



Strategic Training Initiative for the Prevention of Eating Disorders

November 13, 2023

Alan B. Davidson
Assistant Secretary of Commerce for Communications and Information and NTIA Administrator
National Telecommunications and Information Administration, Department of Commerce

Docket No. 230926–0233
RIN 0660–XC059
Initiative To Protect Youth Mental Health, Safety & Privacy Online

Dear Administrator Davidson,

Thank you for the opportunity to comment on Docket No. 230926–0233: *The Initiative To Protect Youth Mental Health, Safety & Privacy Online*. We are reaching out on behalf of the Strategic Training Initiative for the Prevention of Eating Disorders (STRIPED) at the Harvard T. H. Chan School of Public Health and the Michigan State University College of Law. Our team, consisting of public health researchers and legal experts, has spent the past two years researching the harms of social media on youth mental health. The scientific evidence is clear—the evolving landscape of social media and online platforms has become an integral part of the lives of youth, thus significantly influencing their health and wellbeing. We have explored many of the key themes raised by the NITA in this Notice, including 1) identifying the measurable risks of social media use on youth mental health, 2) highlighting the opaque industry practices of social media companies, and 3) identifying potential legislative or regulatory solutions through independent algorithm risk audits.

1. Public health studies affirm that social media has a detrimental impact on the mental health of young users, directly linking social media use in youth to mental health risks through neuropsychological pathways.

Research on social media's impact on youth mental health, especially body image and eating disorders, highlight associations between social media use and negative outcomes.¹⁻¹⁷ Image-based platforms, in particular, contribute significantly to negative outcomes, notably concerning body image and disordered eating.¹⁸ Studies also demonstrate social media's impact on body satisfaction and psychological distress, emphasizing the importance of distinguishing social media use from other screen-based activities.^{4,19} The research underscores the need for awareness and intervention in addressing these mental health challenges.²⁰⁻²²

Adolescents, aged 10 to 22 years, are highly sensitive to peer feedback, especially on social media. Positive cues, such as "likes," shape their understanding of social norms, and highly liked posts displaying risky behaviors can have negative effects.²³⁻²⁶ The adolescent brain's underdeveloped reasoning and judgment, coupled with heightened emotionality, leads to exaggerated emotional responses to social media content. Viewing digitally edited bodies on social media intensifies body dissatisfaction and self-esteem concerns, particularly in adolescents.²⁷ Additionally, the adolescent brain, sensitive to rewards, is captivated by social media features, especially "likes," engaging reward processing parts. Deceptive design features like limitless scroll and notifications trap adolescents in

continuous engagement cycles, even when experiencing damaging mental health effects.²⁸⁻³¹ The urge to scroll incessantly on social media, fueled by deceptive design features, becomes irresistible for adolescents, akin to an uncontrollable itch. Internal memos from Meta reveal that platform designers are aware of the effects of these features on adolescents' engagement and mental health.³²⁻³³

2. The substantial revenue generated from young users serves as a disincentive for transparency and self-regulation by social media platforms, underscoring the necessity for government policy and legislative intervention to mitigate potential harms.

Social media platforms thrive on substantial advertising revenue generated from young users, but the full extent of this economic benefit remains undocumented. Current regulations do not mandate disclosure of the types of content exposed to young users or its impacts, creating a lack of incentive for social media companies to self-regulate and address online harms affecting youth.³⁴⁻³⁵ To address this gap, we employed a novel simulation method to produce the first estimates of the number of users and annual advertising revenue generated from U.S.-based users aged 0-12 and 13-17 years across six major social media platforms (YouTube, Instagram, TikTok, Snapchat, Facebook, and Twitter/X). Our results were startling: We found annual advertising revenue from U.S. children ages 0-12 years is estimated to be over \$2 billion in U.S. dollars. This is notable because youth younger than 13 years are not allowed on these social media platforms without parental consent, but age verification by the platforms is ineffectual. Annual advertising revenue from all U.S. children ages 0-17 years is nearly \$11 billion across the six major platforms. For several social media platforms, nearly 30 to 40 percent of their annual advertising revenue is generated from users ages 0-17 years.³⁶ Platform design, emphasizing engagement, can be harmful, driven by business models monetizing users' time. Such practices, notably affecting young users, are intrinsic to platform strategies.³⁷⁻³⁸ Incentivized by enormous advertising revenues, social media platforms are disinclined to self-regulate and protect young people against online harms.

3. Proposing the implementation of independent algorithm risk audits is crucial to ensure accountability and transparency in social media practices.

In a world where technology is constantly evolving, lawmakers must enact protections for child and adolescent users for the potential harms social media use can cause. To best draft such legislation, policymakers must understand what harms social media causes and the effect these harms have on adolescents. Any law aimed at protecting adolescents from the harmful effects of social media must address how social media platforms employ algorithms in the function and design of their product. Further, for any law in this area to be effective, it should incorporate an enhanced means of enforcement, rather than just mere prohibitions of particular acts. This dual task could best be contemplated through the use of periodic algorithm risk audits. An algorithm risk audit is a technique to make algorithms and their effects on content feeds visible. Audits are a safety check that identify specifically how algorithms are pushing out content in biased ways, and with this knowledge, platforms can be pressured to take steps to remedy their unfair practices. Algorithm risk audits occur in 3 steps:

1. Identify Specific Harms: Define the harms to be measured, e.g., pro-eating disorder content.
2. Measure Extent of Harm: Assess algorithmic impact on content distribution, considering demographics.
3. Reduce Harm: Implement benchmarks and reporting periods to mitigate identified harms.

These audits would be conducted by independent third parties at regular intervals, and would be publicly disclosed to make sure platforms cannot keep their algorithms and their biased effects secret. Social media companies hold all of the information with regard to how the design of their platform is causing harm to youth. Former employees-turned-whistleblowers at Facebook and Instagram have recently divulged that the social media platforms have conducted their own studies to measure the potential harm caused to children, but it is impossible for outsiders to know the extent of such harm

because platforms will not release this information. To implement proper mitigation efforts, social media platforms should be required to be subject to third-party algorithm risk audits that will be made public. The audits would allow the public to know what the harms are and if the mitigation efforts are effective to reduce such harms.

The audits would not violate the platform's First Amendment protection or run afoul of Section 230 of the Communications Decency Act because such audits measure the harm caused by the algorithms, but do not restrict content or speech published by the platform. The audits merely evaluate the product design of the platform and the harm its algorithms may be causing to young people.

The measurements, or evidence of harm, could then be conveyed to law enforcement agencies, which may then use the information to file a complaint against a platform for deceptive advertising, unfair business practices, or some other wrongdoing.

Summary

The scientific evidence underscores the urgent need for awareness and intervention in addressing the detrimental effects of social media on youth mental health, particularly concerning body image and emotional well-being. The lack of mandated disclosure and self-regulation by social media platforms, which earn staggering amounts of advertising revenue by engaging young users, emphasizes the necessity for government policy and legislative intervention to mitigate potential harms. We urge policymakers to enact protections for youth, considering the evolving technological landscape. Algorithm risk audits emerge as a crucial tool to scrutinize and rectify biased content dissemination, fostering safer digital environments for young people. As we navigate the complex intersection of technology and mental health, these recommendations pave the way for a more secure and responsible digital future for our youth.

Sincerely,

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