



Where the world comes for answers

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Written Testimony for Hearing on

“An Act Relating to Consumer Protection; Prohibiting Certain Social Media Algorithms that Target Children”

MN Senate Bill 3933

Senate Civil Law and Data Practices Committee

March 29, 2022

Dear Chairperson Mathews and Honorable Members of the Committee:

Thank you for the opportunity to speak with you today about Senate bill 3933. I am Dr. Bryn Austin, Professor of Pediatrics at Harvard Medical School and Harvard T.H. Chan School of Public Health. I have specialized in research on eating disorders and adolescent health for over 20 years and am Past President of the Academy for Eating Disorders and the Eating Disorders Coalition. I am here today to share research on the negative effects of social media algorithms on the health and wellbeing of adolescents and their link with eating disorders.

Eating disorders affect people of all genders, races, ethnicities, sexual orientations, ages, and body sizes. Nearly 30 million Americans will have an eating disorder in their lifetime,¹ and nearly 2 million children alive today will have an eating disorder before they are 20 years old.¹ Eating disorders are among the most deadly mental health condition, killing over 10,000 Americans every year,¹ or one person every 52 minutes. Eating disorders not only have devastating impacts on individuals and families, but also on society as a whole and cost the U.S. economy almost \$65 billion dollars annually.¹ Nearly a half million Minnesotans will have an eating disorder in their lifetime, and these conditions cost the Minnesota economy \$1.1 billion dollars each year.²

In an increasingly digital world where one quarter of adolescents are on social media “almost constantly,”³ social media platforms continually bombard youth with highly visual content that is extremely engaging by design. Among 13-to-18-year-olds, 63% use social media every day, and although the federal Children’s Online Privacy Protection Act (also known as COPPA) sets 13 as the minimum age to use social media platforms, 13% of children aged 8 to 12 use social media daily.⁴



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We have known for years that social media platforms—especially image-based platforms like Instagram—can have very harmful effects on teen mental health, especially for teens struggling with body image, anxiety, depression, and eating disorders.⁵⁻⁸ From experimental research, we know that algorithm-driven social media feeds of content tailored to each user's engagement patterns can draw vulnerable teens into a dangerous spiral of negative social comparison and hook them into unrealistic ideals of appearance and body size and shape.⁹⁻¹⁰

Big tech is peddling a false narrative that their social media platforms are simply a reflection of their users' interests and experiences, without distortion or manipulation by the platform. But they know full well that this is not true. In fact, their very business model is predicated on how much they can manipulate users' behavior to boost engagement and extend time spent on the platform, which the platform then monetizes to sell to advertisers. They are literally selling users' attention. They know that strong negative emotions, which can be provoked by negative social comparison, keep users' attention longer than other, more positive emotions¹¹—and algorithms are expressly designed to push teens toward toxic content so that they stay on the platform. For teens struggling with body image, anxiety, or other mental health issues, negative social comparison is a dangerous trap, intensifying their engagement with the platform while worsening their symptoms.^{7,12} But with this nefarious business model, every additional minute of users' attention—regardless of the mental health impact—translates into more profits.

Complex algorithms that use machine learning are built to tailor the feed to each individual based on what content they engage with. Imagine a teen "likes" a post about an extreme diet or a post with before-and-after pictures depicting weight loss—both of which are types of content known to worsen body image and eating disorders symptoms in young people.¹³⁻¹⁷ The algorithm will then amp up those types of posts in their feed so the teen sees much more of this type of harmful content.¹⁸⁻²⁰ This content includes sponsored ads and paid influencer posts from commercial interests promoting a hyper focus on extreme thinness and unrealistic weight loss through dangerous and unproven means.²¹⁻²³ Young adolescents especially may have difficulty distinguishing ads from other content.⁷ Even more insidiously, algorithms identify content posted by troubled users promoting extreme eating disordered behavior and then leverage it for profit by placing ads for mainstream teen brands adjacent to this extreme content, knowing it will boost engagement.²⁴ In effect, the algorithm is expressly designed to ensure this teen's feed is filled with a continuous stream of toxic content.

As the evidence continues to mount, researchers from across the globe recently issued an open letter to Meta's Mark Zuckerberg calling for greater transparency and accountability for the role of Facebook and Instagram in child and adolescent mental health.²⁵ The U.S. Surgeon General's December advisory report on the youth mental health crisis also called for greater transparency from tech companies on how algorithms are designed and operate.²⁶ While these are compelling directives from the Surgeon General and my fellow researchers, it is state government leaders like yourselves who have the authority to



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take action. You have the power and responsibility to hold tech companies accountable by ensuring their algorithms do not harm young users. The children of Minnesota are counting on you. Thank you for the opportunity to share the research with you, and thank you to Sen. Chamberlain and members of the committee for your leadership on this important child health issue.

Sincerely,

S. Bryn Austin, ScD

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