability in *Lemmon v. Snap, Inc.*⁷⁹ In *Lemmon*, the surviving parents of two minors sued Snap after their sons’ death in a car accident.⁸⁰ Plaintiffs accused Snap of negligently designing their product, Snapchat, with a design defect: Snap’s reward system and a speed filter on the app.⁸¹ The parents alleged that Snap’s speed filter encouraged their children to drive at dangerous speeds, thus causing the boys’ deaths through this negligent design.⁸² The Ninth Circuit found that Section 230 does not immunize the defendant in a product liability lawsuit because companies are being sued not as publishers of content, but for the consequences of their design that encouraged dangerous behavior.⁸³

The mental health product liability suits against social media companies use a similar theory to *Lemmon*, alleging that platforms are responsible for their defective design.⁸⁴ Plaintiffs are using product liability claims to circumvent Section 230.⁸⁵ They are not trying to hold technology companies responsible for third party content, but for their own poor design.⁸⁶ Since Frances Haugen’s testimony and the subsequent congressional hearings, plaintiffs filed hundreds of product liability claims against social media companies alleging harm to mental health.⁸⁷

⁷⁸ Oral Argument at 9, *Gonzalez v. Google LLC*, 598 U.S. 617 (2023) (per curiam).

⁷⁹ 995 F.3d 1085, 1092 (9th Cir. 2021).

⁸⁰ *Id.* at 1087.

⁸¹ *Id.* at 1092.

⁸² *Id.*

⁸³ *Id.* at 1093 (“The duty to design a reasonably safe product is fully independent of Snap’s role in monitoring or publishing third-party content.”); Isaiah Portiz, *Tech’s Online Content Shield Dented by Product Liability Claims*, BLOOMBERG L. (July 22, 2022, 4:55 AM), <https://news.bloomberglaw.com/tech-and-telecom-law/techs-online-content-shield-dented-by-product-liability-claims> [<https://perma.cc/L8T2-P7M4>].

⁸⁴ See Plaintiffs’ Master Complaint (Personal Injury) at 2–3, *Adolescent Social Media Product Liability Cases*, 637 F. Supp. 3d 1377 (J.P.M.L. 2022) (mem.). Defendants in this MDL are Meta, Snap, ByteDance (owner of TikTok), and Google (owner of YouTube). *Id.* at 9–10.

⁸⁵ Complaint at 25, *Levin v. Meta Platforms, Inc.*, No. 4:22-cv-06263, (N.D. Cal. filed Oct 20, 2022) (“Plaintiff’s claims arise from Defendants’ status as the designer and marketer of dangerously defective social media products, not as the speaker or publisher of third-party content. . . . Plaintiff is not alleging that Defendant is liable for what third-parties have said, but for what Defendants did or did not do.”).

⁸⁶ See Initial Case Management Statement at 4, *Adolescent Social Media Product Liability Cases*, 637 F. Supp. 3d 1377 (J.P.M.L. 2022) (mem.).

⁸⁷ See *supra* note 32 and accompanying text.

*Murden v. Meta Platforms, Inc.*⁸⁸ exemplifies the theory in these product liability cases. In *Murden*, the plaintiff alleges she engaged in problematic use of Meta platforms, driven by their addictive design, which led to injuries including an eating disorder, depression, body dysmorphia, severe anxiety, suicidal ideation, self-harm, and reduced ability to sleep.⁸⁹ Murden claims that Meta designs its products to “maximize screen time using complex algorithms designed to exploit human psychology.”⁹⁰ Murden echoes the Facebook Files by arguing that Meta progressively made its product more addictive with the knowledge that this use creates self-destructive behaviors.⁹¹ The suit alleges several theories of liability including defective design, failure to warn, manufacturing defect, and negligent design.⁹² The complaint argues that the defendant’s defective design of its social media product renders the product “not reasonably safe for ordinary consumers in general and minors in particular” and further contends that it is technologically feasible to design the product in a way that would decrease this harm.⁹³

A Multi-District Litigation (“MDL”) Panel reviewed cases, including *Murden*, with similar allegations against the same defendants and found the actions involved common questions of fact proper for consolidation.⁹⁴ Only twenty cases were pending when the motion to consolidate these cases was filed.⁹⁵ By March 2024, hundreds of cases have been transferred to the Northern District of California under the same question of fact.⁹⁶ Plaintiffs submitted a master complaint in March 2023 and the cases will be litigated throughout the coming years.⁹⁷

⁸⁸ No. 4:22-CV-05889 (N.D. Cal. Feb. 5, 2024).

⁸⁹ Complaint, *Murden*, *supra* note 22, at 22.

⁹⁰ *Id.* at 3; *see also* Plaintiffs’ Master Complaint (Personal Injury), *Adolescent Social Media Product Liability Cases*, *supra* note 84, at 19–24.

⁹¹ Complaint, *Murden*, *supra* note 22, at 3; *see supra* text accompanying note 30.

⁹² *See* Complaint, *Murden*, *supra* note 22, at 4. Plaintiff also brings claims of negligent misrepresentation, fraudulent concealment, conspiracy to commit fraud, unjust enrichment, violation of unfair trade practices and consumer protection laws, breach of express warranty, breach of an implied warranty of merchantability, fitness for a particular purpose, intentional infliction of emotional distress, negligent infliction of emotional distress, negligent failure to recall or retrofit, and medical monitoring. *Id.* at 58–88.

⁹³ *Id.* at 4; *see also* Plaintiffs’ Master Complaint (Personal Injury), *Adolescent Social Media Product Liability Cases*, *supra* note 84, at 238–39.

⁹⁴ *See* Transfer Order at 1, 2, *Adolescent Social Media Product Liability Cases*, 637 F. Supp. 3d 1377 (J.P.M.L. 2022) (mem.).

⁹⁵ Conditional Transfer Order (CTO-4), *Adolescent Social Media Product Liability Cases*, 637 F. Supp. 3d 1377 (J.P.M.L. 2022) (mem.).

⁹⁶ *Id.*

⁹⁷ Plaintiffs’ Master Complaint (Personal Injury), *Adolescent Social Media Product Liability Cases*, *supra* note 84, at 3 (explaining the master complaint is an administrative device, setting forth potential claims and facts individual plaintiffs may use in the multidistrict

C. *The Limitations of a Judicial Remedy to Social Media Harms*

The legal landscape around social media platforms will continue to evolve—for precisely this reason, the courts are an insufficient remedy for the harm caused by social media companies.⁹⁸ Since the remand of *Gonzalez*, there is little indication of the role Section 230 will play in the mental health product liability suits.⁹⁹ This lack of clarity may be irrelevant because, like *Lemmon*, these suits are based on a theory of liability that distinguishes them from “normal” Section 230 cases.¹⁰⁰ Further, even though the *Lemmon* Court found that Section 230 does not immunize platforms in product liability lawsuits, the new product liability cases allege mental, rather than physical, harm.¹⁰¹ Positive judicial outcomes are more difficult to achieve in cases seeking remedies for mental health disorders.¹⁰² For these reasons, the judicial system fails to provide an effective remedy to the extensive harm caused by social media platforms.

i. *Section 230 and the Pending Mental Health Product Liability Cases*

Section 230 may not be limiting for the product liability cases because they are premised on the whole design of these platforms, not just their algorithms.¹⁰³ Complaints cite, for example, the number of posts featured on a site, “like” features, and autoplay videos but specifically exclude third-party content as cause for damages.¹⁰⁴ *Gonzalez*—before remand—argued algorithms caused harm in relation to third-party content, while the product liability cases argue features of these apps cause harm regardless of third-

proceedings against defendants); *In re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation* (MDL No. 3047), U.S. DIST. CT. N. DIST. OF CAL., <https://www.cand.uscourts.gov/in-re-social-media-adolescent-addiction-personal-injury-products-liability-litigation-mdl-no-3047/> [<https://perma.cc/4EXV-TF4E>].

⁹⁸ *E.g.*, *Gonzalez v. Google LLC*, 598 U.S. 617 (2023); *Adolescent Social Media Product Liability Cases*, 637 F. Supp. 3d 1377 (J.P.M.L. 2022) (mem.).

⁹⁹ *See infra* Section II.C.

¹⁰⁰ *Lemmon v. Snap, Inc.*, 995 F.3d 1085, 1092 (9th Cir. 2021); Initial Case Management Statement, *Adolescent Social Media Product Liability Cases*, *supra* note 86, at 4.

¹⁰¹ Katheryn Hayes Tucker, *Beasley Allen Files Series of Meta Product Liability Lawsuits, Stressing Impact on Children’s Mental Health*, LAW.COM (June 9, 2022, 8:23 PM), <https://www.law.com/dailyreportonline/2022/06/09/beasley-allen-files-series-of-meta-products-liability-lawsuits-stressing-impact-on-childrens-mental-health/> [<https://perma.cc/VSX6-6UU4>]; *see, e.g.*, Complaint, *Murden*, *supra* note 22, at 22 (alleging harms including an eating disorder, depression, body dysmorphia, severe anxiety, multiple periods of suicidal ideation, self-harm, and a reduced ability to sleep).

¹⁰² *See infra* Section II.C.

¹⁰³ *See* Complaint, *Murden*, *supra* note 22, at 23–92 (describing twenty causes of action related to products liability); Plaintiffs’ Master Complaint (Personal Injury), *Adolescent Social Media Product Liability Cases*, *supra* note 84, at 2–3.

¹⁰⁴ Complaint, *Levin*, *supra* note 85, at 9, 25.

party content.¹⁰⁵ In *Murden*, the complaint focuses on the plaintiff's behavior that developed as a result of Meta's addictive technological design. In contrast, *Gonzalez* focused on, among other allegations, YouTube's recommendation of ISIS videos to users.¹⁰⁶

The product liability cases are more similar to the theories presented in *Lemmon*, which focused on Snap as a product manufacturer.¹⁰⁷ The Ninth Circuit found this distinction means Section 230 does not provide immunity, which is important for the consolidated mental health product liability cases.¹⁰⁸ Limitations of Section 230 will be informative but not determinative of the mental health product liability cases' outcomes because these cases are more analogous to *Lemmon*.¹⁰⁹

ii. Difficulty of Proving Mental Health Damages

While *Lemmon* may be influential, the difference in damages in the mental health actions presents another challenge. *Lemmon* stems from a case resulting in physical damages: the death of the involved plaintiffs.¹¹⁰ History indicates hesitancy by courts to find significant damages for nonphysical claims—like harm from an eating disorder or depression—despite these disorders often manifesting physically.¹¹¹ Further, in product liability cases, plaintiffs can testify to their subjective distress as it relates to issues of pain and suffering or loss of enjoyment of life, but they are required to provide expert testimony for mental health disorders.¹¹² Expert testimony requires

¹⁰⁵ Initial Case Management Statement, *Adolescent Social Media Product Liability Cases*, *supra* note 86, at 2.

¹⁰⁶ Petition for Writ of Certiorari at 18, *Gonzalez v. Google LLC*, 598 U.S. 617 (2023) (mem.); Complaint, *Murden*, *supra* note 22, at 11.

¹⁰⁷ Initial Case Management Statement, *Adolescent Social Media Product Liability Cases*, *supra* note 86, at 2; *Lemmon v. Snap, Inc.*, 995 F.3d 1085, 1092 (9th Cir. 2021).

¹⁰⁸ *Lemmon*, 995 F.3d at 1095.

¹⁰⁹ *Id.* at 2.

¹¹⁰ *Lemmon*, 995 F.3d at 1087.

¹¹¹ For a brief history on the development of emotional damages claim in the American common law, see William E. Foote & Craig R. Lareau, *Psychological Evaluation of Emotional Damages in Tort Cases*, in 11 FORENSIC PSYCH. 173 (2d ed. 2012) (“Historically, not only have American courts been unreceptive to claims of emotional damages in the absence of physical impact or injury, but many have been openly hostile. . .”).

¹¹² Albert M. Drukteinis, *Understanding and Evaluating Mental Damages*, 24 PSYCHIATRIC TIMES (2007), <https://www.psychiatrictimes.com/view/understanding-and-evaluating-mental-damages> [<https://perma.cc/GB7H-4NG4>] (explaining that jurors can assess reasonableness of claims based on ordinary experience, but expert testimony is required for mental health disorders falling outside of the ordinary experience).

additional resources and creates yet another barrier to the judicial system when individuals experience harm from social media platforms.¹¹³

The difficulty of proving causation is also a barrier to mental health damages.¹¹⁴ Murden, for example, will need to demonstrate that her use of Meta products caused the injuries alleged.¹¹⁵ Causation involves not only a showing that injury resulted from defendant's product, but also that the harm caused was logically and significantly related to the use of these products.¹¹⁶ While the product liability lawsuits expertly detail research and specific factual allegations connecting defendants' products to harm, causation is a question of fact and can come out differently based on the jury.¹¹⁷ Relatedly, decisions on damages are jurisdiction specific because tort law is state dependent, reducing the possibility of consistent outcomes in these product liability cases.¹¹⁸ *Lemmon* suggests that Section 230 does not immunize defendants from product liability cases, but the difficulty of proving damages in mental health claims presents another barrier to plaintiffs seeking recovery.¹¹⁹

III. FEDERAL AND STATE LEGISLATIVE SOLUTIONS

The judicial system is an insufficient approach to the impact of social media on adolescent mental health.¹²⁰ Because of the uncertainty around the pending mental health product liability cases, legislation would be a more effective, proactive solution.¹²¹ Alongside the development of research and the increase in lawsuits, both Congress and the states considered several bills addressing the harms created by social media companies.¹²² This legislation

¹¹³ *Id.* Difficulty with providing expert testimony includes the assumption that all experts, like psychiatrists, are trained in providing evaluation for complex legal cases and the conflict a treating relationship creates with providing expert testimony.

¹¹⁴ *Id.*

¹¹⁵ Complaint, *Murden*, *supra* note 22, at 22.

¹¹⁶ Drukteinis, *supra* note 112.

¹¹⁷ Plaintiffs' Master Complaint (Personal Injury), *Adolescent Social Media Product Liability Cases*, *supra* note 84, at 26–35.

¹¹⁸ Drukteinis, *supra* note 112 (explaining some jurisdictions consider whether plaintiff exhibited an unusual sensitivity to the product in question); Foote & Lareau, *supra* note 111, at 172.

¹¹⁹ *Lemmon v. Snap, Inc.*, 995 F.3d 1085, 1095 (9th Cir. 2021).

¹²⁰ *See supra* Section II.

¹²¹ *See infra* Section IV.

¹²² *See e.g.*, Children and Teens' Online Privacy Protection Act, S. 1628, 117th Cong. (2022) (as introduced May 31, 2022); Kids Online Safety Act, S. 3663, 117th Cong. (2022); Platform Accountability and Consumer Transparency Act, S. 797, 117th Cong. (2021); A.B. 2273, 2022 Leg. (Cal. 2022) (enacted); S. 9563, 2021 Leg. (N.Y. 2021).

is promising, but fails to address many of the harms alleged in the mental health product liability suits.¹²³

There are two examples, one federally proposed bill and one state statute, targeting companies' algorithms and addictive designs: the Children and Teens' Online Privacy Protection Act ("CTOPPA")¹²⁴ and California's Age-Appropriate Design Code Act ("Cal-AADC").¹²⁵ While CTOPPA did not pass in the 117th Congress, it is examined as the Federal bill closest to addressing the harms described in the mental health product liability lawsuits and most comparable to the Cal-AADC.¹²⁶ After reviewing the most important provisions of the federal bill and California statute, these legislative solutions are analyzed for their ability to protect the health of adolescent users.¹²⁷ This Part also acknowledges First Amendment challenges that may affect these statutes.¹²⁸

A. *Children and Teens' Online Privacy Protection Act and California's Age-Appropriate Design Code*

CTOPPA aimed to amend the 1998 Children's Online Privacy Protection Act ("1998 COPPA") to strengthen protections around the disclosure of children and minors' personal information.¹²⁹ The 1998 COPPA only applies to (1) children under thirteen accessing websites *directed* at children or (2) websites with *actual* knowledge that they are collecting personal information from a child under thirteen.¹³⁰ CTOPPA, in contrast, requires only *constructive* knowledge that a user is a minor—a website operator can look to its own data to estimate the age range of a user.¹³¹ Before collecting personal data, such as geolocation or identification information, the bill requires verifiable *parental* consent for children—i.e., users below thirteen—and verifiable consent for minors—i.e., users thirteen

¹²³ See *infra* Section II.B.

¹²⁴ S. 1628.

¹²⁵ CAL. CIV. CODE § 1798.99.28 (West 2022).

¹²⁶ See *infra* Section III.A.

¹²⁷ See *infra* Section III.B.

¹²⁸ See *infra* Section III.C.

¹²⁹ S. 1628.

¹³⁰ *Children's Online Privacy Protection Rule ("COPPA")*, FED. TRADE COMM'N, <https://www.ftc.gov/legal-library/browse/rules/childrens-online-privacy-protection-rule-coppa> [<https://perma.cc/HF83-2Y5F>].

¹³¹ S. 1628 § 2(a)(2) (describes seven different approaches operators can use to determine whether a user is a minor expanding on the previous actual knowledge requirement). Interestingly, the constructive knowledge standard was removed when Senators aimed to get CTOPPA into the 2022 omnibus bill. See *Children and Teens' Online Privacy Protection Act*, S. 1628, 117th Cong. (2021) (as reported by S. Comm. on Com., Sci., and Transp., Dec. 15, 2022). For purposes of this Note, CTOPPA will be analyzed as originally introduced—in its "ideal" form.

to fifteen.¹³² The bill prohibits using this data for targeted marketing towards children and prohibits targeted marketing towards minors without verifiable consent.¹³³ Despite this promising language, Congress failed to include any federal bills strengthening online protections for minors in the fiscal year 2023 spending plan.¹³⁴

The Cal-AADC, signed by Governor Gavin Newsom in September 2022, focuses on protecting children’s privacy during data collection with extra provisions for harmful design features.¹³⁵ The Cal-AADC applies to all minors under eighteen and all online platforms “likely to be accessed” by minors, which is defined to include platforms where internal company research determines a significant amount of a product’s users are children.¹³⁶ Among other data privacy and assessment provisions,¹³⁷ the Cal-AADC has Section 1798.99.31(b)(1) (“Health Provision”) that prohibits an online service from using “the personal information of any child in a way that the business knows, or has reason to know, is materially detrimental to the physical health, mental health, or well-being of a child.”¹³⁸ For example, the Cal-AADC keeps companies from using automated processing of personal

¹³² S. 1628 §§ 3(a)(4)(9), 3(a)(6)(b)(18).

¹³³ *Id.* § 6(a).

¹³⁴ Sara Dorn, *Child Online Privacy Protections Cut from Congress’ Spending Bill Despite Last-Minute Push*, FORBES (Dec. 21, 2022, 4:08 PM), <https://www.forbes.com/sites/saradorn/2022/12/21/child-online-privacy-protections-cut-from-congress-spending-bill-despite-last-minute-push/?sh=525d1b193e95> [https://perma.cc/TY6S-UX4P].

¹³⁵ Press Release, Off. of Governor Gavin Newsom, Governor Newsom Signs First-in-Nation Bill Protecting Children’s Online Data and Privacy (Sept. 15, 2022), <https://www.gov.ca.gov/2022/09/15/governor-newsom-signs-first-in-nation-bill-protecting-childrens-online-data-and-privacy/> [https://perma.cc/J3S2-MMZM]. California’s version of the Age-Appropriate Design Code is largely modeled after the UK’s version by the same name. The UK bill came into effect in September 2020 and companies had a twelve-month grace period to comply with the requirements. Natasha Lomas, *UK Now Expects Compliance with Children’s Privacy Design Code*, TECH CRUNCH (Sept. 1, 2021, 7:01 PM), <https://techcrunch.com/2021/09/01/uk-now-expects-compliance-with-its-child-privacy-design-code/> [https://perma.cc/9QKT-YWPU]. Now that the Code is in effect, it applies to services likely to be accessed by children and prohibits companies from using data in a way that is detrimental to the well-being of children. *Code Standards*, INT’L COMM’RS OFFICE, <https://ico.org.uk/for-organisations/guide-to-data-protection/ico-codes-of-practice/age-appropriate-design-a-code-of-practice-for-online-services/code-standards/> [https://perma.cc/7P6S-G7C4].

¹³⁶ CAL. CIV. CODE § 1798.99.30(b)(1), (4) (West 2022). The Cal-AADC does not force companies to collect identification information on users. Rather, it allows companies to reasonably estimate users’ ages into “age bands”, which includes using their existing data on users. Camille Carlton, *Why the California Age Appropriate Design Code Is Groundbreaking*, CTR. FOR HUMANE TECH. (Sept. 29, 2022), <https://www.humanetech.com/insights/why-the-california-age-appropriate-design-code-is-groundbreaking> [https://perma.cc/2893-GH9L].

¹³⁷ See, e.g., CIV. § 1798.99.31(a)(1)–(10).

¹³⁸ *Id.* § 1798.99.31(b)(1).

information to predict user's interests—with this provision, using algorithms on children would be largely off limits.¹³⁹ The Cal-AADC has a special focus on health and well-being of minors: (1) it eliminates targeted advertising by prohibiting the sale of data to third parties, and (2) it establishes that if default algorithms affect the mental health of a child, those algorithms must be changed.¹⁴⁰

Advocating for transparency in platform moderation does not come without significant criticism.¹⁴¹ Critics believe platform moderation strategies would make moderation more difficult and could even threaten platform user security.¹⁴² These researchers argue that platforms should continue to give users tools to moderate content themselves, as each social media user is the responsible actor for any harm caused.¹⁴³ This argument may stand up for adult users, but what about adolescents? After the UK's Age-Appropriate Design Code passed, Meta noted that, while Instagram allows users to block certain ads, “young people may not be well equipped to make these decisions.”¹⁴⁴ Preventing targeted advertising and harmful algorithms for children takes the burden off adolescent users and places it on companies responsible for these harms.¹⁴⁵

B. *Promising but Insufficient Legislative Solutions*

Comparing CTOPPA and Cal-AADC reveals the strengths of each measure, the shortcomings of CTOPPA, and possible Cal-AADC improvements that would remedy other dangerous aspects of platforms. CTOPPA and the Cal-AADC share provisions that give less lenience to websites regarding knowledge of minor users (via the constructive knowledge standard),¹⁴⁶ forbid collection of minors' data for targeted

¹³⁹ *Id.* §§ 1798.99.30(b)(6), 1798.99.31(b)(2).

¹⁴⁰ Shana Lynch, *A New Law Designed for Children's Internet Safety Will Change the Web for Adults, Too*, STANFORD UNIV. HAI (Oct. 25, 2022), <https://hai.stanford.edu/news/new-law-designed-childrens-internet-safety-will-change-web-adults-too> [https://perma.cc/M256-UNYT].

¹⁴¹ Many critical commentators were invited to the Senate Judiciary Hearing on platform transparency. *See, e.g., S. 797 Hearing*, *supra* note 10, at 2 (statement of Jim Harper, Nonresident Senior Fellow, American Enterprise Institute).

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ Alex Hern, *TechScope: How the UK Forced Global Shift in Child Safety Policies*, GUARDIAN (Aug. 18, 2021, 6:44 AM), <https://www.theguardian.com/technology/2021/aug/18/uk-governments-child-safety-regulation-leads-to-global-policy-shifts> [https://perma.cc/648F-GJPX].

¹⁴⁵ *Id.*

¹⁴⁶ Children and Teens' Online Privacy Protection Act, S. 1628, 117th Cong. § 2(a)(2) (2022) (as introduced May 31, 2022); CAL. CIV. CODE § 1798.99.30(b)(4) (West 2022).

marketing,¹⁴⁷ and require simple display of privacy settings.¹⁴⁸ The constructive knowledge standard means these changes will benefit a larger percentage of young users.¹⁴⁹ This standard, importantly, does not mean companies must collect more data. Rather, a company can use data they already have, such as demographic user data.¹⁵⁰

The Cal-AADC exhibits several strengths beyond what has ever been proposed, let alone enacted, at a federal level.¹⁵¹ Unlike CTOPPA, Cal-AADC recognizes the importance of implementing privacy and transparency protections through age seventeen, instead of age fifteen¹⁵²—an important distinction given that mental illnesses like eating disorders onset during teenage years.¹⁵³ In the case of Olivia, described in this Note’s introduction, both CTOPPA and Cal-AADC would keep this minor from seeing targeted advertising on Instagram about diet plans, but Cal-AADC’s protections would not end when she turned sixteen.¹⁵⁴ Further, the Cal-AADC’s privacy-by-default approach means all settings are configured to the highest level of privacy for minors, a requirement CTOPPA does not include.¹⁵⁵

The Cal-AADC’s focus on mental health and well-being in its Health Provision attempts to address the adolescent mental health crisis.¹⁵⁶ This provision could remedy some of the addictive features cited in the mental health product liability cases.¹⁵⁷ For example, following implementation of the UK’s Age-Appropriate Design Code Act, YouTube turned on “break”

¹⁴⁷ S. 1628 § 6(a)(1)–(2); Civ. § 1798.99.31(b).

¹⁴⁸ S. 1628 § 8; Civ. § 1798.99.31(a)(7).

¹⁴⁹ More than forty percent of Instagram users are twenty-two or younger, comprising about twenty-two million of Instagram’s daily users. Wells et al., *supra* note 12. Tiktok classified more than a third of its users as under age fourteen. Raymond Zhong & Sheera Frenkel, *A Third of TikTok’s U.S. Users May Be 14 or Under, Raising Safety Question*, N.Y. TIMES (Sept. 17, 2020), <https://www.nytimes.com/2020/08/14/technology/tiktok-underage-users-ftc.html> [<https://perma.cc/36ZN-V7RJ>].

¹⁵⁰ Chloe Altieri & Kewa Jiang, *California Age-Appropriate Design Code Aims to Address Growing Concern About Children’s Online Privacy and Safety*, FUTURE OF PRIVACY FORUM (June 28, 2022), <https://fpf.org/blog/california-age-appropriate-design-code-aims-to-address-growing-concern-about-childrens-online-privacy-and-safety/> [<https://perma.cc/72PB-Z28Q>].

¹⁵¹ See sources cited *supra* note 122.

¹⁵² Compare Civ. § 1798.99.30(b)(1), with S. 1628 § 3(a)(19) (Cal-AADC defines children as ages under eighteen, while CTOPPA defines minors as ages twelve to sixteen and children as ages under eleven).

¹⁵³ Umberto Volpe, Alfonso Tortorella, Mirko Manchia, Alessio M. Monteleone, Umberto Albert & Palmiero Monteleone, *Eating Disorders: What Age at Onset?*, 238 PSYCHIATRY RSCH. 225, 225 (2016).

¹⁵⁴ Civ. § 1798.99.30(b)(1).

¹⁵⁵ Civ. § 1798.99.31(a)(6); Carlton, *supra* note 136.

¹⁵⁶ Civ. § 1798.99.31(b)(1); Plaintiffs’ Master Complaint (Personal Injury), *Adolescent Social Media Product Liability Cases*, *supra* note 84, at 19.

¹⁵⁷ Civ. § 1798.99.31(b)(1).

and “bedtime” reminders by default for users ages thirteen to seventeen, and TikTok stopped sending notifications at nighttime for teen users.¹⁵⁸

The Cal-AADC, however, has already been enjoined on constitutional grounds.¹⁵⁹ The lawsuit, filed by NetChoice,¹⁶⁰ points out a significant downfall of Cal-AADC’s Health Provision: the vagueness of the provision may not actually pressure companies to change the most dangerous parts of their platforms.¹⁶¹ Because it lacks even one example of dangerous design features, the Health Provision is an attempt, but far from a legislative solution, to protecting minors’ mental health by statute.¹⁶² In December 2023, the district court granted NetChoice’s motion for preliminary injunction enjoining the Cal-AADC, finding “that although the stated purpose of the Act—protecting children when they are online—clearly is important, NetChoice has shown that it is likely to succeed on the merits of its argument that the provisions of the [Cal-AADC] intended to achieve that purpose do not pass constitutional muster.”¹⁶³

C. First Amendment Issues that Arise When Regulating Social Media Companies

Any legislation in the United States regulating internet platforms will face constitutional challenges.¹⁶⁴ These hurdles are difficult to surpass—as

¹⁵⁸ Hern, *supra* note 144.

¹⁵⁹ NetChoice, LLC v. Bonta, No. 22-CV-08861-BLF, 2023 WL 6135551, *1 (N.D. Cal. Sept. 18, 2023); *see also* Complaint at 15–16, 19, NetChoice, LLC v. Bonta, No. 5:22-CV-08861 (N.D. Cal. filed Dec. 14, 2022) (BL, U.S. D. Dockets).

¹⁶⁰ NetChoice is an association of internet companies including, but not limited to, Google, Meta, and Twitter. *About Us*, NETCHOICE, <https://NetChoice.org/about/> [<https://perma.cc/DBF4-8LBX>].

¹⁶¹ Complaint, *NetChoice*, *supra* note 159, at 19.

¹⁶² Pia Ceres, *The US May Soon Learn What a ‘Kid-Friendly’ Internet Looks Like*, WIRED (Sept. 1, 2022 7:00 AM), <https://www.wired.com/story/california-aadc-kids-privacy-age-checks/> [<https://perma.cc/5N4M-M5BL>] (“Others worry that the bill’s ambiguities, including the age estimation clause, are too vague to be implemented at all. ‘My guess is it will probably just be ignored by tech companies,’ says Justin Brookman, the director of technology policy at nonprofit Consumer Reports.”).

¹⁶³ *NetChoice, LLC*, 2023 WL 6135551, at *1. California appealed the preliminary injunction to the Ninth Circuit. Kewa Jiang, *NetChoice v. Bonta: California Age-Appropriate Design Choice Act Update*, CAL. LAW. ASSOC. (Jan. 24, 2024), <https://calawyers.org/privacy-law/netchoice-v-bonta-california-age-appropriate-design-code-act-update/> [<https://perma.cc/FE48-HXMJ>].

¹⁶⁴ The First Amendment does not discriminate based on party: lawmakers from both Republican and Democratic led states have been faced with First Amendment challenges. Lauren Feiner, *Tech Industry Group Sues to Block California Law Designed to Protect Kids Online Over Free Speech Concerns*, CNBC (Dec. 14, 2022 3:33 PM), <https://www.cnbc.com/2022/12/14/tech-grojud-NetChoice-sues-to-block-california-kids-online-safety-law.html>; Will Oremus, *Want to Regulate Social Media? The First Amendment May Stand in the Way*, WASH. POST (May 30, 2022, 6:00 AM),

proven by NetChoice’s preliminarily successful argument that the Cal-AADC violates the First Amendment because it attempts to regulate content-based editorial decisions.¹⁶⁵ The courts will likely be grappling with First Amendment challenges to internet regulations for years.¹⁶⁶

The First Amendment does not completely bar speech regulation. There are some categories of speech, such as fighting words, that are outside of First Amendment protections.¹⁶⁷ California, for example, opposed NetChoice’s preliminary injunction by arguing that the Cal-AADC does not regulate speech or expressive conduct but rather regulates the collection and use of personal data—that is, companies’ business practices—and therefore does not violate the First Amendment.¹⁶⁸ Effective legislation will need to respond boldly to legal challenges and consider the Supreme Court’s recent decisions that overwhelmingly favor the First Amendment.¹⁶⁹ Different ways legislation can overcome constitutional issues, and more specifically First Amendment challenges, are beyond the scope of this Note.

IV. A FEDERAL AGE-APPROPRIATE DESIGN CODE ACT

The previous sections of this Note identified the mental health crisis facing American youth because of social media’s influence, the current litigation aiming to remedy this issue, and the proposed or passed legislation hoping to mitigate harm in the future.¹⁷⁰ Even though *Lemmon* successfully used product liability against social media companies, mental health damages are more difficult to prove and may still face Section 230 challenges.¹⁷¹ At the federal level, proposed legislation took some small

<https://www.washingtonpost.com/technology/2022/05/30/first-amendment-social-media-regulation/> [<https://perma.cc/8ZMG-6Y2H>].

¹⁶⁵ *NetChoice*, 2023 WL 6135551, at *24; Complaint, *NetChoice*, *supra* note 159; *see also* Feiner, *supra* note 164.

¹⁶⁶ For example, the Fifth and Eleventh Circuits arrived at different conclusions regarding whether regulating social media platforms violated the First Amendment. Peter Brown, *Fifth and Eleventh Circuits Clash on Free Speech and Social Media*, N.Y.L.J. (Oct. 7, 2022 11:00 AM), <https://www.law.com/newyorklawjournal/2022/10/07/fifth-and-eleventh-circuits-clash-on-free-speech-and-social-media/> [<https://perma.cc/SU3S-PNLQ>].

¹⁶⁷ Douglas W. Vick, *The Internet and the First Amendment*, 61 MODERN L. REV. 415, 416 (1998).

¹⁶⁸ Bonta Opposition at 11, *NetChoice, LLC v. Bonta*, No. 5:22-CV-08861 (N.D. Cal. filed Dec. 14, 2022) (BL, U.S. D. Dockets). California also maintains that even if the Cal-AADC regulates content, the statute survives strict scrutiny. *Id.* at 19.

¹⁶⁹ Julia Zorthian, *Washington Wants to Regulate Facebook’s Algorithm. That Might Be Unconstitutional*, TIME (Oct. 13, 2021), <https://time.com/6106643/facebook-algorithm-regulation-legal-challenge/> [<https://perma.cc/4P5U-8Q6M>]; *see, e.g.*, *Janus v. Am. Fed’n of State, Cnty., & Mun. Emps.*, Council 31, 138 S. Ct. 2448 (2018); *Citizens United v. Fed. Election Comm’n*, 558 U.S. 310 (2010).

¹⁷⁰ *See supra* Parts I–III.

¹⁷¹ Drukteinis, *supra* note 112.

steps towards creating a safer Internet for children and teens, but all bills failed to pass with the 117th Congress.¹⁷² The Cal-AADC is an effective solution to many of the damages in the mental health product liability lawsuits, but the Health Provision may be too vague to create change.¹⁷³

Beyond the lack of judicial and legislative remedies to harm, there is an economic motivation for keeping social media design the same. This Part will first discuss social media companies' financial incentives that necessitate legislative involvement.¹⁷⁴ A Federal Age-Appropriate Design Code Act ("Fed-AADC") is necessary to combat the detrimental influence of social media platforms. The Fed-AADC can be largely based on the Cal-AADC, which also includes some elements of CTOPPA, but must provide more specifics on adapting social media platforms to protect minors' mental health, looking to the product liability lawsuits to create these provisions.¹⁷⁵

A. *Market Incentives Driving Addictive Platform Design*

Market incentives are not sufficient to pressure social media companies to change their design.¹⁷⁶ These platforms profit by selling user data to advertising companies and allowing these companies to generate thousands of targeted ads.¹⁷⁷ As several of the mental health product liability suits allege, these platforms also profit by increasing total time spent on the application, which in turn increases the amount of negative content a user is shown.¹⁷⁸ More than forty percent of Instagram users are twenty-two years old and younger, with about twenty-two million teens logging onto Instagram daily.¹⁷⁹ Expanding the amount of young users is, therefore, essential to platforms' annual revenue.¹⁸⁰ The *Murden* complaint summarizes this concept well: "Defendants' advertising profits are directly

¹⁷² See sources cited *supra* note 122.

¹⁷³ See *supra* Section III.B.

¹⁷⁴ See *infra* Section IV.A.

¹⁷⁵ Children and Teens' Online Privacy Protection Act, S. 1628, 117th Cong. (2022) (as introduced May 31, 2022); CAL. CIV. CODE § 1798.99.28 (West 2022); Plaintiffs' Master Complaint (Personal Injury) at 19, *Adolescent Social Media Product Liability Cases*, No. MDL 3047, 2022 WL 5409144 (U.S. Jud. Pan. Mult. Lit. Oct. 6, 2022).

¹⁷⁶ Robert H. Frank, *The Economic Case for Regulating Social Media*, N.Y. TIMES (Feb. 11, 2021), <https://www.nytimes.com/2021/02/11/business/social-media-facebook-regulation.html> [<https://perma.cc/D64N-7HRT>] ("As the developers concede, Facebook's algorithms are addictive by design and exploit negative emotional triggers . . . Platform addiction drives earnings . . .").

¹⁷⁷ Tom Muha, *Social Media Prioritizes Profit Over People*, MICH. DAILY (Oct. 9, 2022), <https://www.michigandaily.com/opinion/social-media-prioritizes-profit-over-people/> [<https://perma.cc/T4VG-FE2M>].

¹⁷⁸ See, e.g., Plaintiffs' Master Complaint (Personal Injury), *supra* note 84, at 5.

¹⁷⁹ Wells et al., *supra* note 12.

¹⁸⁰ *Id.*

tied to the amount of time that its users spend online. Thus, defendants enhance advertising revenue by maximizing users' time online through a product design that addicts them to the platform"¹⁸¹

Retail companies, unlike social media platforms, respond to market pressures because their revenue is driven by direct consumer purchases.¹⁸² For example, some stores recently revealed more inclusive mannequins because they learned that body representation leads to higher profits.¹⁸³ Platforms profit from third parties and engagement, not their direct users, so they have less incentive to remove harmful content.¹⁸⁴ Critics of this viewpoint argue consumer demand will create algorithmic transparency, perhaps similar to the way customers forced inclusivity in clothing brands.¹⁸⁵ This argument, however, falls apart when considering the way these platforms operate—the more addictive and engaging their content is, the better.¹⁸⁶ The conflict between public safety and loss of profits will always be resolved in favor of profit for these companies, thus congressional action is necessary.¹⁸⁷

B. *A Federal Age-Appropriate Design Code Act Modified from the*

¹⁸¹ Complaint, *Murden*, *supra* note 22, at 12. The Master Complaint also cites this issue: “Adolescents and children are central to the Defendants’ business models. These age groups are highly connected to the Internet, more likely to have social media accounts, and more likely to devote their downtime to social media usage.” Plaintiffs’ Master Complaint (Personal Injury), *supra* note 84, at 3.

¹⁸² Kate Taylor, *Nike’s Controversial Plus-Size Mannequin is a Brilliant Business Decision*, BUS. INSIDER (June 12, 2019 2:26 PM), <https://www.businessinsider.com/nikes-plus-size-mannequin-is-a-brilliant-business-decision-2019-6> [<https://perma.cc/9LJN-A9R4>] (explaining how inclusivity can “pay off” for Nike).

¹⁸³ *Id.*; Nadra Nittle, *Selling Plus-Size Clothing Isn’t Only About Pleasing Shoppers*, BBC (Nov. 2, 2020), <https://www.bbc.com/worklife/article/20200211-selling-plus-size-clothing-isnt-only-about-pleasing-shoppers> [<https://perma.cc/38CE-5DPX>]; Lauren Thomas, *Old Navy Overhauls Plus-Size Fashion Line for Women to Win Sales in \$32 Billion Market*, CNBC (Aug. 18, 2021 6:00 AM), [https://www.cnbc.com/2021/08/18/old-navy-overhauls-plus size-womens-fashion-in-32-billion-us-market.html](https://www.cnbc.com/2021/08/18/old-navy-overhauls-plus-size-womens-fashion-in-32-billion-us-market.html) [<https://perma.cc/AB5X-CJA3>].

¹⁸⁴ Donie O’Sullivan, Clare Duffy & Sarah Jorgensen, *Instagram Promoted Pages Glorifying Eating Disorders to Teen Accounts*, CNN (Oct. 4, 2021 7:28 PM), <https://www.cnn.com/2021/10/04/tech/instagram-facebook-eating-disorders/index.html> [<https://perma.cc/3ZA5-KDH3>].

¹⁸⁵ *S. 797 Hearing*, *supra* note 10, at 19 (statement of Jim Harper, Nonresident Senior Fellow, American Enterprise Institute) (“I see no reason why consumer demand cannot press platforms likewise to be good stewards of their communities in any sense that matters.”).

¹⁸⁶ Frank, *supra* note 176; Sara Brown, *The Case for New Social Media Business Models*, MIT MGMT. SLOAN SCH. (June 16, 2021), <https://mitsloan.mit.edu/ideas-made-to-matter/case-new-social-media-business-models> [<https://perma.cc/SJ6R-HH8Y>].

¹⁸⁷ *Whistleblower Testimony*, *supra* note 31, at 4 (statement of Frances Haugen).

Cal-AADC

Both the knowledge of the harmful effects of social media platforms and the uncertainty of judicial outcomes require legislative action.¹⁸⁸ While recent legislation in some states attempts an outright ban on social media for children under a certain age, this approach faces an even steeper constitutional battle than the Cal-AADC and ignores the undeniable fact that adolescents will access these platforms anyway.¹⁸⁹ A Federal Age-Appropriate Design Code Act accepts that children will be engaged in a digital world but protects them as they do so. The Cal-AADC includes many provisions that federal legislation must mimic to successfully protect children against social medias' harms.¹⁹⁰ A Fed-AADC should apply to users through age seventeen, forbid collection of data for targeted advertising, and turn on highest privacy settings by default.¹⁹¹ For protections over personal data and privacy-by-default settings, the Fed-AADC should not allow any users under sixteen to consent to changes—while teenage brains are still developing, older adolescents should be allowed some agency.¹⁹²

When requiring companies to determine the age of their users, a Fed-AADC must also use a constructive knowledge standard.¹⁹³ This standard assures more minors through age seventeen enjoy the strictest privacy when using social platforms, which in turn keeps their data away from advertisers and out of algorithms.¹⁹⁴ These privacy protections would have directly affected plaintiffs in the mental health product liability suits because they all began using social media as minors.¹⁹⁵ Finally, the Fed-AADC must include a similar provision to the Cal-AADC that addresses the conflict between profit and well-being—the Cal-AADC requires companies to prioritize the

¹⁸⁸ *S. 797 Hearing*, *supra* note 10, at 11 (statement of Prof. Jonathan Haidt).

¹⁸⁹ See Natasha Singer, *DeSantis Signs Social Media Bill Barring Accounts for Children Under 14*, N.Y. TIMES (Mar. 25, 2024), <https://www.nytimes.com/2024/03/25/business/florida-social-media-ban-desantis.html> [<https://perma.cc/3KKB-E8PM>] (“Florida . . . became the first state to effectively bar residents under the age of 14 from holding accounts on services like TikTok and Instagram . . . The new [] measure is almost certain to face constitutional challenges over young people’s rights to freely seek information and companies’ rights to distribute information.”).

¹⁹⁰ See *supra* Section III.B.

¹⁹¹ See CAL. CIV. CODE §§ 1798.99.31(a)(6), (b) (West 2022).

¹⁹² See Complaint, *Murden*, *supra* note 22, at 3; Children and Teens’ Online Privacy Protection Act, S. 1628, 117th Cong. § 6(a)(B) (2022) (as introduced May 31, 2022).

¹⁹³ This approach was already recognized in CTOPPA as introduced, indicating federal legislators’ willingness to put the burden on companies for determining the age of their users. S. 1628 § 2(a)(2).

¹⁹⁴ S. 1628 § 2(a)(2); CIV. § 1798.99.30(b)(4).

¹⁹⁵ Plaintiffs’ Master Complaint (Personal Injury), *supra* note 84, at 7.

well-being of children over commercial interests.¹⁹⁶ This provision establishes a level of fiduciary care from platforms to minors that disincentivizes the prioritization of profit over well-being.¹⁹⁷ The sample Fed-AADC legislation in this Section gives examples of how companies can make changes pursuant to this requirement.

The Fed-AADC should also include certain specificities left out by the Cal-AADC. Specifically, the Federal version of this legislation should expand on California's Health Provision, which is an attempt to protect minors' mental health and well-being.¹⁹⁸ This provision, however, does not identify what companies need to change to meet this requirement, such as aspects of the platforms' design that negatively impact young users.¹⁹⁹ Evident from the Facebook Files, companies like Meta are aware that their algorithms are detrimental to users' mental health, but including the Health Provision from Cal-AADC in a federal statute is too vague to result in effective design changes.²⁰⁰ Algorithms, as well as features like a "discover page" and autoplay, drive profit for these companies, and Congress should include these examples in a Health Provision.²⁰¹ This Note recommends that Congress specifically considers the allegations in the mental health product liability suits to include a more expansive Health Provision in the Fed-AADC.²⁰² This provision can mimic Cal-AADC's Health Provision, but instead of general language, the provision should read:

A business that provides an online service, product, or feature likely to be accessed by children;

- (a) Shall not use product design features in a way that the business knows, or has reason to know, is materially detrimental to the physical health, mental health, or well-being of a child.²⁰³ These features include, but are not limited to—

¹⁹⁶ Civ. § 1798.99.29(b).

¹⁹⁷ Carlton, *supra* note 136.

¹⁹⁸ Civ. § 1798.99.31(b)(1).

¹⁹⁹ *Id.*

²⁰⁰ For example, one slide released in the Facebook Files describes the results of a survey question about how Instagram may help users. The option receiving the most support was giving users more control over the content they see, which indicates a dissatisfaction with the way Meta controls algorithmic content. *Hard Life Moments-Mental Health Deep Dive*, META, Slide 16, <https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-1.pdf> [<https://perma.cc/GK9X-JSQK>]; Wells et al., *supra* note 12.

²⁰¹ Complaint, *Murden*, *supra* note 22, at 4.

²⁰² Plaintiffs' Master Complaint (Personal Injury), *supra* note 84, at 1.

²⁰³ While the Cal-AADC does not provide a definition for "physical health, mental health, or well-being," the Centers for Disease Control and Prevention adopts the World Health Organization's definition of mental health: "[O]ur emotional, psychological, and social well-being [which] affects how we think, feel, and act. It [] determines how we handle

- (1) Algorithm-based “timelines,” “feeds,” or similarly functioning displays;
 - (2) Autoplay features on video;
 - (3) Infinite posts displayed on a “discover,” “explore,” or similarly functioning page;
 - (4) Excessive notifications through push notifications, text notifications, and/or email notifications.
- (b) Shall use product design features in a way that the business knows, or has reason to know, is materially advantageous to the physical health, mental health, or well-being of a child. These features include, but are not limited to—
- (1) Prompting users to take a break from app use;
 - (2) Prompting users if they are repeatedly looking at the same negative content;
 - (3) Allowing users to hide posts promoting negative content;
 - (4) Allowing a screen time report to be sent to users or their guardians.²⁰⁴

Perhaps most controversially, the recommendation in Section (a)(1) proposes that social media platforms do away with algorithm-based timelines for minors.²⁰⁵ Algorithms used by companies are focused on engagement-based rankings, which aim to increase the time a user spends online.²⁰⁶ Switching back to chronological ranking on minors’ feeds would re-implement platforms’ original design, focusing more on connection than addictive engagement.²⁰⁷ This requirement is not unworkable: Meta brought

stress, relate to others, and make healthy choices.” *About Mental Health*, CTNS. FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/mentalhealth/learn/index.htm> [<https://perma.cc/5DSE-9S5N>]. The Fed-AADC should adopt similar rhetoric in a definitions section of the statute.

²⁰⁴ The language for this recommendation is informed by Cal-AADC’s Health Provision. CIV. § 1798.99.31(b)(1). The suggestions are composed from the MDL panel complaints, research on social media’s harmful impact, and actions already taken by social media companies to improve their apps’ functions. *See generally* Plaintiffs’ Master Complaint (Personal Injury), *Adolescent Social Media Product Liability Cases*, 2022 WL 5409144; *S. 797 Hearing*, *supra* note 10 (statement of Prof. Jonathan Haidt); sources cited *supra* notes 16–17.

²⁰⁵ Andrew Hutchinson, *Instagram Switching to Algorithm-Fuelled Timeline to Uncover Best Content*, SOCIAL MEDIA TODAY (March 15, 2016), <https://www.socialmediatoday.com/social-networks/instagram-switching-algorithm-fuelled-timeline-uncover-best-content> [<https://perma.cc/83CK-HG7H>].

²⁰⁶ Complaint, *Murden*, *supra* note 22, at 17.

²⁰⁷ Harmful or objectionable content is likely to receive more engagement, which results in more promotion through an engagement driven algorithm. *See id.* at 17–18.

back an option to use a chronological newsfeed in 2023 for all users.²⁰⁸ In the Fed-AADC, however, this option should be the default for minors alongside the other measures that remedy parts of social media's defective design.²⁰⁹

Without collecting her data to operate an algorithm-based newsfeed, Instagram would not be able to promote an endless series of harmful content to Olivia, the young girl discussed in this Note's introduction. Based on the Fed-AADC's constructive knowledge standard, Instagram would be required to estimate Olivia's age through marketing, user, and online context information, guaranteeing the strictest privacy settings for her by default. Without an infinite discover page and autoplay videos, her social media would not be flooded with information from influencers promoting restrictive eating and overexercise. With limited notifications, features prompting Olivia to take breaks from the app, and user-friendly buttons blocking negative content, social media would be one less detrimental influence leading to the mental health disorders so many teens and children increasingly suffer from. These are just some of the impacts a Federal Age-Appropriate Design Code Act would have.

CONCLUSION

Without action, the detrimental impact of social media platforms on children and teens will only increase. Research and congressional hearings reveal a strong correlation between the time spent on these platforms and negative mental health outcomes, especially for young girls. Mental health product liability lawsuits may hold platforms accountable for their defective designs but will likely be ineffective because nonphysical damages are difficult to prove. Despite these lawsuits and research, no federal statute exists addressing these harms. With financial incentives for social media platforms to use their defective designs, every solution falls short without legislative action. In the absence of a sufficient judicial remedy, a Federal Age-Appropriate Design Code Act must build on existing legislation to address the mental health crisis on display in the hundreds of product liability lawsuits facing social media companies.

²⁰⁸ Marcia Sekhose, *How to Get Instagram's Chronological Order Feed*, BUS. INSIDER (Feb. 6, 2023 2:33 PM), <https://www.businessinsider.in/tech/apps/news/how-to-get-instagrams-chronological-feed/articleshow/88727383.cms#> [<https://perma.cc/U9QA-HX7S>].

²⁰⁹ Plaintiffs' Master Complaint (Personal Injury), *supra* note 84, at 19–21.