



March 6, 2023

National Telecommunications and Information Administration  
U.S. Department of Commerce  
1401 Constitution Avenue, NW  
Room 4725  
Washington, D.C. 20230

RE: Privacy, Equity, and Civil Rights Comments

Common Sense Media (CSM) submits these comments to the National Telecommunications and Information Administration (NTIA) in response to its Request for Comments that address issues at the intersection of privacy, equity, and civil rights. Common Sense Media is the nation's leading independent nonprofit organization dedicated to helping kids and families thrive in an increasingly digital world.

As a practical matter, kids and teens have little choice in whether to be online. Even if children did not use social media platforms, their lives have increasingly moved online. The ubiquity of online media and services—with their almost exclusive reliance on advertising revenue—in the lives of children (and adults) has made it near impossible to protect kids and teens from commercial data practices. Young children watch their favorite cartoons and shows on YouTube as often or more often than they do on television. Kids and teens are assigned homework online. Students of all ages use the internet to participate in group activities, whether it be yearbook club, debate tournaments, or other voluntary or assigned activities. .

We provide the following Appendix, which includes responses to your specific questions about kids and teens, and we appreciate the opportunity to explain how commercial data practices uniquely harms children.

Respectfully submitted,

/s/ Jolina Cuaresma

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Common Sense Media

## APPENDIX

### 2. Are there specific examples of how commercial data collection and processing practices may negatively affect underserved or marginalized communities more frequently or more severely than other populations?

Commercial data practices negatively impact everyone. The harmful effects on vulnerable populations, however, are more pronounced.

#### 2a. In particular, what are some examples of how such practices differently impact communities including but not limited to: . . . children and adolescents . . . ?

As kids and teens become prime targets of “social commerce,”<sup>1</sup> data collection and processing practices cause much more harm to children than adults. Commercial data practices interfere with children’s personal development and children are more susceptible to commercial manipulation.

#### **Interference with Personal Development**

As long as kids and teens are online, they unconsciously provide tech firms with a continuous flow of data points about themselves. Firms collect personal identifiers as well as other personal information about children. For example, EdTech firms collect children’s email address, grades, test scores, discipline data, and disability status (i.e., personal identifiers) along with their internet search history, browsing history, and purchase history (i.e., other personal information).

Additionally, firms produce “inferred data” or “derived data” about kids and teens. By applying predictive data analytic tools—such as statistical and machine learning algorithms—to the billions of data points collected on a single child, a tech firm can draw inferences about that child’s interests, likes and dislikes, and characteristics. Such inferences form the basis for creating the child’s individual profile. Establishing profiles allows the firm to curate each child’s online experience by displaying content that algorithms predict will be interesting or relevant. When predictions are accurate, kids and teens are more likely to remain engaged and extend the time they are online.<sup>2</sup> This allows the firm to collect ever more personal information—to produce ever more inferred data—to develop more extensive profiles—to further curate children’s online

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<sup>1</sup> Rather than separate ecommerce sites, commercial activities are merged into the social media online experience. Social Commerce Is The Path To Young, Media Savvy Consumers, PYMTS (Apr. 5, 2021), available at <https://www.pymnts.com/news/retail/2021/social-commerce-is-the-path-to-young-media-savvy-consumers/>.

<sup>2</sup> Research shows that children’s prolonged online activity is linked to clinical depression, anxiety, eating disorders, or suicidal ideation. See Georgetown University, National Center for Education in Maternal and Child Health, The Relation of Social Media and Adolescent Mental Health: A Rapid Review (Feb. 2022), available at <https://www.ncemch.org/documents/Rapid-Review-Social-Media-and-Adolescents.pdf>.

experience—to keep them engaged—to extend their time online<sup>3</sup>—to increase a firm’s advertising revenue.

A firm’s profitability is, therefore, dependent on how long kids and teens are online, which is a function of how well its algorithmic recommendations curate their online experience. But curating necessarily limits the content displayed based on presumed interests, but here’s the rub: kids’ and teens’ interests and personalities are still developing.<sup>4</sup> And with kids and teens spending an increasing amount of time online,<sup>5</sup> tech firms have an increasingly outsized impact in shaping the lives of children and who they become.

### **Kids and Teens are More Susceptible to Commercial Manipulation**

Studies show that, when compared to adults, adolescents are more at risk for making unwise purchases<sup>6</sup> and more readily share personal information.<sup>7</sup> This is because adults and adolescents make decisions and solve problems using different parts of their brains as a result of their brains’ structural differences.

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<sup>3</sup> Clearly, this loop continues ad infinitum and such a feedback loop can also become insidious. As the algorithm displays more of the same content, it can steer already vulnerable adolescents down a rabbit hole into echo chambers that serve as virtual meeting spaces for any number of groups, including pro-ana (anorexia), pro-mia (bulimia), and pro-self-harm.

<sup>4</sup> See Common Sense Media, *AdTech and Kids: Behavioral Ads Need a Time Out* (May 13, 2021), available at [https://www.common sense media.org/sites/default/files/featured-content/files/adtech\\_and\\_kids\\_explainer.pdf](https://www.common sense media.org/sites/default/files/featured-content/files/adtech_and_kids_explainer.pdf).

<sup>5</sup> Common Sense Media, *The Common Sense Census: Media Use by Tweens and Teens (2021)*, available at [https://www.common sense media.org/sites/default/files/research/report/8-18-census-integrated-report-final-web\\_0.pdf](https://www.common sense media.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf). In 2015, children, ages 8 to 12, spent a daily average of nearly 5 hours using screened devices; in 2021, that figure jumped by more than 20 percent. *Id.* at 3. For teens, ages 13 to 18, the statistics are even more alarming. In 2015, they spent roughly 40 percent of waking hours in front of screens; in 2021, that figure grew to roughly 55 percent. *Id.*

<sup>6</sup> See Adriana Galvan et al., *Earlier Development of the Accumbens Relative to Orbitofrontal Cortex Might Underlie Risk-Taking Behavior in Adolescents*, *J. NEUROSCI.* (June 21, 2006), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6673830/>.

<sup>7</sup> Sonia Livingstone et al., *Children’s data and privacy online: Growing up in a digital age. An evidence review*, *London School of Economics and Political Science 29* (Jan. 2019), available at [https://eprints.lse.ac.uk/101283/1/Livingstone\\_childrens\\_data\\_and\\_privacy\\_online\\_evidence\\_review\\_published.pdf](https://eprints.lse.ac.uk/101283/1/Livingstone_childrens_data_and_privacy_online_evidence_review_published.pdf). Children “may also provide personal data passively and unconsciously when using online services like social media, provoked by the platform design and configuration” and because they “display some confusion of what personal data means and a general inability to see why their data might be valuable to anyone.” *Id.* at 15.

The brain is made up of neurons, or nerve cells, and are responsible for receiving sensory input from the external world. These neurons are often referred to as gray matter. Electrical impulses travel between neurons to allow different parts of the brain to communicate (e.g., sending motor commands to an individual's muscles). As the brain matures, a white layer of fat and protein, or myelin sheath wraps around the main part of the neurons. Myelin increases the speed at which electrical impulses travel, and thus, the speed at which the brain processes information.<sup>8</sup>

During adolescence, the transition between childhood and adulthood, the two parts of the brain that regulate behavior, the limbic system (responsible for emotion) and the prefrontal cortex (responsible for cognition), develop simultaneously but asynchronously.<sup>9</sup> The limbic system develops at a faster rate, and thus, matures years before the prefrontal cortex, which does not mature until closer to adulthood.<sup>10</sup> Studies show that adults process information using the prefrontal cortex whereas adolescents rely on the limbic system.<sup>11</sup>

The limbic system, located mainly in the medial temporal lobe and responsible for survival, memory formation, sexual arousal, and learning, operates subconsciously, continuously processing sensory input from internal and external stimuli to elicit appropriate autonomic and behavioral responses.<sup>12</sup> Within the limbic system is the amygdala, which controls certain emotional responses (fear, anxiety) that activate immediate and instinctive behavior such as the “fight, flight, or freeze” response to perceived danger.<sup>13</sup>

Situated in the front-most area (the last region to fully develop) and right behind the forehead, the prefrontal cortex is responsible for executive functioning skills such as planning, problem solving, reasoning, and impulse control.<sup>14</sup> The prefrontal cortex has three substructures: the medial frontal, which makes it possible to pay attention and concentrate; the orbitofrontal cortex, which helps prevent reckless behavior or emotional outbursts; and the lateral prefrontal, which processes complex information and evaluating different courses of actions.<sup>15</sup>

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<sup>8</sup> Mariam Arain *et al.*, Maturation of the Adolescent Brain, 9 *NEUROPSYCHIATRIC DISEASE TREATMENT* 449, 453–54 (2013).

<sup>9</sup> B.J. Casey *et al.*, The Adolescent Brain, 28 *DEVELOPMENTAL REV.* 62, 63 (2008).

<sup>10</sup> *Id.*

<sup>11</sup> *Id.* at 63.

<sup>12</sup> See Velayudhan Rajmohan and Eladath Mohandas, The Limbic System, 49 *INDIAN J. OF PSYCHIATRY* 132–39 (2007) (providing an overview of the components and functions of the limbic system).

<sup>13</sup> Ralph Adolphs, The Biology of Fear, 23 *CURRENT BIOLOGY* 79, 83–85 (2013).

<sup>14</sup> Edward E. Smith and John Jonides, Storage and Executive Processes in the Frontal Lobes, 283 *SCIENCE* 1657, 1659–60 (1999).

<sup>15</sup> Joaquin M. Fuster, The Prefrontal Cortex—An Update: Time is of the Essence, 30 *NEURON* 319, 320–21 (2001).

In the adult brain, the limbic system and the prefrontal cortex are fully matured and they operate in tandem to balance emotion and cognition. A developed prefrontal cortex serves as a counterbalance to the limbic system, allowing for adults to take a long term perspective and control impulses.<sup>16</sup> When the prefrontal cortex is active, there is less activity in the amygdala, allowing adults to make sound decisions.<sup>17</sup>

In the adolescent brain, the limbic system is fully matured but the prefrontal cortex is still developing. Functional brain imaging shows that responses to external stimuli occur in the limbic system when the prefrontal cortex is not fully developed.<sup>18</sup> Therefore, adolescents are more likely than adults to be swayed by their emotions and exhibit more impulsive behavior, rather than a logical or measured response.<sup>19</sup> Until the prefrontal cortex reaches the same level of maturity as the limbic system, the desire for rewards overpowers rational thinking, making adolescents far more susceptible to commercial manipulation.

**2c. How do specific data collection and use practices potentially create or reinforce discriminatory obstacles for marginalized groups regarding access to key opportunities, such as . . . education . . . ?<sup>20</sup>**

The amount of data EdTech firms collect, their profiling techniques, and how data is shared or monetized raise important questions about how such practices affect kids' and teens' academic opportunities.

Many apps designed for children are for educational purposes, and often such apps are school-required. These apps also use algorithmic recommendation systems that can exhibit biases when making decisions, perpetuating discrimination by showing certain kids and teens opportunities but not others. For example, many colleges have started using more algorithmic solutions to help make admission decisions, especially since the COVID-19 pandemic.<sup>21</sup> However, these methods can exclude underrepresented students and create new and less obvious barriers to higher education. In fact, some colleges are “tracking prospective student engagement through social

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<sup>16</sup> See Angela Griffin, Adolescent Neurological Development and Implications for Health and Well-Being, 5 HEALTHCARE 62, 63 (2017) (describing how the prefrontal cortex is late-evolving and enables individuals to learn how to manage long term planning, monitor what is going on, and adjusting smoothly to surroundings while keeping emotions and behaviors context appropriate).

<sup>17</sup> David R. Roalf et al., More is Less: Emotion Induced Prefrontal Cortex Activity Habituates in Aging, 32 NEUROBIOLOGY OF AGING 1634, 1635 (2011).

<sup>18</sup> Arain et al., *supra* fn. 8, at 453.

<sup>19</sup> *Id.*

<sup>20</sup> The response to question 2c also serves as a response to questions 3 and 3a.

<sup>21</sup> See Rashida Richardson & Marci Lerner Miller, The Higher Education Industry Embracing Predatory and Discriminatory Student Data Practices Slate (Jan. 13, 2021), available at <https://slate.com/technology/2021/01/higher-education-algorithms-student-data-discrimination.html>.

media or using econometric modeling to determine the type of incoming class they can afford to admit.”<sup>22</sup> Such methods “are likely to favor students with the resources to visit the colleges they are applying to and have the access to private college counselors who advise them to engage with colleges’ social media accounts and by email.”<sup>23</sup>

Furthermore, we have long known that teacher’s expectations significantly affect how a student performs,<sup>24</sup> especially for certain marginalized groups.<sup>25</sup> The use of predictive data analytic tools can exacerbate the psychological phenomena known as the Pygmalion effect (where high or positive expectations lead to improved performance) and the Golem effect (where low or negative expectations lead to poor performance). When teachers do not form their own impressions of students and instead rely on algorithms, it can magnify self-fulfilling prophecies (similar to feedback loops), causing untold amounts of damage.

## 5. What are the principles that should guide the Administration in addressing disproportionate harms experienced by underserved or marginalized groups due to commercial data collection, processing, and sharing?

Common Sense Media believes that the seven principles of EU’s General Data Protection Regulation (GDPR)<sup>26</sup> are particularly well-suited to protecting kids and teens.

(i) **Lawfulness, fairness and transparency.** Firms should only collect, use, or share data once they have received meaningful consent from users. Meaningful consent requires a firm to first provide a clear and conspicuous notice of the company’s data practices in plain language<sup>27</sup> (Notice) to allow users to make an informed decision. Until the age of consent, the Notice should be provided to users’ parents or guardians.<sup>28</sup>

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<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> See generally Robert Rosenthal & Lenore Jacobsen, *Pygmalion in the Classroom: Teacher Expectation and Pupils’ Intellectual Development Expanded Edition* (2003).

<sup>25</sup> J. Benjamin Hinnant *et al.*, The Longitudinal Relations of Teacher Expectations to Achievement in the Early School Years (Jan. 2009) (original publication 1968) (finding that a Minority boys had the lowest performance when their abilities were underestimated and the greatest gains when their abilities were overestimated), available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2860190/>.

<sup>26</sup> Available at <https://gdpr-info.eu/chapter-2/>.

<sup>27</sup> Plain Language, <https://www.plainlanguage.gov/>.

<sup>28</sup> The European Union’s General Data Protection Regulation (GDPR) recommends 16 as the age of consent, but member states may lower it to 13. Art. 8 GDPR. The UK has established 13 as the age of consent. Part 2, Chapter 2, No. 9 of the Data Protection Act of 2018 (implementing the GDPR). The California Consumer Privacy Act and the Connecticut Data Privacy Act (effective July 1, 2023) expand the

(ii) **Purpose limitation.** Secondary use of data should be prohibited. Firms should only use or share data pursuant to the purposes outlined in their Notice. To the extent that a firm seeks to use or share the data for other purposes, it must first obtain meaningful consent for these other purposes.

(iii) **Data minimization.** With increased computing power, automation, and emerging technologies, firms have the ability to collect Big Data (i.e., large and diverse sets of data that grows at an increasing rate).<sup>29</sup> However, a firm should not collect untold millions of data points about an individual user just because it has the capacity to do so.

This principle is especially apt for addressing data practices that harm kids and teens. By the time a child reaches 13 years old, a single ad tech firm has already collected over 70 million data points.<sup>30</sup> Our youth spend increasing amounts of time on sites that automatically capture their data. At the same time they face pressure to share extremely personal and sensitive information about themselves and their peers, and to view this as common.<sup>31</sup> Firms should be prohibited from collecting more data than necessary to provide the good or service requested.

(iv) **Accuracy.** As society becomes ever more reliant on Big Data and predictive data analytic tools to make decisions, the accuracy of data is critical. Parents, guardians, and teens should have the ability to correct inaccuracies.

(v) **Storage limitation.** Firms should not keep data about users indefinitely. Data retention should be for a short period of time. To keep data longer, firms should anonymize the data through aggregation (i.e., individual data is presented at the group level) and de-identification.<sup>32</sup>

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opt-in consent requirement to minors under 16 years old, and allows teens between 13 and 16 years of age to consent instead of their parents. Cal. Civ. Code § 1798.120(c); P.A. 22-15 § 6(a)(7).

<sup>29</sup> Big Data: A Tool for Inclusion or Exclusion?, available at <https://www.ftc.gov/system/files/documents/reports/big-data-tool-inclusion-or-exclusion-understanding-issues/160106big-data-rpt.pdf>.

<sup>30</sup> Common Sense Media, Behavioral Advertising Harms: Kids and Teens (Feb. 2022), available at [https://www.common sense media.org/sites/default/files/featured-content/files/behavioral\\_-surveillance-advertising-brief.pdf](https://www.common sense media.org/sites/default/files/featured-content/files/behavioral_-surveillance-advertising-brief.pdf); Common Sense Media, List of Social Media Harms (Dec. 2021), available at [https://www.common sense media.org/sites/default/files/featured-content/files/list\\_of\\_social\\_media\\_harms\\_formatted\\_edited.docx\\_.pdf](https://www.common sense media.org/sites/default/files/featured-content/files/list_of_social_media_harms_formatted_edited.docx_.pdf).

<sup>31</sup> One survey found that almost 25 percent of minors, ages 9 to 12, and about 33 percent of those aged 13 to 17, believe that sharing sexually explicit content was normal for their age group. Thorn and Benenson Strategy Group, Self-Generated Child Sexual Abuse Material: Youth Attitudes and Experiences in 2020, (Nov 2021), available at [https://info.thorn.org/hubfs/Research/SGCSAM\\_Atitudes&Experiences\\_YouthMonitoring\\_FullReport\\_2021\\_FINAL%20\(1\).pdf](https://info.thorn.org/hubfs/Research/SGCSAM_Atitudes&Experiences_YouthMonitoring_FullReport_2021_FINAL%20(1).pdf).

<sup>32</sup> To be sure, even anonymized and aggregated data has some risk of re-identification. In 2006, a PhD student and his advisor could re-identify customers from Netflix's data release that contained only the customers' ratings of the movies watched on the streaming platform. They used Netflix's data release and determined the approximate dates when customers watched a movie from comparing the released data to

This principle is important in addressing the particular harm that kids and teens face from commercial data practices. Children should be allowed to grow up, to go from kids to tweens to teens to young adults, without having a permanent record of typical youthful indiscretions or a collection of their every thought and “like.” Therefore, Common Sense Media recommends that individuals aged 13 and over should have the right to delete (colloquially referred to as an “erasure mechanism”) any personal information collected or obtained about themselves while they were minors.<sup>33</sup> Additionally, parents or guardians should have the right to request the deletion of personal information of their children under 13.

(vi) **Integrity and confidentiality (security).** Firms must secure data from external attacks and from inadvertent disclosure. As a general matter, courts award damages when harm is financial in nature or when harm can be reduced to a dollar figure. The harms that stem from security failures are, however, often intangible and difficult to quantify.

This is especially true for kids and teens. Their harms are generally nonfinancial in nature (i.e., children are rarely, if ever, victims of identity theft or fraud), and disclosure of personal data is more likely to cause kids and teens embarrassment or reputational harm. For example, ads for LGBTQ+ resources showing up on a shared device could prematurely “out” a child to their family, rather than giving them the autonomy to do so on their own accord.

(vii) **Accountability.** Without accountability to users, there is no reason to suggest that tech firms will do what is in the best interest of kids or teens.

C-suite officers of publicly traded firms<sup>34</sup> (e.g., Google, Facebook/Meta) have a fiduciary responsibility to shareholders, not users. Management’s overarching goal is to maximize shareholder value. When public companies are not accountable for harm they cause—because of section 230 immunity, absence of a private right of action, or difficulty in proving damages—they have no incentive to make changes that benefit the user. However, if tech firms were held liable for ensuing harm, it would impact the bottom line and management’s duty would be to minimize liability to increase shareholder value.

Put another way, business leaders will always prioritize profits over people until their companies are held accountable for harms that stem from commercial data practices. The

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the publicly available Internet Movie Database, in which people use real names to post their moving ratings. With approximate dates, they could correctly re-identify individuals 99% of the time. MICHAEL KEARNS & AARON ROTH, *The Ethical Algorithm* 23-26 (2020). Clearly, storage limitations should be data-specific.

<sup>33</sup> This right is distinctly important for anyone born during the age of “sharenting.” Why Kids are Confronting Their Parents about “Sharenting”, N.Y. TIMES OPINION (2019), available at <https://www.youtube.com/watch?v=YRPUZ3pufAg>. Today’s teens were born at a time when social media platforms began to emerge. In 2003, [Friendster](#) and [MySpace](#) launched within months of each other, followed by [YouTube](#) in 2005, [Facebook](#) in 2006, [Instagram](#) in 2010, and [Snapchat](#) in 2011. Teens will tell you that they lost their privacy long ago when their parents were quick to post anything and everything about their babies and toddlers.

<sup>34</sup> Many tech firms are publicly owned and the goal of many tech startups is to go public.



government must hold firms accountable to users, especially kids and teens, through laws and regulations.

**5b. What kinds of protections might be appropriate to protect children and teens from data abuses?**

Common Sense Media believes data protections should be embedded into the design of products or services such that privacy is automatic. In other words, a firm should provide users with the highest level of privacy protections by default (i.e., it does not require users to do anything). We commend firms that utilize a “privacy by design” approach. Privacy-protecting design features and default settings are especially critical when a firm’s app or online site become school-mandated for kids or teens. We cannot expect them to recognize which privacy setting is best for them.

**5b (cont’d). How might such protections appropriately address the differing development and informational needs of younger and older children?**

Today, kids and teens lack baseline protections such as opt-in consent.<sup>35</sup> Thus, while there may be instances when protections should distinguish between different age groups, the structural differences between the adolescent brain and the adult brain make it far more important to focus efforts on providing such fundamental rights.

**5b (cont’d). Are there any existing proposals that merit particular attention?**

**Federal.** During the 117th Congress, COPPA 2.0 and the Kids Online Safety Act were introduced in the Senate while the American Data Privacy & Protection Act was introduced in the House. We expect them to be reintroduced in the 118th Congress and believe they each contain important provisions for the protection of kids’ and teens’ data privacy. We believe the Administration can work with Congress to strengthen these proposals.

**States.** In recent years, a number of state assemblies have considered privacy protections. California has been particularly active in this space. In 2022, the state enacted two important bills: AB 2273, the Age-Appropriate Design Code, which requires online platforms to assess the privacy and protection of children under 18 when designing digital products or services; and AB 587, Social Media Transparency, which requires social media platforms to post their privacy policies, including their content moderation policies.

This year, California Senator Nancy Skinner has introduced SB 287, which would hold social media platforms accountable for addicting and harming children. California Assemblymember Buffy Wicks has also introduced AB 1394, which would hold social media firms accountable for

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<sup>35</sup> In the absence of regulation, firms’ default settings generally require consumers to “opt-out” of data collection and data sharing. To be sure, everyone’s data should be protected as a matter of course. However, teens’ data in particular should be protected. As discussed above (*see supra* fn. 7 and accompanying text), teens are more susceptible to oversharing personal information.

knowingly, recklessly, or negligently facilitate, aid, or abet commercial sexual exploitation of children. Maryland Senator Malcolm Augustine has introduced SB 698, which prohibits firms from targeting teens with advertising or selling their data without first obtaining their consent.