



### Question from Senator Whitehouse

**Please describe your preferred legislative changes, if any, to the federal immunity granted under Section 230 of the Communications Decency Act of 1996 (47 U.S.C. § 230).**

As Fairplay outlined in the amicus brief it filed with the Supreme Court in *Gonzalez v. Google*, attached, courts have incorrectly extended immunity under Section 230 of the Communications Decency Act to algorithmic recommendation systems and deliberate design choices. Fairplay supports efforts to reform Section 230 to clarify that platform design choices to maximize engagement, including the promotion of content through algorithmic recommendation systems, is not protected publishing activity under the law.

When tech companies design online platforms and build and deploy algorithms, their goal is to maximize user engagement, which in turn maximizes profits. They are not designed to improve young users' well-being, nor to serve them high quality content. Ultimately, companies use algorithms and deceptive design techniques to keep kids and teens online for as long as possible, and they use them alongside sophisticated design techniques, including social manipulation and variable reward design features, that target kids' and teens' developmental vulnerabilities.<sup>1</sup> As the Surgeon General has observed, "[b]usiness models are often built around maximizing user engagement as opposed to safeguarding users' health and ensuring that users engage with one another in safe and healthy ways . . . This translates to technology companies focusing on maximizing time spent, not time well spent."<sup>2</sup>

Increased time on social media is linked to serious physical and mental health harms for minors. It displaces sleep and physical activity, and the pressure to spend more time on digital media platforms and maximize interactions with other users also puts children at risk of predation. It is also linked with worse psychological wellbeing: Heavy users of digital media are more likely to be unhappy, to be depressed, or to have attempted suicide.<sup>3</sup> Two nationally representative surveys of U.S. adolescents in grades 8 through 12 found "a clear pattern linking screen activities with higher levels of depressive symptoms/suicide-related outcomes and nonscreen activities with lower levels."<sup>4</sup> A large and growing

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<sup>1</sup> Written Testimony at 10-15.

<sup>2</sup> *Protecting Youth Mental Health: The U.S. Surgeon General's Advisory* at 25 (2021), <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>.

<sup>3</sup> Jean M. Twenge & W. Keith Campbell, *Media Use Is Linked to Lower Psychological Well-Being: Evidence from Three Datasets*, 90 *Psychol. Q.*, 311 (2019). <https://pubmed.ncbi.nlm.nih.gov/30859387/>

<sup>4</sup> Jean M. Twenge et al., *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 Psychol. Sci.* 3, 9 (2018)

body of research indicates a strong link between time spent on social media—some of the services most relentless in their deployment of engagement-maximizing techniques—and serious mental health challenges.<sup>5</sup> More frequent and longer social media use is associated with depression,<sup>6</sup> anxiety,<sup>7</sup> and suicide risk factors.<sup>8</sup> Increased time on social media can also lead to heightened exposure to content which increases minors’ susceptibility to poor body image and, consequently, disordered eating.<sup>9</sup> Personal stories from sufferers of disordered eating have highlighted the link to social media,<sup>10</sup> as has Meta’s own internal research; the documents Frances Haugen shared with the *Wall Street Journal* in 2021 revealed that Facebook has been aware at least since 2019 that “[w]e make body image issues worse for one in three teen girls.”<sup>11</sup>

In addition, maximizing time and activities online also fosters “problematic internet use”—psychologists’ term for excessive internet activity that exhibits addiction, impulsivity, or compulsion.<sup>12</sup> A 2016 nationwide survey of minors ages 12 to 18 found that 61% of teens thought they spent too much time

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<https://doi.org/10.1177/2167702617723376>. See also Jane Harness et al., *Youth Insight About Social Media Effects on Well/ill-Being and Self-Modulating Efforts*, 71 *J. Adolescent Health*, 324-333 (Sept. 1, 2022), [10.1016/j.jadohealth.2022.04.011](https://doi.org/10.1016/j.jadohealth.2022.04.011); Amy Orben et al., *Windows of Developmental Sensitivity to Social Media*, 13 *Nature Comm.*, 1649, (2022), [10.1038/s41467-022-29296-3](https://doi.org/10.1038/s41467-022-29296-3)

<sup>5</sup> See, e.g., K.E. Riehm et al., *Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth*, 76 *JAMA Psychiatry*, 1266 (2019), <https://doi.org/10.1001/jamapsychiatry.2019.2325>; N. McCrae et al., *Social Media and Depressive Symptoms in Childhood and Adolescence: A Systematic Review*, 2 *Adolescent Res. Rev.*, 315 (2017), <https://doi.org/10.1007/s40894-017-0053-4>; H. Allcott et al., *The Welfare Effects of Social Media*, 110 *Econ. Rev. Am.* 629 (2020), <https://www.aeaweb.org/articles?id=10.1257/aer.20190658>

<sup>6</sup> Jean M. Twenge & W. Keith Campbell, *Media Use Is Linked to Lower Psychological Well-Being: Evidence from Three Datasets*, 90 *Psychol. Q.* at 312 (2019). <https://pubmed.ncbi.nlm.nih.gov/30859387/>

<sup>7</sup> Royal Society for Public Health, *#StatusOfMind: Social Media and Young People’s Mental Health and Wellbeing* 8 (May 2017), <https://www.rsph.org.uk/static/uploaded/d125b27c-0b62-41c5-a2c0155a8887cd01.pdf>

<sup>8</sup> Jean M. Twenge & W. Keith Campbell, *Media Use Is Linked to Lower Psychological Well-Being: Evidence from Three Datasets*, 90 *Psychol. Q.* (2019). <https://pubmed.ncbi.nlm.nih.gov/30859387/>

<sup>9</sup> A 2019 study of 7th and 8th graders in the *International Journal of Eating Disorders* “suggest[ed] that [social media], particularly platforms with a strong focus on image posting and viewing, is associated with elevated [disordered eating] cognitions and behaviors in young adolescents.” Simon M. Wilksch et al., *The Relationship Between Social Media Use and Disordered Eating in Young Adolescents*, 53 *Int. J. Eat. Disord.* 96, 104 (2020); see also Pixie G. Turner & Carmen E. Lefevre, *Instagram Use Is Linked to Increased Symptoms of Orthorexia Nervosa*, 22 *Eating Weight Disorders* 277, 281 (2017)

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

<sup>11</sup> Georgia Wells et al., *Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show*, *W.S.J.* (Sept. 14, 2021), <https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739>.

<sup>12</sup> Chloe Wilkinson et al., *Screen Time: The Effects on Children’s Emotional, Social, and Cognitive Development*, *Informed Futures*, at 6, (2021), <https://informedfutures.org/wp-content/uploads/Screen-time-The-effects-on-childrens-emotional-social-cognitive-development.pdf>.

on their mobile devices, and 50% felt “addicted” to them.<sup>13</sup> In a 2022 Pew Research survey, 35% of teens said they are on YouTube, TikTok, Instagram, Snapchat, or Facebook “almost constantly.”<sup>14</sup> And a report released this year by Amnesty International on young people ages 13-24 found “a staggering 74% of respondents report checking their social media accounts more than they would like to.”<sup>15</sup> Problematic internet use, in turn, is linked to a host of additional problems.<sup>16</sup>

As Fairplay outlined in its attached amicus brief, courts’ misinterpretation of Section 230 has prevented tech companies from being held accountable for the harms that result from the deliberate design choices they make. Section 230 should not be altered or repealed such that it no longer provides tech companies protection from liability for the mere presence of user-generated speech. However, the algorithmic recommendation systems and design features that tech companies deploy to push content into users’ feeds should not receive blanket protection under Section 230 just because the content that is promoted is user-generated. We believe strongly that state and lower federal courts have misinterpreted the plain text of Section 230 and that the Supreme Court has sufficient evidence to correct these misinterpretations in *Gonzalez*, but we support Congressional action if the Court’s decision does not make clear that Section 230 immunity does not extend to platform design choices that maximize engagement.

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<sup>13</sup> Common Sense, *Dealing with Devices: Parents*, 10-11, (2016), [https://www.common sense media.org/sites/default/files/research/report/common sense\\_dealingwithdevices-topline\\_release.pdf](https://www.common sense media.org/sites/default/files/research/report/common sense_dealingwithdevices-topline_release.pdf).

<sup>14</sup> Emily A. Vogels et al., *Teens, Social Media and Technology 2022*, Pew Research Center (Aug. 10, 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022>.

<sup>15</sup> Amnesty International, “*We are totally exposed*”: *Young people share concerns about social media’s impact on privacy and mental health in global survey* (Feb. 7, 2023) <https://www.amnesty.org/en/latest/news/2023/02/children-young-people-social-media-survey-2/>.

<sup>16</sup> For example, one study of 564 children between the ages of 7 and 15 found that problematic internet use was positively associated with depressive disorders, Attention Deficit Hyperactivity Disorder, general impairment, and increased sleep disturbances. Restrepo et al., *Problematic Internet Use in Children and Adolescents: Associations with Psychiatric Disorders and Impairment*, 20 BMC Psychiatry 252 (2020), <https://doi.org/10.1186/s12888-020-02640-x>.

**Questions from Senator Tillis for Josh Golin, Executive Director of Fair Play**

**1. What are the largest impacts of high screen time for children? How can this be mitigated?**

Excessive screen media use and social media use is linked to a number of risks for children and adolescents, including obesity,<sup>1</sup> lower psychological wellbeing,<sup>2</sup> decreased happiness,<sup>3</sup> decreased quality of sleep,<sup>4,5</sup> increased risk of depression,<sup>6</sup> and increases in suicide-related outcomes such as suicidal ideation, plans, and attempts.<sup>7</sup>

Young people who exhibit signs of problematic internet use – psychologists’ term for excessive internet activity that exhibits addiction, impulsivity, or compulsion – are particularly at risk. For example, one study of 564 children between the ages of 7 and 15 found that problematic internet use was positively associated with depressive disorders, attention-deficit/hyperactivity disorder (ADHD), general impairment, and increased sleep disturbances.<sup>8</sup> A meta-analysis of peer-reviewed studies involving cognitive findings associated with problematic internet use in both adults and adolescents found “firm evidence that [problematic internet use]. . . is associated with cognitive impairments in motor inhibitory control, working memory, Stroop attentional inhibition and decision-making.”<sup>9</sup> Another study of over 11,000 European adolescents found that among teens exhibiting problematic internet use, 33.5% reported moderate to severe depression; 22.2% reported self-injurious behaviors such as cutting; and

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<sup>1</sup> Robinson, T. N., Banda, J. A., Hale L., Lu, A. S., Fleming-Milici, F., Calvert, S. L., Wartella, E. “Screen media exposure and obesity in children and adolescents.” *Pediatrics*, 140 (Supplement 2), S97-S101. (2017), doi:[10.1542/peds.2016-1758K](https://doi.org/10.1542/peds.2016-1758K)

<sup>2</sup> Twenge, J., Campbell, K. “Media Use Is Linked to Lower Psychological Well-Being: Evidence from Three Datasets,” *Psychiatric Quarterly* 90, no. 2. 311–31, (1 June 2019), <https://doi.org/10.1007/s11126-019-09630-7>.

<sup>3</sup> Twigg, L., Duncan, C., Weich, S. “Is Social Media Use Associated with Children’s Well-Being? Results from the UK Household Longitudinal Study,” *Journal of Adolescence* 80: 73–83, (1 April 2020), <https://doi.org/10.1016/j.adolescence.2020.02.002>.

<sup>4</sup> Carter, Ben et al. “Association Between Portable Screen-Based Media Device Access or Use and Sleep Outcomes: A Systematic Review and Meta-Analysis.” *JAMA Pediatrics* 170, no. 12: 1202–8, (1 Dec. 2016), <https://doi.org/10.1001/jamapediatrics.2016.2341>.

<sup>5</sup> Lemola, Sakari et al. “Adolescents’ Electronic Media Use at Night, Sleep Disturbance, and Depressive Symptoms in the Smartphone Age.” *Journal of Youth and Adolescence* 44 (1 Feb. 2014), <https://doi.org/10.1007/s10964-014-0176-x>.

<sup>6</sup> *Ibid.*

<sup>7</sup> Twenge, Jean et al. “Increases in Depressive Symptoms, Suicide-Related Outcomes, and Suicide Rates Among U.S. Adolescents After 2010 and Links to Increased New Media Screen Time.” *Clinical Psychological Science* 6, no. 1, 3–17, (1 Jan. 2018), <https://doi.org/10.1177/2167702617723376>.

<sup>8</sup> Restrepo et al., *Problematic Internet Use in Children and Adolescents: Associations with Psychiatric Disorders and Impairment*, 20 BMC Psychiatry 252 (2020), <https://doi.org/10.1186/s12888-020-02640-x>.

<sup>9</sup> Konstantinos Ioannidis et al., *Cognitive Deficits in Problematic Internet Use: Meta-Analysis of 40 Studies*, 215 British Journal of Psychiatry 639, 645 (2019), <https://pubmed.ncbi.nlm.nih.gov/30784392/>.

42.3% reported suicidal ideation.<sup>10</sup> The rate of attempted suicides was a staggering ten times higher for teens exhibiting problematic internet use than their peers who exhibited healthy internet use.<sup>11</sup>

The more time that young people spend online, the greater the chance that they will have negative and unwanted experiences. Fifty-nine percent of US teens have reported being bullied on social media,<sup>12</sup> an experience which has been linked to increased risky behaviors such as smoking and increased risk of suicidal ideation.<sup>13</sup> The pressure to spend more time on digital media platforms and maximize interactions with other users also puts children at risk from predation. Twenty-five percent of 9- to 17-year-olds report having had an online sexually explicit interaction with someone they believed to be an adult.<sup>14</sup> In 2020, 17% of minors – including 14% of 9- to 12-year-olds – reported having shared a nude photo or video of themselves online. Of these children and teens, 50% reported having shared a nude photo or video with someone they had not met in real life and 41% reported sharing with someone over the age of 18.<sup>15</sup>

The best way to mitigate these negative effects is to create a duty of care that requires online operators to prevent and mitigate the most serious harms to young people. The current business model for most digital media revolves around maximizing engagement in order to collect more data and serve more ads. This harms young people in two related ways. First, as noted above, excessive use of digital media is associated with a number of serious harms to young people, in part because time spent online displaces activities with proven developmental benefits. Second, the design choices used by platforms to maximize engagement create new risks. For example, as described below in the answer to question #4, algorithms designed to maximize engagement often recommend harmful content to young people and send them down rabbit holes.

Just as companies currently design their services to prioritize profits and engagement over children’s wellbeing, these same services *could* be designed in a way that puts children first. But that won’t happen without significant action from Congress, such as passing the Kids Online Safety Act.

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<sup>10</sup> Michael Kaess et al., *Pathological Internet use among European adolescents: psychopathology and self-destructive behaviours*, 23 *Eur. Child & Adolescent Psychiatry* 1093, 1096 (2014), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4229646/>.

<sup>11</sup> *Id.*

<sup>12</sup> Anderson, Monica. “A Majority of Teens Have Experienced Some Form of Cyberbullying,” *Pew Research Center: Internet, Science & Tech* (blog), (27 Sep. 2018), <https://www.pewresearch.org/internet/2018/09/27/a-majority-of-teens-have-experienced-some-form-of-cyberbullying/>.

<sup>13</sup> Van Geel, M., Vedder, P., Tanilon, J.. “Relationship Between Peer Victimization, Cyberbullying, and Suicide in Children and Adolescents: A Meta-Analysis,” *JAMA Pediatrics* 168, no. 5: 435–42, (1 May 2014), <https://doi.org/10.1001/jamapediatrics.2013.4143>.

<sup>14</sup> Thorn. “Responding to Online Threats: Minors’ Perspectives on Disclosing, Reporting, and Blocking.” (May 2021), [https://info.thorn.org/hubfs/Research/Responding%20to%20Online%20Threats\\_2021-Full-Report.pdf](https://info.thorn.org/hubfs/Research/Responding%20to%20Online%20Threats_2021-Full-Report.pdf).

<sup>15</sup> Thorn. “Understanding sexually explicit images, self-produced by children.” (9 Dec. 2020), <https://www.thorn.org/blog/thorn-research-understanding-sexually-explicit-images-self-produced-by-children/>.

**2. You've raised concern in the past that even EdTech (Educational Technology), in terms of high screen time, can be dangerous for our children. Do you see a path forward where a balance can be struck with EdTech as it does have its benefits in certain situations?**

For-profit EdTech vendors are selling schools, families and policymakers on the false premise that EdTech products offer the most effective and budget-friendly ways to learn. In reality, the products are costly to purchase and maintain. The products also ensnare students, whose data and brand loyalty are harvested, and who often become targets of relentless marketing efforts. These efforts include the insidious practice of upselling, through which students and their families are pushed to purchase premium versions, thereby exacerbating inequalities among students.<sup>16</sup> Equally important, these programs reduce the roles played by creative, compassionate teachers in educating the whole child. Learning happens best in the context of human relationships and is lost when the balance is skewed toward online platforms.

The value of face-to-face instruction is well-supported by research.<sup>17</sup> There is no credible research supporting the value of investing heavily in computer technology for schools.<sup>18</sup> Test scores do not rise. Dropout rates do not fall. Graduation rates do not improve. In 2019, fewer than half of virtual and blended schools had “acceptable” state performance ratings, and only 30% of virtual schools associated with for-profit Education Management Organizations (EMO) managed to meet even that low bar.<sup>19</sup> A study of millions of high school students in 36 countries by the Organisation for Economic Co-operation and Development (OECD) found that students who frequently used computers at school “do a lot worse in most learning outcomes, even after accounting for social background and student demographics.”<sup>20</sup>

EdTech is destined to under-deliver because of how the human brain reacts to screen-based media. In short: the brain doesn't like it. Reading text on paper increases comprehension, retention, and sheer satisfaction with reading as an activity.<sup>21</sup> Writing by hand boosts idea generation as well as retention.<sup>22</sup> Children between the ages of 8 and 11 who spend more than two hours per day on screens perform

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<sup>16</sup> See, e.g., Campaign for a Commercial-Free Childhood (now Fairplay), “Request for Investigation of Deceptive and Unfair Practices by the Edtech Platform Prodigy.” *Campaign for a Commercial-Free Childhood before the Federal Trade Commission*. (19 Feb. 2020). [https://fairplayforkids.org/wp-content/uploads/2021/02/Prodigy\\_Complaint\\_Feb21.pdf](https://fairplayforkids.org/wp-content/uploads/2021/02/Prodigy_Complaint_Feb21.pdf)

<sup>17</sup> See, e.g., Mohammed, Saro. “Tech or No Tech, Effective Learning Is All about Teaching.” *Brookings* (blog), September 6, 2018. <https://www.brookings.edu/blog/brown-center-chalkboard/2018/09/06/tech-or-no-tech-effective-learning-is-all-about-teaching/>.

<sup>18</sup> Molnar, Alex, Gary Miron, Najat Elgeberi, Michael K. Barbour, Luis Huerta, Sheryl Rankin Shafer, and Jennifer King Rice. “Virtual Schools in the U.S. 2019,” May 28, 2019. <https://nepc.colorado.edu/publication/virtual-schools-annual-2019>; OECD. “Students, Computers and Learning,” 2015. <https://www.oecd-ilibrary.org/content/publication/9789264239555-en>.

<sup>19</sup> Molnar et al. (2019).

<sup>20</sup> OECD (2015).

<sup>21</sup> Jabr, Ferris. “The Reading Brain in the Digital Age: The Science of Paper versus Screens.” *Scientific American*. April 11, 2013. <https://www.scientificamerican.com/article/reading-paper-screens/>.

<sup>22</sup> James, Karin H., and Laura Engelhardt. “The Effects of Handwriting Experience on Functional Brain Development in Pre-Literate Children.” *Trends in Neuroscience and Education* 1, no. 1 (December 1, 2012): 32–42. <https://doi.org/10.1016/j.tine.2012.08.001>.

worse on memory, language, and thinking tests than those who spend less time on screens.<sup>23</sup> The sensorimotor stimuli that screens offer are paltry compared to real life stimuli, and developing brains are more severely impacted by this disparity.<sup>24</sup>

Nevertheless, EdTech can be an important tool in helping students learn, provided it is used in a responsible, developmentally appropriate and limited way where digital technologies are just one of many tools in the pedagogical tool box. From a policy perspective, the following is needed order to maximize the educational benefits to children of EdTech and limit the harms:

1. Congress should expand privacy protections to teens by passing the Children and Teens' Online Privacy Protection Act or similar legislation. The Children's Online Privacy Protection Act (COPPA) is an important tool for protecting student data but it only covers children until their 13<sup>th</sup> birthday. Teens deserve COPPA's data minimization and use limitation requirements to ensure that the sensitive data collected from them over the course of the school day or for homework is protected.
2. The Federal Trade Commission (FTC) should follow through on its important May 2022 Policy Statement on Education Technology and the Children's Online Privacy Protection Act and bring enforcement actions against EdTech companies that collect extraneous student data, violate COPPA's use prohibitions, retain data longer than reasonably necessary to fulfill the purpose for which it collected, or fail to meet COPPA's security requirements.
3. The Department of Education and/or Health and Human Services should issue guidance on best practices for EdTech use. Such guidance should include developmentally appropriate limits on screen use in classrooms and for homework.
4. Congress should prohibit the use of educational technologies that exert commercial pressure on students. This should include a prohibition on ad-supported services, as advertising on digital platforms that are required for school use exploits a captive audience of students. It should also include a prohibition on using EdTech platforms in schools that sell subscriptions directly to students and their families. Subscriptions create inequities between families who can and cannot afford to pay for extras; in addition, subscription models encourage EdTech companies to design their products to maximize engagement and revenue rather than educational outcomes.

### **3. What is surveillance advertisement and how is this particularly detrimental to children? How can this be mitigated?**

Surveillance advertising – also sometimes called targeted, personalized or behavioral advertising – is the practice of targeting online advertisements to individuals based on their online and offline activities,

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<sup>23</sup> Walsh, Jeremy J., Joel D. Barnes, Jameason D. Cameron, Gary S. Goldfield, Jean-Philippe Chaput, Katie E. Gunnell, Andrée-Anne Ledoux, Roger L. Zemek, and Mark S. Tremblay. "Associations between 24 Hour Movement Behaviours and Global Cognition in US Children: A Cross-Sectional Observational Study." *The Lancet Child & Adolescent Health* 2, no. 11 (November 1, 2018): 783–91. [https://doi.org/10.1016/S2352-4642\(18\)30278-5](https://doi.org/10.1016/S2352-4642(18)30278-5).

<sup>24</sup> Softky, William, and Criscillia Benford. "Sensory Metrics of Neuromechanical Trust." *Neural Computation* 29, no. 9 (June 9, 2017): 2293–2351. [https://doi.org/10.1162/neco\\_a\\_00988](https://doi.org/10.1162/neco_a_00988).

behaviors and interests. Surveillance advertising is harmful to children in a number of ways.

First, it leads to massive and invasive data collection. By some estimates, advertisers already possess over 13 million data points about a child by the time they turn 13, despite the fact that the Children’s Online Privacy Protection Act (COPPA) requires parental permission before sharing the personal information of children 12 and under with advertisers.<sup>25</sup> This data is often shared with opaque networks and actors, making children’s sensitive data vulnerable to hacking and misuse.

Second, surveillance advertising is unfair to children. As Fairplay, Global Action Plan, and Reset Australia described in a report about Facebook:

On the one side is a child, poorly equipped to distinguish between advertising and information, especially within digital contexts. On the other, Facebook with its vast troves of data about the child, including but not limited to their browsing history, mood, insecurities, their peers’ interests, and more. This power imbalance makes surveillance advertising inherently more manipulative than contextual digital advertising, let alone traditional analogue advertising.<sup>26</sup>

Third, ads can be used to target and exacerbate young people’s vulnerabilities. Leaked documents from Facebook revealed in 2017 that the company told advertisers it could help them target teens at moments when they are feeling specific emotions, such as “silly,” “defeated,” “overwhelmed,” “useless” and “a failure.”<sup>27</sup> This capability allows marketers to target vulnerable young people with ads for harmful products. Ads for risky “Flat Tummy Teas” and dangerous exercise routines target young women on Instagram. Early digital marketing campaigns for Juul vaping products were deliberately targeted at young audiences.<sup>28</sup> Researchers were able to target ads to teenagers on Facebook based on their interests in gambling, alcohol, and dieting.<sup>29</sup>

Finally, in order to maximize surveillance ad revenue and data collection, platforms are often designed to maximize user engagement. As described in the reply to question #1, this can be harmful to young people by fostering overuse.

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<sup>25</sup> *SuperAwesome Launches Kid-Safe Filter to Prevent Online Ads from Stealing Children’s Personal Data*, SuperAwesome (Dec. 6, 2018), <https://www.superawesome.com/superawesome-launches-kid-safe-filter-to-prevent-online-ads-from-stealing-childrens-personal-data/>.

<sup>26</sup> Yi-ching Ho, E., Farthing, R., *How Facebook still targets surveillance ads to teens*, Reset Australia, Fairplay, and Global Action Plan (Nov. 2021), <https://fairplayforkids.org/wp-content/uploads/2021/11/fbsurveillancereport.pdf>.

<sup>27</sup> Sam Machkovech, *Report: Facebook Helped Advertisers Target Teens Who Feel “Worthless”*, ArsTechnica (May 1, 2017), <https://arstechnica.com/information-technology/2017/05/facebook-helpedadvertisers-target-teens-who-feel-worthless/>.

<sup>28</sup> Jidong Huang et al., *Vaping versus JUULing: how the extraordinary growth and marketing of JUUL transformed the US retail e-cigarette market*, 28 *Tobacco Control* 146, 150 (Feb. 22, 2019), <https://doi.org/10.1136%2Ftobaccocontrol-2018-054382> (“JUUL was one of the first major retail e-cigarette brands that relied heavily on social media to market and promote its products.”); Julia Cen Chen-Sankey et al., *E-cigarette Marketing Exposure and Subsequent Experimentation Among Youth and Young Adults*, 144 *Pediatrics at 8* (Nov. 2019), <https://doi.org/10.1542/peds.2019-1119>; see also Erik Larson et al., *Juul Reaches \$439 Million Settlement Over Marketing to Kids*, Bloomberg Law, (Sept. 6, 2022), <https://news.bloomberglaw.com/health-law-and-business/juul-reaches-439-million-multi-state-settlement-over-marketing>.

<sup>29</sup> Farthing, Rys, et al., *Profiling Children for Advertising: Facebook’s Monetisation of Young People’s Personal Data*, Reset Australia, (April 2021), [https://au.reset.tech/uploads/resettechaustralia\\_profiling-children-for-advertising-1.pdf](https://au.reset.tech/uploads/resettechaustralia_profiling-children-for-advertising-1.pdf).



Prohibiting the use of user data to target ads to minors will mitigate the harms of surveillance advertising on young people. The Children and Teens' Online Privacy Protection Act, which advanced out of the Commerce Committee in 2022 and is expected to be reintroduced soon, would do just that.

#### **4. Beyond surveillance advertisement, are there any other algorithmic-based practices being implemented that are particularly detrimental to children? How can this be mitigated?**

In addition to surveillance ads, engagement-maximizing algorithms are detrimental to children. These algorithms fill young people's feeds with the content that is most likely to keep them online, and are one of the primary ways children are exposed to posts, images, or videos that are age-inappropriate, dangerous, or abusive. Platforms such as YouTube, TikTok, and Instagram serve users content based on automated suggestions. Algorithms choose which content to suggest to children and teens based on the vast amount of data they collect on users, such as likes, shares, comments, interests, geolocation, and information about the videos a user watches and for how long. These algorithms are designed to extend engagement by discerning which pieces of content a user is most likely to engage with – not whether the content or overall online experience is beneficial to the user.<sup>30</sup>

Algorithmic recommendations can be particularly dangerous when they target children and teens' greatest vulnerabilities. Investigations have repeatedly demonstrated the way social media feeds deliver harmful mental health and eating disorder content to accounts registered to minors. A December 2022 report by the Center for Countering Digital Hate (CCDH) found that newly created TikTok accounts registered to teenagers that watched or liked videos about body image, mental health, or eating disorders received videos in their For You feeds related to self-harm, suicide, or eating disorders within minutes.<sup>31</sup> CCDH also studied the For You feeds of newly created TikTok accounts registered to teenagers that included the phrase "loseweight" in their usernames. Those accounts received videos about self-harm, suicide, or eating disorders in their For You feeds every 66 seconds on average.<sup>32</sup>

Other reports have made similar findings: A 2021 *Wall Street Journal* investigation documented how TikTok users were served videos that encouraged eating disorders and discussed suicide.<sup>33</sup> The same year, Senator Richard Blumenthal's office created an account for a fake 13-year-old girl that "liked" content about dieting, and the account was served pro-eating disorder and self-harm content within 24 hours.<sup>34</sup> Young users' engagement with this harmful content is valuable to tech companies: Fairplay's

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<sup>30</sup> A former YouTube engineer observed: "recommendations are designed to optimize watch time, there is no reason that it shows content that is actually good for kids. It might sometimes, but if it does, it is coincidence." Orphanides, K.G. "Children's YouTube is still churning out blood, suicide and cannibalism." *Wired*, (March 23, 2018), <https://www.wired.co.uk/article/youtube-for-kids-videos-problems-algorithm-recommend>

<sup>31</sup> Center for Countering Digital Hate, *Deadly by Design: Tik Tok Pushes Harmful Content Promoting Eating Disorders and Self-harm into users' feeds*, (Dec. 15, 2022), <https://counterhate.com/research/deadly-by-design/>

<sup>32</sup> *Id.*

<sup>33</sup> Wall Street Journal Staff, *Inside TikTok's Algorithm: A WSJ Video Investigation*, Wall Street Journal, (July 21, 2021), <https://www.wsj.com/articles/tiktok-algorithm-video-investigation-11626877477>.

<sup>34</sup> Nihal Krishan, *Senate office impersonates 13-year-old girl on Instagram to flag eating disorder content*, Yahoo News, (Sep. 30 2021), <https://www.yahoo.com/entertainment/senate-office-impersonates-13-old-212700515.html>.

2022 report detailed how Meta profits from 90,000 unique pro-eating disorder accounts that reach 20 million people, one-third of whom are minors, some as young as nine.<sup>35</sup>

Content recommendation algorithms also expose minors to videos of dangerous viral “challenges,” which has tragically led to the serious injuries and deaths of many young people. For example, media reports have documented how “the blackout challenge” on TikTok, in which young people hold their breath or choke themselves until they pass out, is responsible for the deaths of several children.<sup>36</sup> Many families say that their children learned about the challenge through recommended videos on their For You feeds.<sup>37</sup>

Policy interventions are needed in order to mitigate the harms of algorithmic recommendation systems on children. For example, the Kids Online Safety Act has a duty of care that requires platforms in their design and operation (including their deployment of algorithms) to prevent and mitigate “mental health disorders or associated behaviors, including the promotion or exacerbation of suicide, eating disorders, and substance use disorders, consistent with evidence-based medical information;” Harmful algorithmic recommendations can also be addressed by prohibiting harmful uses of minors’ data.

**5. Are you aware of any surveillance advertisements or algorithms that are used to target children, specifically to promote drugs and the sale of narcotics?**

This is not my area of expertise so I am not qualified to answer this question. I would encourage anyone interested in this topic to read [this newly released report](#) from the Colorado Department of Law. It contains a lengthy section on how illegal drugs are marketed online. I would also encourage you to speak with Eric Feinberg at the Coalition for a Safer Web who tracks the advertising of drugs on social media.

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<sup>35</sup> Fairplay, *Designing for Disorder: Instagram’s Pro-eating Disorder Bubble* at 1 (Apr. 2022),

[https://fairplayforkids.org/wp-content/uploads/2022/04/designing\\_for\\_disorder.pdf](https://fairplayforkids.org/wp-content/uploads/2022/04/designing_for_disorder.pdf).

<sup>36</sup>Olivia Carville, *TikTok’s Viral Challenges Keep Luring Young Kids to Their Deaths*, Bloomberg, (Nov. 30, 2022), <https://www.bloomberg.com/news/features/2022-11-30/is-tiktok-responsible-if-kids-die-doing-dangerous-viral-challenges>; Anne Marie Lee, *Child deaths blamed on TikTok ‘blackout challenge’ spark outcry*, CBS News, (Aug. 19, 2021), <https://www.cbsnews.com/news/tik-tok-blackout-challenge-child-deaths/>.

<sup>37</sup> Michael Levenson and April Rubin, *Parents Sue TikTok, Saying Children Died After Viewing ‘Blackout Challenge’*, New York Times, (July 6, 2022), <https://www.nytimes.com/2022/07/06/technology/tiktok-blackout-challenge-deaths.html>.