Subcommittee on Innovation, Data, and Commerce

Hearing entitled "Legislative Solutions to Protect Kids Online and Ensure Americans' Data Privacy Rights" [April 17, 2024]

Documents for the record

At the conclusion of the meeting, the Chair asked and was given unanimous consent to include the following documents into the record:

- 1. Letter from America's Credit Unions to Chair Bilirakis and RM Schakowsky on privacy legislation, submitted by the Majority.
- 2. Letter from the Association of National Advertisers and the American Association of Advertising Agencies to Chair Rodgers and RM Pallone on APRA, submitted by the Majority
- 3. Letter from Rep. Auchineloss (MA-04) to Chair Rodgers and RM Pallone on children's online safety legislation and the Verifying Kids' Online Privacy Act, submitted by the Minority
- 4. Letter from the California Privacy Protection Agency to Chairs Rodgers and Bilirakis on privacy preemption, submitted by the Majority
- 5. Letter from Consumer Reports to Chair Rodgers and RM Pallone on APRA, submitted by the Minority
- 6. Letter from the Electronic Privacy Information Center to Chair Rodgers and RM Pallone on APRA, submitted by the Majority
- 7. Document from the American Alliance for Vehicle Owners' Rights on privacy legislation, submitted by the Majority
- 8. Document from the Center for Digital Democracy on APRA, submitted by the Majority
- 9. Letter from the Leadership Conference on Civil and Human Rights to Chairs Rodgers and Bilirakis and RMs Pallone and Schakowsky on privacy legislation, submitted by the Majority
- 10. Letter from Main Street Privacy Coalition to Chairs Rodgers and Bilirakis and RM Pallone and Schakowsky on APRA, submitted by the Majority
- 11. Document from the National Taxpayers Union on privacy legislation, submitted by the Majority
- 12. Letter from Privacy for America to Chairs Rodgers and Bilirakis and RMs Pallone and Schakowsky on privacy legislation, submitted by the Majority
- 13. Letter from the US Chamber of Commerce to Chair Bilirakis and RM Schakowsky on APRA, submitted by the Majority
- 14. Letter from R Street to Chair Bilirakis and RM Schakowsky on privacy legislation, submitted by Rep. Walberg
- 15. Letter from ACLI, Finseca, IRI, NAFA, and NAIFA on privacy, submitted by the Majority
- 16. Letter from BSA The Software Alliance to Chair Bilirakis and RM Schakowsky on APRA, submitted by the Minority
- 17. Testimony of Jonathan Haidt titled "Teen Mental Health is Plummeting, and Social Media is a Major Contributing Cause," submitted by Rep. Castor

- 18. Testimony of Arturo Bejar before the Subcommittee on Privacy, Technology, and Law, November 7, 2023, submitted by Rep. Castor
- 19. U.S. Surgeon General's Advisory titled, "Social Media and Youth Mental Health," submitted by Rep. Castor
- 20. CNBC article titled, "Unredacted complaint alleges Meta knew of 'huge volume' of child sexual harassment on its platforms," January 18, 2024, submitted by Rep. Castor
- 21. Common Sense report titled, "Constant Companion: A Week in the Life of a Young Person's Smartphone Use," submitted by Rep. Castor
- 22. Report titled, "Dangerous by Design: How Social Media Companies Are Hurting Our Kids, National Security, and Democracy —and What We Can Do About It," submitted by Rep. Castor
- 23. Report titled, "Designing for Disorder: Instagram's Pro-eating Disorder Bubble," submitted by Rep. Castor
- 24. Wall Street Journal article titled, "Facebook Says AI Will Clean Up the Platform. Its Own Engineers Have Doubts," October 17, 2021, submitted by Rep. Castor
- 25. Testimony of Frances Haugen before the Subcommittee on Communications and Technology.
- 26. Wall Street Journal article titled, "Is Facebook Bad for You? It Is for About 360 Million Users, Company Surveys Suggest," November 5, 2021, submitted by Rep. Castor.
- 27. Report titled, "Unfair Impacts: How LGBTQIA+ Youth are Disproportionately Harmed by Online Platform Design Decisions," submitted by Rep. Castor
- 28. Issue One press release titled, "New poll finds overwhelming public support for bipartisan legislation to protect kids from online harms," November 16, 2023, submitted by Rep. Castor
- 29. Article from the American Psychological Association titled, "Potential Risks of Content, Features, and Functions," submitted by Rep. Castor
- 30. Article from the International Journal of Environment Research and Public Health titled, "The Relationship between Social Media and the Increase in Mental Health Problems," submitted by Rep. Castor
- 31. Article from the Wall Street Journal titled, "Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show," September 14, 2021, submitted by Rep. Castor
- 32. DELETE Act support letter, submitted by Rep. Trahan
- 33. Letter from the American Psychological Association to Chair Bilirakis and RM Schakowsky, April 17, 2024, submitted by Rep. Trahan
- 34. Letter from Taxpayers Protection Alliance to Chair Bilirakis and RM Schakowsky, April 16, 2024, submitted by the Majority
- 35. Letter from the American Financial Services Association to Chairs Rodgers and Bilirakis and RM Pallone and Schakowsky on APRA, April 17. 2024, submitted by the Majority
- 36. Comments from ATA Action to Chair Bilirakis and RM Schakowsky, April 16, 2024, submitted by the Majority
- 37. Letter from Engine to Members of the Innovation Subcommittee, April 17, 2024, submitted by the Majority
- 38. Joint letter from insurance trade associations, April 16, 2024, submitted by the Majority

- 39. Letter from the National Advertising Initiative (NAI) to Chairs Rodgers and Bilirakis and RM Pallone and Schakowsky on APRA, submitted by the Majority
- 40. Letter from SIIA to Chair Rodgers and RM Pallone, April 16, 2024, submitted by the Majority
- 41. Letter from the American Property Casualty Insurance Association (APCIA) to Chairs Rodgers and Bilirakis and RM Pallone and Schakowsky on APRA, April 15, 2024, submitted by the Majority



Jim Nussle President & CEO 202-508-6745 jnussle@americascreditunions.org

99 M Street SE Suite 300 Washington, DC 20003

April 17, 2024

The Honorable Gus Bilirakis Chairman Committee on Energy & Commerce Subcommittee on Innovation, Data, and Commerce U.S. House of Representatives Washington, DC 20515 The Honorable Jan Schakowsky Ranking Member Committee on Energy & Commerce Subcommittee on Innovation, Data, and Commerce U.S. House of Representatives Washington, DC 20515

Re: Today's Hearing: "Legislative Solutions to Protect Kids Online and Ensure Americans' Data Privacy Rights"

Dear Chairman Bilirakis and Ranking Member Schakowsky

On behalf of America's Credit Unions, I am writing regarding to share our thoughts regarding the draft American Privacy Rights Act (APRA) ahead of today's hearing. America's Credit Unions is the voice of consumers' best option for financial services: credit unions. We advocate for policies that allow the industry to effectively meet the needs of their nearly 140 million members nationwide.

We applaud the efforts of Chair McMorris Rodgers and Chairwoman Cantwell in crafting comprehensive data privacy legislation and attempting to advance this issue. Credit unions strongly support the idea of a national data security and data privacy regime that includes robust security standards that apply to all who collect or hold personal data and is preemptive of state laws. We firmly believe that there can be no data privacy until there is strong data security.

Stringent information security and privacy practices have long been a part of the financial services industries' business practices and are necessary as financial services are entrusted with consumers' personal information. This responsibility is reflected in the strong information security and privacy laws that govern data practices for the financial services industry as set forth in the Gramm-Leach-Bliley Act (GLBA). The GLBA's protection requirements are strengthened by federal and state regulators' examinations for compliance with the GLBA's requirements and robust enforcement for violations.

There are three key tenets that credit unions believe must be addressed in any new national data privacy law: a recognition of GLBA standards in place for financial institutions and a strong exemption from new burdensome requirements; a strong federal preemption from the myriad of various state laws for those in compliance with national privacy and GLBA standards; and protection from frivolous lawsuits created by a private right of action. While the draft APRA addresses many of these areas, we believe it falls short of addressing credit unions' concerns. April 17, 2024 Page 2 of 3

GLBA Exemption

We are concerned that the bill does not have an entity-level exemption for those in compliance with the GLBA, but instead creates a data-level GLBA exemption. While this would provide some exemption for credit unions from a number of the bill's provisions, it may not address certain new requirements that lack any comparable analogue in either the GLBA or the Fair Credit Reporting Act (FCRA), such as data portability. The data-level exemption in the bill, unlike an entity-level exemption, will only apply to the extent the GLBA addresses certain uses of data.

This is concerning, as the language of the APRA could be construed as capturing both federaland state-chartered credit unions, as well as credit union service organizations (CUSOs) under its current language, creating significant new burdens on the credit union industry. We would urge changes to strengthen the GLBA exemption to an entity level to include all credit unions before moving forward.

Federal Preemption

The APRA would generally preempt state privacy and data security laws, but there is a long list of carveouts for existing state laws built into the legislation. America's Credit Unions has concerns with some of these exceptions. By far the most problematic of these exceptions to preemption are state laws addressing unfair or unconscionable practices—a catchall that could be used to erode the entire purpose of a uniform federal standard and preemption through incremental expansions of state authority over practices deemed unfair to consumers.

Additionally, the exception for breach notification opens the door for inconsistent state cyberincident reporting standards, which could be longer or shorter than what is currently required by the NCUA (72 hours). For the section of law regarding banking and financial records, many FCRA rights could rest within this domain. State laws that are not "inconsistent" with the FCRA— including state laws that are more protective of consumers than the FCRA—are not entirely preempted by the FCRA itself—and might not be preempted by this bill.

Furthermore, the carveout for state laws addressing banking records could also lead to inconsistencies across states in terms of how liability is allocated between data providers and third parties that avail themselves of the CFPB's proposed rules governing consumer data portability under Section 1033 of the Dodd-Frank Act.

We would urge removal and greater clarity on these exceptions before moving forward on this legislation.

Private Right of Action

In general, the APRA establishes a broad private right of action covering most parts of the bill, including Section 9 which relates to data privacy to the extent a claim alleges a data breach arising from a violation of Section 9(a) (general data security practices), or a regulation

April 17, 2024 Page 3 of 3

promulgated thereunder. Individuals could be awarded actual damages, injunctive relief, declaratory relief, and reasonable attorney fees and litigation costs. While a covered entity would have the opportunity to cure actions or violations in response to a claim for injunctive relief with 30-days' notice, the notice requirement would be waved in cases involving substantial harm (which could be overly broad). We are concerned that this could still lead to frivolous legal action given the exceptions.

Finally, we would urge a strong data security section be added to strengthen data security requirements for those handling personal financial data that are not already to GLBA provisions. As noted above, we firmly believe that there can be no data privacy until there is strong data security for individuals.

In conclusion, while we appreciate the efforts in the draft APRA to create a national privacy standard, we believe the bill still needs to be improved before advancing in the legislative process. On behalf of America's Credit Unions and their 140 million credit union members, thank you for holding this hearing and the opportunity to share our views. We look forward to continuing to work with you to create an environment where credit union members can thrive.

Sincerely,

in Nule

Jim Nussle, CUDE President & CEO

cc: Members of the Subcommittee on Innovation, Data, and Commerce





April 16, 2024

The Honorable Cathy McMorris Rodgers Chair House Energy and Commerce Committee 2188 Rayburn House Office Building Washington, D.C. 20515 The Honorable Frank Pallone, Jr. Ranking Member House Energy and Commerce Committee 2107 Rayburn House Office Building Washington, D.C. 20515

Dear Chair McMorris Rodgers and Ranking Member Pallone:

The Association of National Advertisers ("ANA") and the American Association of Advertising Agencies ("4A's") support effective and preemptive federal privacy legislation, as evidenced by our founding role in Privacy for America and the creation of its *Principles for Privacy Legislation*.¹ We are committed to continuing our work with you and other members of Congress to support the enactment of such legislation. We write to share our concerns that certain provisions in the discussion draft of the American Privacy Rights Act ("APRA")² would negatively impact the advertising industry and the multitude of benefits it provides individuals, businesses, and the economy.

Most notably, the bill could significantly limit the ability of advertisers in every Congressional District (businesses, nonprofits, political campaigns, and the government alike) to reach their customers at the most relevant time and with the most relevant message with targeted advertising, defined in the bill as the mere sending of an advertisement based on a preference of the recipient. In our experience, consumers desire relevant advertising, not spam advertising.

Targeted advertising benefits both consumers and businesses because it ensures advertising reaches the people who want to see it, thereby reducing unwanted ads, driving greater sales, strengthening competition, meeting consumers' desire for advertising, and lowering prices. We believe any limits on such communication would also run afoul of the First Amendment, under which advertising is protected speech that both businesses have a right to speak and consumers have a right to receive.³

In contrast to the approach in the draft APRA, all of the states that have addressed this issue focus their bills on web viewing data across unrelated sites over time, with the focus being on providing choice over the use of this collected data for targeted advertising.

¹ Privacy for America, *Principles for Privacy Legislation*, located <u>here</u>.

² Discussion Draft, American Privacy Rights Act of 2024, located here (hereinafter, "APRA").

³ Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc., 425 U.S. 748, 756-67 (1976); Sorrell et. al. v. IMS Health Inc., 564 U.S. 552, 570-71 (2011).

This issue can be prevented if the APRA is amended to support consumer privacy and efficient marketing at the same time in the same way as state laws by allowing data-driven advertising to continue to power innovation, subject to an opt-out choice that is appropriately scoped.

We hope to work constructively with you and your offices to improve the bill, and protect businesses across the country and the nation's economy from the consequences of unworkable federal privacy standards.

* * *

Sincerely,

Christopher Oswald EVP for Law, Ethics & Gov't Relations ANA Alison Pepper EVP – Government Relations and Sustainability 4A's JAKE AUCHINCLOSS

4TH DISTRICT, MASSACHUSETTS

HOUSE COMMITTEE ON TRANSPORTATION & INFRASTRUCTURE

SUBCOMMITTEE ON AVIATION SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION SUBCOMMITTEE ON HIGHWAYS AND TRANSIT

HOUSE SELECT COMMITTEE ON STRATEGIC COMPETITION BETWEEN THE UNITED STATES AND THE CHINESE COMMUNIST PARTY



Congress of the United States House of Representatives Washington, DC 20515

1524 LONGWORTH HOUSE OFFICE BUILDING WASHINGTON, DC 20515 PHONE (202) 225-5931 FAX (202) 225-0182

8 North Main Street, Suite 200 Attleboro, MA 02703 (508) 431-1110

29 CRAFTS STREET, SUITE 375 NEWTON, MA 02458 (617) 332-3333 Fax (617) 332-3308

auchincloss.house.gov facebook.com/RepAuchincloss twitter.com/RepAuchincloss instagram.com/RepAuchincloss/

April 16, 2024

The Honorable Cathy McMorris Rodgers Chair Committee on Energy and Commerce 2125 Rayburn House Office Building Washington, DC 20515 The Honorable Frank Pallone Ranking Member Committee on Energy and Commerce 2322A Rayburn House Office Building Washington, DC 20515

Dear Chair McMorris Rodgers and Ranking Member Pallone,

It has recently been announced that the Committee on Energy and Commerce will hold a hearing on legislation related to data privacy and children's online safety.¹ As the Committee continues to evaluate legislation to enhance data privacy and strengthen protections for children online, I urge you to consider legislation that includes privacy-protective age verification requirements, such as those included in my legislation, the Verifying Kids' Online Privacy Act (H.R. 7534).²

Social media companies can easily skirt data privacy and safety regulations for children if they are not required to verify the age of their users. The Children's Online Privacy Protection Act (COPPA) requires protections for users under the age of 13.³ Major social media companies have, by and large, decided that it is easier to not allow kids under 13 to use their services instead of complying with this "burdensome" requirement.⁴ Companies often simply ask users to input their birthday when creating an account, which is easy for underage users to work around.

The lack of strong protections for children online has led to rampant abuse by social media companies. An ongoing lawsuit by over thirty state Attorneys General alleges that Meta "designed psychologically manipulative product features to induce young users' compulsive and extended use" of their platforms.⁵

¹ Klar, R. (2024, April 10). House Panel to Hold Hearing on Privacy, Kids Safety Bills. The Hill. <u>https://thehill.com/policy/technology/4585304-house-panel-to-hold-hearing-on-privacy-kids-safety-bills/</u>

² H.R.7534 - Verifying Kids' Online Privacy Act. (2024, March). Congress.gov. <u>https://www.congress.gov/bill/118th-congress/house-bill/7534?s=1&r=1</u>

³ Children's Privacy. (n.d.). EPIC - Electronic Privacy Information Center. <u>https://epic.org/issues/data-protection/childrens-privacy/</u>

⁴ Products, P. D. V. O. Y., & Meta. (2021, September 23). How do we know someone is old enough to use our apps? *Meta*. <u>https://about.fb.com/news/2021/07/age-verification/</u>

⁵ Kang, C., & Singer, N. (2023, October 24). Meta Accused by States of Using Features to Lure Children to Instagram and Facebook. New York Times. <u>https://www.nytimes.com/2023/10/24/technology/states-lawsuit-children-instagram-facebook.html</u>

And a recent Wall Street Journal investigation found that Instagram promotes videos that include sexual content to users, including adult men, that follow young influencers.⁶ A previous Journal investigation found that Instagram "helps connect and promote a vast network of accounts openly devoted to the commission and purchase of underage-sex content."⁷

My legislation would take two major steps to address the gaps in COPPA's protections: 1) increasing the age of those protected from 13 to 16, and 2) requiring social media companies to develop privacy-protective methods of verifying the age of its users to ensure that COPPA's protections extend to all children on a platform. Importantly, this legislation would not require a specific age verification method, but would allow for companies to design a privacy-protective method that fits their platform, while still requiring those companies to submit these processes to the Federal Trade Commission to be considered for COPPA's existing safe harbor provisions.⁸ Companies would also be barred from selling, transferring, or otherwise using any data collected in the verification process for any purpose other than verification.

Requiring age verification would constitute a critical step in ensuring that companies uphold the protections included in COPPA, as well as any future data privacy and child safety legislation the Committee may consider. As you work to evaluate legislation pertaining to data privacy and children's online safety in the remainder of this session, I urge you to consider the strongest possible safety and privacy measures, including privacy-protective age verification.

Thank you for your work on this critical issue.

Sincerely,

La Dala-

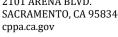
Jake Auchincloss Member of Congress

⁶ Horwitz, J., & Blunt, K. (2023, November 27). Instagram's algorithm delivers toxic video mix to adults who follow children. Wall Street Journal. <u>https://www.wsj.com/tech/meta-instagram-video-algorithm-children-adultsexual-content-72874155</u>

⁷ Horwitz, J., & Blunt, K. (2023, June 7). *Instagram Connects Vast Pedophile Network*. Wall Street Journal. <u>https://www.wsj.com/articles/instagram-vast-pedophile-network-4ab7189</u>

⁸ COPPA Safe Harbor Program. (2023, September 6). Federal Trade Commission. <u>https://www.ftc.gov/enforcement/coppa-safe-harbor-program</u>

CALIFORNIA PRIVACY PROTECTION AGENCY 2101 ARENA BLVD.





April 16, 2024

The Honorable Cathy McMorris Rodgers, Chair House Energy & Commerce Committee United States House of Representatives Washington, DC 20515

The Honorable Gus Bilirakis, Chair Innovation, Data, and Commerce Subcommittee United States House of Representatives Washington, DC 20515

Re: American Privacy Rights Act Discussion Draft

Dear Chairs McMorris Rodgers and Bilirakis,

In light of the Innovation, Data, and Commerce Subcommittee's hearing, "Legislative Solutions to Protect Kids Online and Ensure Americans' Data Privacy Rights," the California Privacy Protection Agency (Privacy Agency)¹ writes to urge the House Energy & Commerce Committee to consider comprehensive federal privacy legislation that truly protects Americans' privacy by setting a floor, not a ceiling on those rights. Instead, the American Data Privacy Rights Act discussion draft,² released just last week, includes language intended to eliminate nearly every provision in the California Consumer Privacy Act (CCPA),³ the California Delete Act,⁴ and other existing privacy laws—and seeks to prevent California and other states from further advancing protections.

In this era of rapid technological innovation, this approach is short-sighted. For years, California and other states have typically been the first to step in to address new threats to consumer privacy. In 2002, California became the first state to pass a data breach notification requirement, and in 2018, it became the first to adopt a comprehensive commercial privacy law, the California Consumer Privacy Act. That pace has only accelerated as technology has grown more advanced. In the past two years alone, California has adopted multiple pieces of legislation to strengthen privacy protections—including a first-in-the-nation global data broker deletion requirement⁵ and new protections with respect to reproductive privacy.⁶ These efforts are supported by the CCPA's unique "floor" on protections, ensuring that any amendments to the CCPA by the California legislature are in furtherance of the law's intent: to protect privacy.⁷ This benefits not

¹ Established by California voters in 2020, the California Privacy Protection Agency was created to protect Californians' consumer privacy. The Agency implements and enforces the California Consumer Privacy Act. It is governed by a five-member board that consists of experts in privacy, technology, and consumer rights. ² American Privacy Rights Act of 2024 Discussion Draft (APRA),

https://d1dth6e84htgma.cloudfront.net/American_Privacy_Rights_Act_of_2024_Discussion_Draft_0ec8168a66.pdf. ³ Cal. Civ. Code § 1798.100 et seq.

⁴ 2023 Cal. Stat. 709 (SB 362).

⁵ Id.

⁶ See, for example, 2022 Cal. Stat. 567 (AB 1194).

⁷ Proposition 24 (2020), Sec. 25.

just Californians but all Americans since it provides a baseline of protections to which businesses must adhere.

If adopted, APRA could remove these and many other singular protections enjoyed by Californians. For example, the draft seeks to remove the California Privacy Protection Agency's (Privacy Agency) authority, overriding the will of California voters to create a new state data protection authority.⁸ The CCPA provides the Privacy Agency with the power to audit and bring administrative actions against businesses under its jurisdiction, creating another law enforcement entity to protect consumer privacy.⁹ California's unique audit authority, in particular, is modeled after European inspection authority. And though the APRA seeks to vest the Federal Trade Commission (FTC) with new responsibilities, it also prevents the FTC from bringing robust enforcement in certain scenarios by granting compliance safe harbors to businesses. Constraining the primary enforcement authority when Americans need greater privacy enforcement—and limiting existing privacy enforcers—disadvantages consumers.¹⁰

The APRA also seeks to undermine efforts to secure comprehensive protections with respect to emerging technologies like artificial intelligence, including automated decisionmaking technology (ADMT). Though not yet law, California is proposing draft regulations that already go farther than the APRA, including a right to opt-out of the use of personal information with respect to training ADMT.¹¹ The Privacy Agency's rulemaking authority also permits it to update regulations in response to changes over time, to keep pace with evolving technology. But as written, the APRA would lock the country into a standard that stymies California's rulemaking innovation.

In addition, APRA seeks to weaken protections with respect to data brokers. The California Delete Act, adopted last year, gives consumers the right to request that their personal information held by all registered data brokers be deleted, in a single step. If the consumer requests such deletion, businesses are also prevented from selling or sharing new personal information. And if a deletion request cannot be verified, the data broker must honor the request as an opt out of sale or sharing. Instead, APRA provides for a global data broker "Do Not Collect" request, which would still allow data brokers to retain and sell consumers' information—which is a significant security risk. Lastly, the APRA caps certain penalties for data brokers' noncompliance with registration and notice requirements to approximately \$10,000 per year, which would weaken the law overall. The California Delete Act has no such cap.

APRA also lacks critical protections with respect to sexual orientation, union membership, and immigration status. Not including these categories in the definition of sensitive covered data leaves crucial gaps in protections. For example, APRA exempts inferences made from publicly available information as long as they do not reveal information about an individual that would constitute sensitive covered data and are not combined with covered data.¹² For example, if a business makes an inference that an individual is a member of the LGBT community based on factors such as social media posts and address, the business would not be obligated to disclose,

⁸ Established by California voters in 2020, the California Privacy Protection Agency was created to protect Californians' consumer privacy. The Agency implements and enforces the California Consumer Privacy Act. It is governed by a five-member board that consists of experts in privacy, technology, and consumer rights. ⁹ Cal. Civ. Code § 1798.199.40

¹⁰ APRA, Sec. 15

 ¹¹ California Privacy Protection Agency, Draft Risk Assessment and Automated Decisionmaking Technology Regulations (March 2024), https://cppa.ca.gov/meetings/materials/20240308_item4_draft_risk.pdf.
 ¹² APRA, Sec. 2(9)(iv).

correct, or delete this inference because it would not be "covered data." In contrast, the CCPA includes sexual orientation, union membership, and immigration status in the definition of sensitive personal information.¹³ And the California Attorney General has clarified that inferences derived from publicly available information are covered by the CCPA.¹⁴

Traditionally, federal privacy legislation has set a baseline and allowed states to develop stronger protections. For example, the Health Insurance Portability and Accountability Act (HIPAA), the Gramm-Leach-Bliley Act (GLBA), and the Fair Credit Reporting Act (FCRA), among others, include language that enables states to adopt stronger protection.¹⁵ California has often done so. The Confidentiality of Medical Information Act and the California Financial Information Privacy Act are just two examples of California laws that build on the federal baseline.¹⁶ This approach has not prevented California from becoming one of the largest economies in the world.¹⁷

The APRA would break with that tradition. In addition, it is not clear that the draft would create a single national standard, often cited as the justification for preempting state law. Requiring the FTC to bless compliance plans developed by different businesses could lead to a proliferation of procedures for exercising access, deletion, correction, and opt-out rights. This would shift the burden of compliance to consumers, especially seniors, parents of young children, and other underserved groups who do not have the resources to navigate hundreds if not thousands of different processes.

A federal privacy law with sweeping preemption language could freeze protections for the next thirty years. Strong federal protections do not have to come at the expense of the states. Indeed, if we view states as laboratories in our federal system, the APRA would slam the door closed when it comes to privacy and emerging technology.

We look forward to working with you to craft legislation that supports both a federal baseline and states' ability to innovate.

Sincerely,

Ashkan Soltani Executive Director California Privacy Protection Agency

cc: Members, House Energy & Commerce Committee

¹³ Cal. Civ. Code § 1798.140(ae).

¹⁴ Opinion No. 20-303 (Opinion), State of California Office of the Attorney General at 11 (Mar. 10, 2022), https://oag.ca.gov/system/files/opinions/pdfs/20-303.pdf.

¹⁵ See 45 C.F.R. Part 160, Subpart B; 15 U.S.C. § 6807; 15 U.S.C. § 1681t.

¹⁶ Cal. Civ. Code § 56.10 et seq.; Cal. Fin. Code § 4051(b).

¹⁷ Office of Governor Gavin Newsom, *ICYMI: California Poised to Become World's 4th Biggest* Economy (Oct. 24, 2022), https://www.gov.ca.gov/2022/10/24/icymi-california-poised-to-become-worlds-4th-biggest-economy/.



April 16, 2024

Chair Cathy McMorris Rodgers Ranking Member Frank Pallone House Committee on Energy and Commerce Washington, D.C. 20515

Re: Discussion Draft of the American Privacy Rights Act (APRA)

Dear Chair McMorris Rodgers and Vice Pallone,

Consumer Reports¹ writes to share our initial thoughts on the committee's recently announced discussion draft of the American Privacy Rights Act (APRA). We commend the continued work of this committee in trying to enact federal privacy legislation and for its outreach to stakeholders to solicit feedback to ensure the bill works as intended. Consumer Reports has long argued in favor of federal privacy protections, and we support the bipartisan negotiations to develop a consensus solution to these pressing issues. However, as currently written, we believe the bill's privacy protections are not robust enough to justify the bill's preemption provisions that would undo important and evolving state and federal privacy laws.

The bill does include important protections for consumers, many of which have been carried over from the committee's last bipartisan proposal, the American Data Privacy and Protection Act (ADPPA). These include baseline consumer rights like the right to access, correct, and delete personal information held by companies, strong civil rights protections to safeguard consumers from discriminatory uses of data, and special protections relating to data brokers and large data holders.

That said, the bill's core protections relating to targeted advertising and online tracking — those tethered to the bill's data minimization, opt-in, and opt-out provisions — are too unclear and contradictory to support in their current form. To share one key example, under the current draft, information used to track consumers across apps and websites (the type of information commonly used for targeted advertising) is deemed as sensitive information (subject to both data minimization and opt-in consent), and the practice of targeting advertising using non-sensitive data is listed as an exception to the data minimization standard. Does that mean

¹ Founded in 1936, Consumer Reports (CR) is an independent, nonprofit and nonpartisan organization that works with consumers to create a fair and just marketplace. Known for its rigorous testing and ratings of products, CR advocates for laws and company practices that put consumers first. CR is dedicated to amplifying the voices of consumers to promote safety, digital rights, financial fairness, and sustainability. The organization surveys millions of Americans every year, reports extensively on the challenges and opportunities for today's consumers, and provides ad-free content and tools to 6 million members across the U.S.

that targeted advertising using sensitive data is prohibited by default? If so, then why is there a separate opt-out for targeted advertising later in the bill? If not, the bill takes a step back from ADPPA, which clearly prohibited as a matter of law the use of online behavioral data for targeted advertising. The text of the bill raises several other similar questions that are difficult to answer based on its current language.

Offering these ambiguous and sometimes contradictory protections at the expense of the developing body of state privacy law — many of which contain provisions that are considerably stronger than APRA — would be a bad deal for consumers at this time. For more detailed thoughts on these issues, please see the attached op-ed, "Unclear Protections in the American Privacy Rights Act Not Worth Broad Preemption." We plan to follow-up with the committee with suggested language to address these and other concerns.

Thank you again for your diligent efforts to bring new privacy and civil rights protections to American consumers. Despite our concerns, we remain supportive of this process and are hopeful that the issues we identify can be resolved.

Sincerely,

Justin Brookman, Director, Technology Policy Matt Schwartz, Policy Analyst Consumer Reports

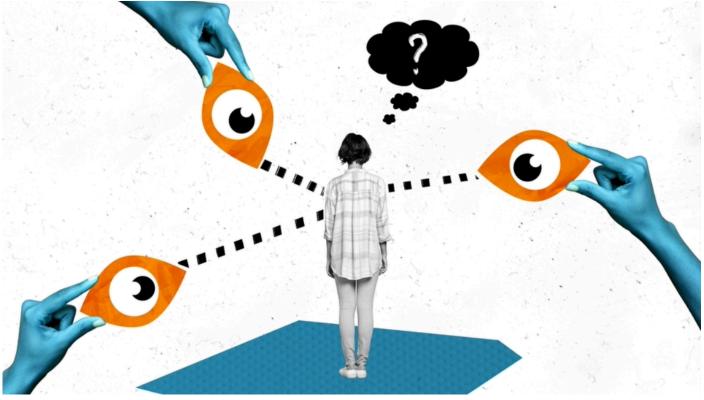


Home > Unclear Protections in the American Privacy Rights Act Not Worth Broad Preemption

Unclear Protections in the American Privacy Rights Act Not Worth Broad Preemption

JUSTIN BROOKMAN / APR 11, 2024

Justin Brookman is the Director of Technology Policy for Consumer Reports.



Shutterstock

I am very torn on the subject of federal privacy legislation. On the one hand, it's something I've fought for for years, and American consumers deserve to have strong and comprehensive protections over what happens to their personal information. On the other hand, I am very worried about enacting and cementing imperfect privacy protections in place, undoing the substantial progress that has been made at the state level, and prohibiting states from iterating on protections over time. Federal privacy law could be monumental if it gets the substance right, but it could also be disastrous if it preempts the states with a weak or unworkable standard.

Over the weekend, Senator Cantwell (Democratic Chair of the Senate Commerce Committee) and Representative McMorris Rodgers (Republican Chair of the House Energy & Commerce Committee) unveiled the text of <u>American Privacy Rights Act of 2024</u> — the latest effort in a long-standing slog to enact federal privacy legislation. APRA is a carefully balanced compromise that will necessarily frustrate both sides, but which offers everyone something — companies get one standard that preempts states from enacting additional protections, and advocates get a nationwide law that includes novel protections as well as a private right of action.

The landscape has changed

One thing that's important to note at the beginning of this discussion is that the landscape at the state level is very different than it was even two years ago when Congress considered the <u>American</u> <u>Data Privacy and Protection Act</u> (or ADPPA) — the last major bipartisan effort at federal privacy legislation. Sixteen states have now enacted comprehensive privacy laws, most recently Maryland which enacted arguably the strongest yet, mandating companies only collect data as is necessary to provide the service requested by the consumer. California has refined and strengthened its privacy laws since enacting the California Consumer Privacy Act (CCPA) in 2018, adding strong new protections for mental health and sexuality data, enacting the DELETE Act to give consumers more control over data broker records — all while the California Privacy Protection Agency has initiated rulemaking on protections around automated decision making. Dozens of other states are considering similar protections around algorithmic decision making and AI in addition to their own comprehensive and sectoral privacy bills. Washington state passed the My Health, My Data Act strictly limiting secondary use of personal health information, while Massachusetts is considering legislation to prohibit the sharing of geolocation data with third parties.

So is passing APRA worth reversing all the state level gains? It's not, at least not as it's currently written. The text of the bill is largely borrowed from ADPPA, but it does fold in new elements, and perhaps as a result the overall structure is complicated, and at times contradictory. (To be fair, the bill was consciously distributed as a "discussion draft," and the authors have signaled a willingness to work with stakeholders to address concerns. We will be sharing specific suggestions with lawmakers to address these and other issues.)

Confusing treatment of online advertising

One of the first things I look for in privacy legislation is "how will the bill address targeted advertising and online data sharing?" Concerns about websites sharing your data with Google and Facebook, not to mention hundreds of other ad-tech companies and data brokers, has fueled much of the drive for enacting privacy legislation, so it's important to know how legislation would try to rein in excessive practices.

Unfortunately, it is *very* difficult to assess what exactly APRA would do on this issue. Section 3(a) of the bill leads with a strong data minimization principle: companies can only collect, use, or share data to provide a specific product or service requested by an individual (with some explicit carveouts for operational administrative uses). This is what consumer advocates have largely asked for, including Consumer Reports (see for example our <u>white paper</u> with EPIC on guidance for FTC privacy rulemaking) — constraining data processing to consumer expectations rather than subjecting consumers to persistent and annoying opt-in requests, or difficult-to-use opt-out controls.

However, the APRA bill text then introduces a number of other exceptions and other intersecting and confusing provisions, leaving the reader unclear as to how different data elements are protected. "Targeted advertising" based on non-sensitive data is exempted from the data minimization requirements, subject only to an opt-out. Separately, Section 3(b) of the bill requires opt-in consent for the transfer of "sensitive" data to third parties (including data about online activities). It is not clear how this provision interacts with 3(a)'s data minimization rules — does the transfer also have to be specifically in service of a consumer request? The text is ambiguous, but it would be strange to treat the sharing of less sensitive data pursuant to a stronger standard (data minimization under 3(a)) than sensitive data (consent requirement under 3(b)). On the other hand, if 3(a) still applies, it's hard to see how targeted advertising based on sensitive data could ever be allowed. I would support that result, but it seems inconsistent with the rest of the bill (such as the definition of "targeted advertising" which includes targeting based on online behavioral data). If instead online targeted advertising is allowed under the bill, that would be a significant retreat from ADPPA, which prohibited most cross-website ad targeting without an opt-out or an opt-in.

There is also ambiguity about what constitutes "sensitive" data. The bill defines "information revealing an individual's online activities over time and across websites and online services" as sensitive, but what if websites share data about online activities one-at-a-time? That's how much online sharing works — you go to a website, and then that website tells dozens of other companies that you're there. Is that one site visit sensitive, requiring consent for transferring? Similarly, is "retargeting" — targeting ads based on just one website (such as a pair of shoes you looked at) — covered by the definition of targeted advertising? And if it isn't, is it completely fair game — not even subject to an opt-out — or is it strictly prohibited? I'm not sure of the answer to any of these questions based on the text of APRA.

While "targeted advertising" and some first-party advertising are carved out as exceptions to the bill's data minimization rule, other ad-tech functions like frequency capping, measurement, and attribution don't seem to be covered by the bill at all. Does that mean they are just prohibited by the bill's default data minimization language?

Or, do those functions fall under the bill's large carveouts for "service providers" who provide functionality on behalf of other companies? Would the bill simply allow companies to engage in most of the same data sharing behaviors they already do by simply designating partners as "service providers" who can then collect and merge data sets across their various customers? In response to state privacy laws — even laws intended to address sensitive data categories like <u>personal health data</u> — we've seen companies adopt <u>aggressive interpretations</u> of loopholes to simply engage in the same behaviors of sharing online behavior with dozens of sites at a time (while maybe passing along instructions limiting use of that data). Perhaps this bill would do no worse than existing state laws in actually reining in excessive data sharing. But it would also stop states from improving on their laws to address these concerns over time.

And in some cases, the bill actually backtracks from existing law. For example, Section 4(e) says that companies can make material changes to their privacy policies after the fact and treat previously collected data pursuant to those new policies so long as they try to let you know about it and give you the opportunity to opt out. That's a weaker standard than existing consumer protection law that says companies can only retroactively change privacy policies with your express permission. Perhaps not the biggest deal in the world since few people actually read policies, but this would render privacy policies even more meaningless, and deprive the FTC of a <u>tool they've used</u> for <u>nearly twenty years</u> to go after companies who've violated promises to consumers as to how they would treat your personal information.

Hazy rules for AI

The bill also tackles algorithmic discrimination, just as a host of bills <u>across</u> the <u>country</u> are purporting to do the same thing. Many of the protections are thoughtful and praiseworthy, but there are loopholes that could constrain their effectiveness. Companies are required to audit their algorithms for potential bias issues and harms to minors but not for other harms. Companies can also withhold not just information that would reveal "trade secrets" but anything it deems to be "confidential." Companies don't have to tell consumers when they lose out on an opportunity because of an algorithmic assessment, nor are they entitled to an explanation for when they do.

The bill also vaguely requires that companies offer an "opt-out" for consequential decision making, but doesn't provide any guidance as to what that means or what the alternative is (the Federal Trade Commission isn't empowered to engage in rulemaking but can offer informal "guidance"). Algorithmic "opt outs" have been an element of various state and international privacy laws for years now, but there is still a ton of uncertainty as to how exactly they do — or should — operate in practice. Some scholars have put a ton of <u>practical thinking</u> into how consumers should be able to opt out, contest, or otherwise appeal decisions made by AI and other algorithmic determinations, but it's a complicated and nuanced subject, and the current text of APRA doesn't offer a ton of clarity. Unlike with privacy

law, where we at least have some useful metrics as to what works and what doesn't, we don't have a lot of data about what effective consumer interventions with regard to algorithmic decision making looks like (apart from the Fair Credit Reporting Act and Equal Credit Opportunity Act, which mandates transparency, <u>explainability</u>, and <u>appeal</u> instead of an "opt out"). Freezing the law around a poorly articulated "opt-out" would constrain state policymakers from coming up with more measured approaches.

Reasons to believe, and work to be done

To be fair, the bill also has a number of novel elements that we haven't seen in a lot of state legislation to date, such as special rules to constrain the power of dominant social media companies, strong language clearly prohibiting retaliation against consumers who exercise privacy rights, and an opportunity for private citizens to enforce the law — a vital provision that understandably must have taken a great deal of negotiation and which has already drawn the <u>ire of critics</u>. Those — and other provisions — would all mark a dramatic improvement over the existing patchwork of state laws, and give consumer advocates reason to be enthusiastic about APRA's enactment.

But there's a huge cost as well if the bill were to invalidate current state laws — some of which have stronger elements than APRA — as well as future laws that could address holes that emerge from the law as well as new technologies. Congress has tried — and failed — to enact privacy legislation since at least the late Senator Fritz Hollings (D-SC) proposed the <u>Online Personal Privacy Act</u> nearly twenty-five years ago. If APRA is enacted, will Congress wait another twenty-five years to address new concerns? Meanwhile, California alone iterates and advances on its own privacy legislation *every year*. If broad preemption is going to be worth the tradeoff, the text of a bill would need to be exceedingly clear and strong — far stronger than existing state protections. APRA isn't there yet — and there's a short legislative window to address its issues — but we will work to hopefully get the bill to a place where its benefits outweigh its downsides for American consumers.

RELATED READING:

- <u>The American Privacy Rights Act of 2024 Explained: What Does the Proposed Legislation Say,</u> <u>and What Will it Do?</u>
- Can the American Privacy Rights Act Accomplish Data Minimization?
- Experts Provide Early Analysis of the American Privacy Rights Act

AUTHORS

4/16/24, 5:18 PM



Unclear Protections in the American Privacy Rights Act Not Worth Broad Preemption | TechPolicy.Press

JUSTIN BROOKMAN

Justin Brookman is the Director of Technology Policy for Consumer Reports. Justin is responsible for helping the organization continue its groundbreaking work to shape the digital marketplace in a way that empowers consumers and puts their data privacy and security needs first. This work includes us...

TOPICS

Privacy Transparency

OUR CONTENT. DELIVERED.

Join our newsletter on issues and ideas at the intersection of tech & democracy

-		_	:	L .
E.	m	a	L	L

Subscribe

A nonprofit media and community venture intended to provoke new ideas, debate and discussion at the intersection of technology and democracy. Privacy Policy

AboutFellowsArticlesDonateContributorsPodcastPrivacy PolicySubmissionsResearch Library



Tech Policy Press © 2023 - a 501(c)(3) organization

epic.org

Electronic Privacy Information Center 1519 New Hampshire Avenue NW Washington, DC 20036, USA +1 202 483 1140
 +1 202 483 1248
 @EPICPrivacy
 https://epic.org

April 17, 2024

Dear Chair McMorris Rogers and Ranking Member Pallone:

The Electronic Privacy Information Center (EPIC) commends you and Senator Cantwell for returning to the table to work on bipartisan comprehensive privacy legislation. The American Privacy Rights Act (APRA) represents significant progress toward the goal of enacting meaningful privacy protections for all Americans. EPIC looks forward to working with you to strengthen the bill.

We face a data privacy crisis in the United States. Americans are constantly tracked: Every website we visit, app we open, article we read, ad we linger over, even what our friends are reading and where they are going is collected and connected to other data about us all to target us with more ads. These commercial surveillance systems are fundamentally inconsistent with the expectations of consumers. This mass data collection heightens security risks, enables data misuse, threatens autonomy, and perpetuates manipulation and discrimination.

We commend the sponsors of the APRA for recognizing that in order to meaningfully protect Americans' privacy, these harmful business practices are going to have to change. The APRA's core protections are based on a concept that has long been a pillar of privacy protection: data minimization. The APRA sets a baseline requirement that entities only collect, use, and transfer data that is "*necessary, proportionate, and limited*" to provide or maintain a product or service requested by the individual (or pursuant to certain enumerated purposes). This limitation will better align company's data collection practices with what consumers expect. We commend you for including strong data minimization rules in the APRA.

But if the APRA is to preempt existing and future state privacy laws, it must be stronger than current state laws and resilient to future shifts in technology and business practices. EPIC has long argued that federal privacy laws should set a floor, allowing states to enact stronger protections. We still believe this is the best approach and would prefer that the APRA set that standard, but we recognize that compromise is necessary to enact a federal law that would protect the privacy and civil rights of all Americans.

However, the privacy landscape in the United States has shifted considerably since the American Data Privacy and Protection Act was introduced in 2022. Over a dozen states have passed comprehensive privacy laws of varying strength. Just this month, Maryland passed a privacy law that

1

Privacy is a Fundamental Right.

includes data minimization standards and civil rights protections modeled after provisions in the American Data Privacy and Protection Act. Maine, Massachusetts, and Vermont are all considering similar bills. Companies have already started investing in compliance with the California Consumer Privacy Act and the extensive regulations issued by the California Privacy Protection Agency. Other states will likely also rely on California's regulations to provide guidance to businesses regarding compliance with their own privacy laws. Washington state enacted the My Health, My Data Act to establish strong protections for health data.

We believe that the current status of state privacy laws will make the preemption compromise in APRA very difficult both for businesses to follow and courts to decipher – but there are possible solutions. The current privacy landscape is similar to the situation that preceded the Clean Air Act, and we believe the preemption provisions in that law offer a solution that could be adopted in the privacy context — states would be permitted to seek a waiver of the preemption provision if they can show that their law provides a greater degree of privacy protection. EPIC is happy to follow up with the Committee with additional details and draft language if interested. Rulemaking authority for specific provisions in the bill such as algorithm impact assessments and design evaluations would also help the law keep pace with technology.

Privacy is a fundamental right, and it is time for Congress to act to protect the privacy rights of all Americans. The American Privacy Rights Act presents Congress with the best opportunity it has had in decades to stop the very real data abuses and privacy harms that are happening every minute of every day, but it must meet the moment we are in in 2024. We commend you for your work on this critical issue and look forward to continuing to work with you to finally enact meaningful privacy protections for all Americans.

Sincerely,

Electronic Privacy Information Center (EPIC)

2



STATEMENT OF THE

AMERICAN ALLIANCE FOR VEHICLE OWNERS' RIGHTS

BEFORE THE HOUSE ENERGY AND COMMERCE COMMITTEE'S INNOVATION, DATA AND COMMERCE SUBCOMMITTEE'S HEARING ON

"LEGISLATIVE SOLUTIONS TO PROTECT KIDS ONLINE AND ENSURE AMERICANS' DATA PRIVACY RIGHTS"

APRIL 17, 2024

The undersigned organizations and companies of the American Alliance for Vehicle Owners' Rights (AAVOR) respectfully submit this statement to the House Energy and Commerce Subcommittee on Innovation, Data and Commerce and ask that it be made part of the official record for the April 17, 2024 hearing on "Legislative Solutions to Protect Kids Online and Ensure Americans' Data Privacy."

AAVOR's members represent interests from across the mobility ecosystem, including consumer advocates, fleet owners and operators, shared mobility service providers, preventative automotive maintenance and repair providers, insurers, automotive recyclers, and telematics providers. As Congress looks to address privacy concerns, and as vehicles are increasingly "computers on wheels," we respectfully urge Congress also to address the issue of access, ownership and control of motor vehicle generated data.

American Alliance for Vehicle Owners' Rights Contact: Greg Scott, gscott@aavor.org 202-297-5123 Motor vehicle generated data is the new frontier for the development of the future of mobility. Today's connected vehicles (cars, trucks and buses) offer consumers innovative new services, and bring significant downstream business development potential for all stakeholders in the on-road transportation sector, including, but not limited to, navigation (real-time localization/traffic information), infotainment (access to online movies/music), maintenance (fleet management/remote diagnostics/vehicle recovery), insurance (pay-as-you-drive/claim investigation), traffic efficiency (reduced congestion), sustainability (reduced fuel consumption), and safety. This vehicle-generated data is related to nearly every aspect of the vehicle's operation and has been historically accessed through a physical "on-board diagnostics" (e.g., OBD-II in passenger cars) port. A growing number of vehicles are transitioning to wireless access (telematics), bypassing the in-cabin, wiredaccess port and restricting access to vehicle generated data by vehicle owners and third parties. Vehicle-generated data – whether accessed through a wired port or telematics -- already provides many benefits.

Based on the foregoing, as Congress seeks to enact a federal data privacy law, we respectfully urge Congress to also address the issue of access, ownership and control of motor vehicle generated data, and we look forward to working with members of the Subcommittee on these important issues. We thank you for the opportunity to submit this statement for the record.

Signed,

American Car Rental Association American Property Casualty Insurance Association Automotive Recyclers Association Consumer Action NAFA – Fleet Management Association National Consumers League Owner-Operator Independent Drivers Association Tire Industry Association Geotab, Inc. Privacy4Cars Safelite, LLC

American Alliance for Vehicle Owners' Rights Contact: Greg Scott, gscott@aavor.org 202-297-5123



April 17, 2024

Center for Digital Democracy Washington, DC Contact: Katharina Kopp, <u>kkopp@democraticmedia.org</u>

Statement Regarding House Energy & Commerce Hearing : "Legislative Solutions to Protect Kids Online and Ensure Americans' Data Privacy Rights"

The following statement can be attributed to **Katharina Kopp, Ph.D., Deputy Director, Center for Digital Democracy**:

The Center for Digital Democracy (CDD) welcomes the bi-cameral and bi-partisan effort to come together and produce the **American Privacy Rights Act (APRA**) discussion draft. We have long advocated for comprehensive privacy legislation that would protect everyone's privacy rights and provide default safeguards.

The United States confronts a commercial surveillance crisis, where digital giants invade our private lives, spy on our families, and exploit our most personal information for profit. Through a vast, opaque system of algorithms, we are manipulated, profiled, and sorted into winners and losers based on data about our health, finances, location, gender, race, and other personal information. The impacts of this commercial surveillance system are especially harmful for marginalized communities, fostering discrimination and inequities in employment, government services, health and healthcare, education, and other life necessities. The absence of a U.S. privacy law not only jeopardizes our individual autonomy but also our democracy.

However, our reading the APRA draft, we have several questions and concerns, suggesting that the document needs substantial revision. While the legislation addresses many of our requirements for comprehensive privacy legislation, we oppose various provisions in their current form, including

- Insufficient limitations on targeted advertising and de-facto sharing of consumer data: The current data-driven targeted ad supported business model is the key driver of commercial exploitation, manipulation, and discrimination. APRA, however, allows the continuation and proliferation of "first party" targeted advertising without any recourse for individuals. Most of the targeted advertising today relies on first party advertising and widely accepted de-facto sharing practices like "data clean rooms." APRA should not provide any carve-out for first-party targeted advertising.
- Overbroad preemption language: APRA's preemption of state privacy laws prevents states from implementing stronger privacy protections. Considering that it took the U.S. three decades to pass any comprehensive privacy legislation since the establishment of pervasive digital marketing practices, it would be short-sighted and reckless to believe that the current form of APRA can adequately protect online privacy in the long run

without pressure from states to innovate. Technology and data practices are rapidly evolving, and our understanding of their harms are evolving as well. The preemption language is particularly careless, especially since there are almost no provisions giving the FTC the ability to update APRA through effective rulemaking.

CDD strongly supports the **Children and Teens' Online Privacy Protection Act (COPPA 2.0**), **HR 7890.** Children and teens require additional privacy safeguards beyond those outlined in APRA. Digital marketers are increasingly employing manipulative and unfair data-driven marketing tactics to profile, target, discriminate against, and exploit children and teens on all the online platforms they use. This is leading to unacceptable invasions of privacy and public health harms. The Children and Teens' Online Privacy Protection Act (COPPA 2.0) is urgently needed to provide crucial safeguards and to update federal protections that were initially established almost 25 years ago. We commend Rep. Walberg (R-Mich.) and Rep. Castor (D-FL) for introducing the House COPPA 2.0 companion bill. The bill enjoys strong bipartisan support in the U.S. Senate. We urge Congress to promptly pass this legislation into law. Any delay in bringing HR 7890 to a vote would expose children, adolescents, and their families to greater harm.

CDD strongly supports the **Kids Online Safety Act (KOSA)** and believes that children and teens require robust privacy safeguards *and* additional online protections. Social media platforms, such as Meta, TikTok, YouTube, and Snapchat, have prioritized their financial interests over the wellbeing of young users for too long. These companies should be held accountable for the safety of America's youth and take measures to prevent harms like eating disorders, violence, substance abuse, sexual exploitation, addiction-like behaviors, and the exploitation of privacy.

We applaud the efforts of Reps. Gus Bilirakis (R-FL), Kathy Castor (D-FL), Erin Houchin (R-IN), and Kim Schrier (D-WA), on the introduction of KOSA. The Senate has shown overwhelming bipartisan support for this legislation, and we urge the House to vote on KOSA, adopt the Senate's knowledge standard, and make the following amendments to ensure its effectiveness:

- Extend the duty of care to all covered platforms, including video gaming companies, rather than just the largest ones.
- Define the "duty of care" to cover "patterns of use that indicate or encourage addiction-like behaviors" rather than simply "compulsive usage". This will ensure a broader scope that addresses more addiction-like behaviors.
- Retain the consideration of financial harms within the duty of care.

We believe these adjustments will improve the much-needed safety of young internet users.

###

1620 L Street, NW Suite 1100 Washington, DC 20036 202.466.3311 voice 202.466.3435 fax www.civilrights.org



April 17, 2024

The Honorable Cathy McMorris Rodgers Chair Committee on Energy and Commerce U.S. House of Representatives Washington, DC 20515

The Honorable Frank Pallone Ranking Member Committee on Energy and Commerce U.S. House of Representatives Washington, DC 20515 The Honorable Gus Bilirakis Chair Subcommittee on Innovation, Data, and Commerce U.S. House of Representatives Washington, DC 20515

The Honorable Jan Schakowsky Ranking Member Subcommittee on Innovation, Data, and Commerce U.S. House of Representatives Washington, DC 20515

Dear Chair McMorris Rodgers, Ranking Member Pallone, Chair Bilirakis, and Ranking Member Schakowsky,

On behalf of the Center for Civil Rights and Technology, an advocacy hub of The Leadership Conference on Civil and Human Rightsⁱ and The Leadership Conference Education Fundⁱⁱ, we thank you for the opportunity to submit our views regarding online privacy. We ask for this letter to be entered into the record of the Innovation, Data, and Commerce Subcommittee hearing titled "Legislative Solutions to Protect Kids Online and Ensure Americans' Data Privacy Rights" on April 17, 2024.

Technological progress should bring greater safety, economic opportunity, and convenience to everyone. And the collection of demographic data is essential for documenting persistent inequality and discrimination. But just as technology has created immense positive value by creating economic opportunities, facilitating civil rights advocacy, and adding new voices to our culture and public debate, it can also enable discriminatory conduct and give new tools to powerful institutions to entrench and exacerbate existing disparities.

Today, despite efforts to enact a strong comprehensive federal privacy law, tens of millions of people remain without any kind of legal protections for their personal data.ⁱⁱⁱ The lack of legal protections means that they are discriminated against in housing, employment, credit, education, finance, and other economic opportunities, and they are left in the dark about how

Officers Chair Judith L. Lichtman National Partnership for Women & Families Vice Chairs Margaret Huang Southern Poverty Law Center Derrick Johnson NAACP Thomas A. Saenz Mexican American Legal Defense and Educational Fund Secretary Fatima Goss Graves National Women's Law Center Treasurer Lee A. Saunders American Federation of State, County and Municipal Employees Board of Directors Abed Ayoub American-Arab Anti-Discrimination Committee Gloria L. Blackwell AAUW Ray Curry International Union, UAW Jocelyn Frye National Partnership for Women & Families Jonathan Greenblatt Anti-Defamation League Mary Kay Henry Service Employees International Union Damon Hewitt Lawyers' Committee for Civil Rights Under Law David H. Inoue Japanese American Citizens League Virginia Kase Solomón League of Women Voters of the United States Marc Morial National Urban League Janet Murguía UnidosUS Svante Myrick People For the American Way Janai Nelson NAACP Legal Defense and Educational Fund, Inc. Christian F. Nunes National Organization for Women Rabbi Jonah Pesner Religious Action Center of Reform Judaism Rebecca Pringle National Education Association Lisa Rice National Fair Housing Alliance Kelley Robinson Human Rights Campaign Anthony Romero American Civil Liberties Union Liz Shuler AFL-CIO Fawn Sharp National Congress of American Indians Maria Town American Association of People with Disabilities Randi Weingarten American Federation of Teachers John C. Yang Asian Americans Advancing Justice | AAJC

President and CEO Maya Wiley April 17, 2024 Page 2 of 4



their personal data is used.^{iv} As we have told this committee previously, privacy rights are civil rights.^v

Accordingly, we are heartened by the continued focus by Congress on the important issue of people's privacy and are encouraged by the release of the American Privacy Rights Act of 2024 (APRA). The APRA contains important provisions that could address ongoing discrimination in housing, employment, credit, education, finance, and other economic opportunities stemming from biased algorithmic systems and data privacy abuses.^{vi} The proposal prohibits the use of personal data in a discriminatory manner in the provision of goods or services on the basis of protected characteristics. It would ensure that these protections would be incorporated into the sectors that need them most, through requirements to test algorithms for bias and to measure potential impacts on equal access to and eligibility for housing, employment, credit, education, insurance, health care, and public accommodations. The bill also appears to preserve state civil rights laws and other types of state laws that are important for the protection of consumers and marginalized communities. The data minimization requirements in the APRA will further protect the rights of individuals by limiting potential data surveillance.

Under the proposal, consumers would be able to hold companies accountable for data misuse through a private right of action. The Federal Trade Commission is given enforcement authority, and attorneys general and privacy agencies in every state in the country are empowered to enforce the APRA. Through these three layers of enforcement, consumers and our institutions will be able to effectuate meaningful change and hold bad actors accountable.

While we are still reviewing the proposal, the provisions described above are reasons why The Leadership Conference welcomes the release of the APRA. In 2014, The Leadership Conference, along with 14 signatories, released the "Civil Rights Principles for the Era of Big Data," (civil rights principles) calling on the U.S. government and businesses to respect and promote equal opportunity and equal justice in the development and use of data-driven technologies.^{vii} While the terminology has shifted from "big data" to "AI," the issues remain the same and the threats technology can pose to civil rights have only grown.

Recognizing this increased urgency, as well as the growing disparity between the vast amount of personal data available to companies, and the very limited amount of information available to the public about how companies are using it, in 2020, The Leadership Conference, along with a number of advocacy and civil rights organizations, released updated civil rights principles.^{viii} Those principles include ending high-tech profiling; ensuring justice in automated decisions; preserving constitutional principles; ensuring that technology serves people historically subject to discrimination; defining responsible use of personal information and enhancing individual rights; and making systems transparent and accountable.

Although the APRA is a very positive step in the right direction and in line with our civil rights principles, there are changes that need to be made for it to be truly impactful. Any privacy legislation moving forward must preserve state civil rights laws and other types of state laws important for the protection of consumers, as well as provide for robust enforcement authority across both the federal government and state governments. Additionally, we have concerns about preemption of existing state data privacy laws under the bill. Further, the legislative language must be tightened to disallow data

April 17, 2024 Page 3 of 4



brokers from inappropriately selling private consumer data to both public and private entities, Congress must ensure that "Big Tech" and other companies are held accountable for the data they collect and use, especially when those actions impact people's lives. Any loopholes or exceptions must be closed and the scope of the entities covered by the APRA, as well as the protected classes in the bill, must be tailored to ensure individuals are fully protected. It is critical that those important protections for all people remain, and are built on, as the bill moves forward.

We stand ready to work with Congress on policies that will protect civil rights, prevent unlawful discrimination, and advance equal opportunity. Should you require further information or have any questions regarding this issue, please feel free to contact Jonathan Walter, policy counsel, at walter@civilrights.org; Frank Torres, privacy and AI fellow, at torres@civilrights.org; or Alejandra Montoya-Boyer, senior director of the Center for Civil Rights and Technology, at montoyaboyer@civilrights.org.

Sincerely,

Saple

Koustubh "K.J." Bagchi Vice President, Center for Civil Rights and Technology

ⁱ Founded in 1950, The Leadership Conference on Civil and Human Rights is a coalition charged by its diverse membership of more than 240 national organizations to promote and protect the rights of all persons in the United States.

ⁱⁱ The Education Fund was founded in 1969 as the education and research arm of The Leadership Conference on Civil and Human Rights

ⁱⁱⁱ Thorin Klosowki, "The State of Consumer Data Privacy Laws in the US (And Why It Matters), N.Y. Times (Sept. 6, 2021), https://www.nytimes.com/wirecutter/blog/state-of-privacy-laws-in-us/.

^{iv} "The Leadership Conference on Civil and Human Rights Views on Discussion Draft of The American Data and Privacy Act," The Leadership Conference on Civil and Human Rights (June 14, 2022),

https://civilrights.org/resource/letter-to-house-energy-and-commerce-committee-on-the-american-data-privacy-andprotection-act/.

^v "The Leadership Conference on Civil and Human Rights Views on Discussion Draft of The American Data and Privacy Act," The Leadership Conference on Civil and Human Rights (June 14, 2022),

https://civilrights.org/resource/letter-to-house-energy-and-commerce-committee-on-the-american-data-privacy-andprotection-act/.

^{vi} "The Leadership Conference on Civil and Human Rights Views on Discussion Draft of The American Data and Privacy Act," The Leadership Conference on Civil and Human Rights (June 14, 2022),

https://civilrights.org/resource/letter-to-house-energy-and-commerce-committee-on-the-american-data-privacy-andprotection-act/.

^{vii} "Civil Rights Principles for the Era of Big Data," The Leadership Conference on Civil and Human Rights (Feb. 27, 2014), https://civilrights.org/2014/02/27/civil-rights-principles-era-

bigdata/#:~:text=Technological%20progress%20should%20bring%20greater,documenting%20persistent %20inequality%20and%20discrimination.

April 17, 2024 Page 4 of 4



^{viii} Press Release, "Civil Rights Leaders Announce Principles to Protect Civil Rights and Technology," The Leadership Conference on Civil and Human Rights (Oct. 21, 2020), https://civilrights.org/2020/10/21/civil-rightsleaders-announce-principles-to-protect-civil-rights-and-technology/.



April 16, 2024

The Honorable Cathy McMorris Rodgers Chair U.S. House Committee on Energy and Commerce Washington, DC 20515

The Honorable Gus Bilirakis Chair U.S. House Subcommittee on Innovation, Data & Commerce Washington, DC 20515 The Honorable Frank Pallone Ranking Member U.S. House Committee on Energy and Commerce Washington, DC 20515

The Honorable Jan Schakowsky Ranking Member U.S. House Subcommittee on Innovation, Data & Commerce Washington, DC 20515

RE: Hearing on "Legislative Solutions to Protect Kids Online and Ensure Americans' Data Privacy Rights" on April 17, 2024

Dear Chair Rodgers, Ranking Member Pallone, Chairman Bilirakis, and Ranking Member Schakowsky:

The Main Street Privacy Coalition (MSPC) appreciates your holding a subcommittee hearing on April 17 and the opportunity to share our initial views on the discussion draft of the American Privacy Rights Act (APRA). MSPC supports the goal of establishing a national privacy law that applies equivalently to all businesses handling consumers' information and avoids potentially unintended consequences that would have disproportionate impacts on Main Street businesses and, in turn, negatively impact consumers and the American economy.

The Committee's efforts last Congress on the American Data Privacy and Protection Act (ADPPA) included, in some instances, ways to address concerns that had long been difficult to reconcile. In some specific provisions affecting our members, such as preserving customer loyalty plans, service provider requirements, and the treatment of franchise businesses, however, the APRA significantly departs from the successful compromises achieved in the ADPPA. We look forward to continuing to work collaboratively this year with you and your colleagues in Congress to address the issues outlined below with the ultimate goal of enacting privacy legislation that establishes a single, uniform national privacy law.

MSPC firmly believes that consumers across the country should be empowered to control their personal data. Having data privacy and security laws that create clear protections for Americans while allowing our members' businesses to serve their customers in the ways they have come to rely upon is a key goal. Achieving that goal, however, has been elusive. One of the challenges central to the Committee's legislative effort is that the overwhelming focus on the data practices of so-called "big tech" companies can obscure the reality that data privacy laws

also apply to and must work for Main Street businesses whose employees directly serve Americans in their daily lives.

The MSPC is comprised of 20 national trade associations that together represent more than a million American businesses—a broad array of companies that line America's Main Streets¹ and interact with consumers day in and day out. From retailers to REALTORS®, hotels to home builders, grocery stores to restaurants, gas stations to travel plazas, and self-storage to convenience stores, including franchise establishments, the businesses represented by MSPC member associations can be found in every town, city, and state, providing jobs, supporting our economy, and serving Americans as a vital part of their communities.

Collectively, the industries that MSPC members represent directly employ approximately 34 million Americans and constitute over one-fifth of the U.S. economy by contributing \$4.5 trillion (or 21.8%) to the U.S. gross domestic product (GDP). Our success depends on maintaining *trusted* relationships with our customers and clients: trust that goods and services we provide are high quality and offered at competitive prices; and trust that information customers provide to us while we are serving them is kept secure and used responsibly. For these reasons, our associations have been actively engaged for many years with policymakers on data privacy legislation and regulations.

Six Principles for Effective Federal Privacy Legislation

Main Street businesses have no higher priority than earning and preserving trusted relationships with their customers, including by protecting and responsibly using the personal data that customers share with them. As policymakers consider the APRA and other legislative solutions to address data privacy concerns, our coalition urges adoption of legislation meeting the following core principles to ensure a comprehensive and effective national privacy law:

- Establish a Uniform National Privacy Law: The United Stats should have a sensible federal framework for data privacy legislation that benefits consumers and businesses alike by ensuring that consumers' personal data is protected in a consistent manner regardless of the state in which a consumer resides. Preempting state laws with a set of federal rules for all businesses handling consumers' personal data is necessary to achieve the important public policy goal of establishing a single, uniform national privacy law.
- **Protect Consumers Comprehensively with Equivalent Standards for All Businesses:** To protect consumers comprehensively, federal data privacy frameworks should apply requirements to all industries that handle personal data and not place a disproportionate burden on certain sectors of the economy while simultaneously alleviating other sectors from providing equal protection of consumer data. An equivalent data privacy standard should apply, regardless of whether a business directly collected data from a consumer or obtained it in a business-to-business transaction.

¹ The Main Street Privacy Coalition website and member list may be accessed at: <u>https://mainstreetprivacy.com</u>.

- Create Statutory Obligations (Not Contractual Requirements) for All Entities that Handle Consumers' Data: Given imbalances in contractual negotiating power, effective consumer protection cannot be achieved by relying on Main Street businesses to regulate the conduct of market-dominant service providers through contracts. Service providers and third parties must have statutory obligations like all other entities to ensure their compliance with a federal privacy framework, particularly when offering data processing, transmission, storage, or other services to tens of thousands of Main Street businesses.
- **Preserve Customer Loyalty Rewards and Benefits:** Any federal data privacy framework should preserve the ability of consumers and businesses to voluntarily establish mutually beneficial business-customer relationships and set the terms of those relationships. Legislation should include safe harbors to ensure that consumers can purchase, or otherwise obtain, the goods and services they want by taking advantage of benefits, incentives, or enhanced services they earn from being loyal customers, even if other customers choose not to engage in such loyalty programs.
- **Require Transparency and Customer Choice for All Businesses:** Consumers deserve to know the categories of personal data businesses collect, how it is generally used to serve them, and the choices they have regarding those uses. These policies should be clearly disclosed in company privacy policies and readily accessible to consumers. These transparency and choice obligations should apply to *all* businesses handling consumers' personal data, including service providers, third parties, and financial services businesses.
- Hold Businesses Accountable for their Own Actions: Privacy legislation should not include terms that potentially expose businesses, including contractors and franchises, to liability for the actions or noncompliance of a business partner. Those business partners should be responsible for their own compliance and any resulting liability. In particular, consumer-facing businesses should not be unfairly saddled with liability for other businesses that do not fulfill their own obligations under a federal privacy law.

Main Street Privacy Coalition Views on the APRA Discussion Draft

We appreciate the Committee's efforts to develop the APRA discussion draft, however, we have initial concerns that the bill, as drafted, disproportionately and negatively impacts the industry sectors MSPC member associations represent. We appreciate the opportunity to work constructively with Committee members and staff to address the potential unintended consequences of new language in the APRA prior to its introduction and advancement in Committee markups, consistent with our past history of productive dialogue on the ADPPA.

1. Preemption of State Law: We appreciate the Committee's intention to develop preemptive legislation that would establish a single, uniform national privacy law benefitting consumers and businesses alike by ensuring privacy protections are the same regardless of the State in which a consumer resides or a business is located. This is necessary to address the increasing patchwork of newly enacted state privacy laws that conflict and threaten the ability to provide comprehensive and uniform privacy protections to all Americans. Despite the underlying

goal, we are concerned the APRA's current preemption provision is unlikely to withstand anticipated legal challenges in federal court, potentially leaving States free to continue adopting privacy laws that would leave American consumers with different rights depending on where they live and would saddle Main Street businesses with compliance burdens exceeding the federal standards set by Congress. We therefore urge Committee members to modify the APRA's preemption provision to meet the standards the Supreme Court has consistently ruled sufficient to create a preemptive federal law. For instance, the APRA could avoid using a general rule that necessitates pages of exceptions – a form federal courts have used as the basis to preserve similar State laws and frustrate Congressional intent – by instead specifying precisely which State laws are preempted by the APRA and making clear that future laws related to the specifically preempted laws would be similarly preempted. Such an approach, as suggested last year by the MSPC, would make the APRA much more likely to achieve its primary goal of creating a single, uniform national privacy law for all Americans.

2. Private Rights of Action: We understand the bipartisan interest in authorizing private rights of action (PRA) in the APRA as a politically necessary element to advance a privacy bill through Congress. Our member companies are concerned, however, with taking a leap that no State law has taken due to the technical complexity involved in entities achieving mistake-free compliance with data privacy laws, as well as Main Street companies' extensive experience with large volumes of demand letters threatening lawsuits with questionable legal claims that recently have proliferated under other areas of the law (e.g., patent trolls and ADA website accessibility claims). More importantly, the APRA differs significantly from the ADPPA in that it no longer authorizes the PRA to enforce the requirements for service providers or third parties under Section 11(a) through (c) by limiting the PRA's application only to covered entities under subsection 11(d). This is a surprising reversal of the ADPPA's application of the PRA in this section that disproportionately impacts Main Street businesses compared to their business partners. Under this PRA, private litigants' only recourse would be to sue the covered entities for failing to exercise reasonable judgment in selecting service providers or transferring data to third parties because they cannot sue the service providers or third parties directly for their own failures to comply with their Section 11 requirements. Further, the APRA does not offer a way for well-intentioned Main Street businesses to avoid litigation by denying them any opportunity to cure *alleged* violations in claims for damages. All too often, provisions like this PRA permit potential litigants to exploit the Main Street business reality that obtaining legal representation to defend against alleged claims under a complex federal law is too expensive. Those costs lead Main Street businesses to agree to settlements of even non-meritorious claims simply to avoid litigation, which has the compounding effect of making it more challenging for them to cover operational expenses and consequently costs Americans their jobs. Due to the complexity of achieving compliance, the disproportionate impact that the APRA would have on Main Street businesses, and their inability to avoid litigation for alleged violations, our members would prefer the Committee adopt an enforcement approach similar to what all State privacy laws have adopted as the most effective way to drive compliance with privacy laws: exclusive government agency enforcement against businesses after a 30- or 60-day cure period following agency notice of non-compliance. If that is not achievable politically, we urge the Committee to at least address the serious concerns raised above to ensure that America's Main Street businesses, their employees, and the customers they serve are not disproportionately impacted, compared to other stakeholders, by the APRA's enforcement provisions as currently drafted.

3. Preserving Customer Loyalty Rewards and Benefits: It is clear that Americans overwhelmingly wish to continue participating in their customer loyalty programs that provide rewards, discounts and other benefits.² Additionally, the fifteen States that have passed comprehensive data privacy laws have all preserved loyalty program benefits for consumers by protecting the ability of businesses to continue offering better prices and services to customers who voluntarily participate in bona fide customer loyalty, club or rewards programs. Under the State privacy laws, loyalty plan provisions protect against construing the laws to prohibit as discriminatory acts the offering of discounted prices or other benefits to customers who choose to participate in the plans even if other customers choose not to participate in them. However, the APRA adds a new page of novel requirements for loyalty plans not seen in any State law. We have significant concerns that the draft text alters the carefully balanced language of the ADPPA that MSPC member associations previously supported after all stakeholders negotiated with the Committee to ensure the ADPPA provision would preserve customer loyalty programs. For example, one of the APRA requirements prohibits all transfers of any data in ways that exceed the bill's already established data transfer provisions that permit covered data transfers subject to an opt-out and sensitive covered data transfers subject to an opt-in, excluding permissible purposes. With these same APRA transfer provisions applying to covered entities offering loyalty programs, similar to how all State privacy laws' consumer rights and privileges apply to plan participants' data as well, it is unclear why the draft APRA would impose a new, more restrictive data-transfer regulation on loyalty programs that consumers must already opt into under the law. We urge the Committee to restore the previous balance achieved in the ADPPA's loyalty provision. This is important to American consumers who wish to maintain their earned points, rewards and discounts, and is a critical need for Main Street businesses.

4. Service Provider and Third Party Requirements: Similar to the loyalty plan provisions, we are concerned that the APRA draft text of Section 11 alters the carefully achieved balance in the ADPPA's service provider and third party requirements following stakeholder negotiations with Committee staff over that bill's provisions. We appreciated that, in the ADPPA, the Committee placed direct statutory obligations on service providers and third parties. and subjected these obligations to the same enforcement mechanisms as covered entities, to ensure their compliance with the law. However, we are concerned the draft APRA has altered the text of these requirements to remove both the direct statutory obligations as well as the enforcement mechanisms for service providers and third parties in ways that obviate their obligations to protect the consumer data received from covered entities. The APRA ultimately allows service providers and third parties to avoid liability by shifting it onto covered entities through subsection 11(d), the only subsection enforceable by private rights of action (as explained in point 2 above). As a result, under the APRA, nationwide and global service providers would not have the equivalent privacy requirements or enforcement provisions that apply to even the smallest Main Street businesses. To protect Americans' data privacy comprehensively, the APRA should ensure that businesses in all industry sectors face equivalent privacy requirements and enforcement of the law in order to close of any privacy loopholes that would leave consumers unprotected when their personal data is handled by a range of service providers and third-party businesses. For example, the APRA's critical data minimization

² According to a survey by Bond Brand Loyalty Inc., 79% of consumers say loyalty programs make them more likely to continue doing business with brands that offer them, and 32% of consumers strongly agree that a loyalty program makes their brand experience better. Bond Brand Loyalty Inc., <u>The Loyalty Report (2019)</u>.

Main Street Privacy Coalition April 16, 2024 Page 6

obligations do not apply to service providers or third parties – these are privacy requirements that exist nowhere else in federal privacy law and should be required of all businesses in the APRA.

5. Common Branding: One issue that the Committee was able to resolve in the ADPPA was an unintended consequence of holding franchisors and franchisees liable for each other's privacy law compliance. Many franchisees and franchisors share common branding but are distinct companies and should be treated as such. But the language of the APRA defines them as one single "covered entity" because the businesses operate with "common branding." That language had been used in the ADPPA at one time, but the Committee recognized that it could lead to unintended consequences and took the "common branding" language out of the ADPPA. The same should be done for the APRA to avoid making broad groups of independent businesses jointly liable for one another's behavior.

We appreciate your continued consideration of the views of Main Street businesses regarding the APRA as you work to refine the discussion draft before it is introduced and advanced in Committee. This is not just a bill for "big tech" companies; Main Street businesses will bear the full burden of complying with the regulatory obligations under the APRA that the Committee is examining today. As you consider ways to improve the APRA prior to its introduction and advancement in the legislative process, the members of the MSPC appreciate your consideration of the above principles and concerns with the discussion draft, as well as our efforts to address these concerns prior to approving the APRA in Committee. We look forward to continuing our constructive dialogue with the Committee on these critical matters and welcome the opportunity to address each specific topic with your staff.

Sincerely,

The Main Street Privacy Coalition

cc: Members of the U.S. House Committee on Energy and Commerce



To: Members of the House Committee on Energy and Commerce's Innovation, Data, and Commerce Subcommittee
From: National Taxpayers Union
Date: April 16, 2024
Subject: NTU's Views on April 17, 2024 Subcommittee Hearing

I. Introduction and Key Taxpayer Considerations

On behalf of the National Taxpayers Union (NTU), the nation's oldest taxpayer advocacy organization, we write to express our views on several measures slated for consideration before the House Committee on Energy and Commerce's Innovation, Data, and Commerce Subcommittee. NTU applauds the Committee for your continued efforts to advance legislation that will protect taxpayers' data privacy. As such, NTU urges caution as the legislative process proceeds on the American Privacy Rights Act, H.R. 7891, and H.R. 7890.

H.R. _____ - The American Privacy Rights Act (APRA)

Against the backdrop of a growing patchwork of state privacy laws, this bipartisan <u>legislation</u> by House Energy and Commerce Committee Chair Cathy McMorris-Rodgers (R-WA) and Senate Commerce Committee Chair Maria Cantwell (D-WA) seeks to harmonize privacy rules across boundaries.

While Congress works to pass a much-needed comprehensive privacy law, it also needs to <u>ensure</u> that such a framework does not create more problems than it solves. To that end, ideal privacy legislation should harmonize privacy rules across both state boundaries *and* different sectors. The proposed APRA is likely to succeed on the first count but fail on the second because of exemptions for existing sectoral federal laws.

A better approach would <u>entail</u> establishing the same legal standards for all industries while developing distinct rules and liabilities for different data types. For example, a consumer's music streaming preferences do not carry the same privacy risks as sensitive financial and medical data, and privacy law should create distinct rules accordingly. Congress should <u>distinguish</u> between non-sensitive and sensitive data — such as educational records and biometric data. The strictest privacy standard should <u>apply</u> to sensitive data used to deliver critical services like surgeries, while the least strict standard should apply to non-sensitive data used to provide non-critical services, like music streaming.

Nevertheless, even within the framework of the APRA, several amendments could improve the proposed legislation. First, the overly broad, expansive <u>private right of action</u> under §19 could easily lead to an array of frivolous lawsuits against all types of companies. The proposed law would benefit from narrower and more targeted rights of private action, if not eliminating private rights of action altogether.

Second, at a time when the Federal Trade Commission has increasingly <u>sought</u> to act beyond its statutory authority, U.S. lawmakers should be cautious about granting the Commission more powers. That is precisely what the newly proposed FTC Bureau for privacy enforcement — similar to the existing Bureau of Competition and Bureau of Consumer Protection — and new enforcement powers for the Commission under §17 (a) and (b) would risk doing. While an eventual U.S. federal privacy bill will require one or multiple regulators for enforcement functions, any statutory powers should be balanced by increased Congressional oversight and monitoring mechanisms to hold such regulator(s) accountable.

Finally, a major feature of the proposed law is that any "Federal, State, Tribal, or local government entity" would be exempt from proposed rules under §2 (10) (C). However, at a time when government entities have emerged as a major source of <u>data breaches</u> and <u>surveillance</u> of Americans, privacy obligations should <u>apply</u> to both private and public entities. According to a <u>survey</u> of U.S. adults in May 2023 from the non-partisan Pew Research Center, 77 percent of Americans responded that they have "little to no understanding" about what the government does with their data (compared to 67 percent for companies), while 71 percent are "concerned" about how the government uses such data (compared to 81 percent for the private sector). As more cases of government surveillance and data breaches <u>come</u> to light, it is likely that concerns about how government entities collect and use data about Americans will continue to grow further.

While some exceptions might be needed in emergencies and on well-defined national security, such cases should be exceptions, not the norm, and formal criteria for such exceptions should be established in statute. Indeed, notwithstanding many negative aspects of the European Union's General Data Protection Regulation (GDPR), one positive aspect has been that its obligations apply both to government and private entities, albeit with some well-defined exceptions on national security and public safety grounds. Instead of mandating wholesale exemption for government entities, the revised APRA should ensure that data of U.S. residents and taxpayers from unlawful activities of government and non-government entities alike.

H.R. 7891 - the Kids Online Safety Act (KOSA) - and H.R. 7890 - Children and Teens' Online Privacy Protection Act (COPPA 2.0)

Congressional efforts to protect online safety and privacy for young people are laudable. However, as was the case under previous versions of the legislation, the recently reintroduced <u>KOSA</u> and the amended <u>COPPA 2.0</u> would significantly increase online surveillance and undermine privacy for youths and adults alike.

The central problem with these two bills is that, in seeking to address the current lack of data protection and online privacy, they will inevitably result in more tracking of users. By <u>holding</u> online platforms liable for all sorts of societal ills – from anxiety and depression to eating and substance use disorders, the two bills would <u>force</u> online platforms to snoop on users and restrict online speech. While online safety and privacy must be improved, even more surveillance is not the answer.

II. Contact Information

Thank you for your consideration. Should you have any questions about the content in this memo, please do not hesitate to reach out to Ryan Nabil, <u>rnabil@ntu.org</u>.



April 16, 2024

The Honorable Cathy McMorris Rodgers Chair House Energy and Commerce Committee 2188 Rayburn House Office Bldg. Washington, DC 20515-4705

The Honorable Gus Bilirakis Chair House Energy and Commerce Innovation, Data, and Commerce Subcommittee 2306 Rayburn House Office Bldg. Washington, DC 20515 The Honorable Frank Pallone Ranking Member House Energy and Commerce Committee 2107 Rayburn House Office Bldg. Washington, DC 20515

The Honorable Jan Schakowsky Ranking Member House Energy and Commerce Innovation, Data, and Commerce Subcommittee 2408 Rayburn House Office Bldg. Washington, DC 2051

Dear Representatives McMorris Rodgers, Pallone, Bilirakis, and Schakowsky:

Privacy for America is a coalition of trade organizations and companies representing a broad cross-section of the American economy. Our membership includes companies and trade associations in the advertising, travel, hospitality, media, financial services, data services, communications, and market research industries, as well as many others. We have long supported the enactment of a comprehensive, preemptive national standard for consumer privacy that applies across the marketplace. The Privacy for America *Principles For Privacy Legislation* ("Framework") serve as an example of how to strike an appropriate balance for national data standards that provide strong protections for individuals while preserving vital and valuable data processing functions that benefit individuals and the economy.¹

While we are encouraged that the Innovation, Data, and Commerce Subcommittee of the House Energy and Commerce Committee is considering comprehensive privacy legislation during its April 17, 2024 hearing, we are concerned that the American Privacy Rights Act ("APRA"), as presently drafted, would significantly hinder beneficial and legitimate data processing activities, such as data-driven advertising, public safety, and important identity and fraud solutions that ensure the security of online transactions, to the detriment of individuals and businesses alike. If APRA is enacted as presently drafted it could create a less competitive and fair marketplace, diminishing the availability of information and offerings for individuals. As discussed in the Framework, we strongly believe that routine, essential, and responsible uses of data must be permitted to persist to enable individuals' continued access to critical online resources and to support a thriving economy.

We are committed to working toward a practical and protective privacy law that benefits all Americans, and we will provide targeted suggestions to help address the negative

¹ Privacy for America, *Principles for Privacy Legislation* (2019),

https://www.privacyforamerica.com/overview/principles-for-privacy-legislation/.



consequences the current APRA language could create. We will work with all willing members of Congress to refine the APRA to provide robust protections for consumers while allowing responsible uses of data to continue to benefit consumers and power the data-driven economy.

* * *

Thank you for your consideration of this letter as you deliberate on ways to improve the APRA.

Sincerely,

Privacy for America

U.S. Chamber of Commerce



1615 H Street, NW Washington, DC 20062-2000 uschamber.com

April 17, 2024

The Honorable Gus Bilirakis Chair Subcommittee on Innovation, Data & Commerce Committee on Energy and Commerce U.S. House of Representatives Washington, DC 20515

The Honorable Jan Schakowsky Ranking Member Subcommittee on Innovation, Data & Commerce Committee on Energy and Commerce U.S. House of Representatives Washington, DC 20515

Dear Chairman Bilirakis and Ranking Member Schakowsky:

In advance of your Subcommittee's hearing, "Legislative Solutions to Protect Kids Online and Ensure American Data Privacy Rights," the U.S. Chamber of Commerce ("the Chamber") offers the following thoughts and concerns regarding draft legislation titled "American Privacy Rights Act" ("APRA").

The Chamber has supported efforts to pass data privacy legislation that includes strong preemption language. Such an approach is necessary to achieve the goal of a national set of privacy requirements that protects children and consumers, allows businesses, including small businesses and entrepreneurs, to use the latest technology, and continue American global leadership in technology and innovation. In the absence of a national approach, the Chamber supports the bi-partisan consensus privacy approach that has created effective privacy protections in Texas¹, Tennessee², Virginia³ and eleven other states.⁴

Unfortunately, in its current form, the APRA would fail to create a national standard and imposes California-style privacy standards that undermine the consensus privacy approach that protects the privacy rights of almost 100 million Americans.

Our concerns are outlined in more detail below.

I. <u>A Single National Privacy Standard</u>

Congress must pass a fully preemptive privacy law that eliminates a state patchwork of privacy laws and prevents States from drafting laws that survive preemption in the future. A single *preemptive* national privacy standard would allow the United States to reap the benefits of the 21st century digital economy and enable a thriving ecosystem that facilitates small business growth. Simply adopting a national privacy law without strong preemption would enable a state

¹ Letter to Texas House *available at <u>https://americaninnovators.com/wp-</u>*

 $[\]underline{content/uploads/2023/04/State_HB4_TexasDataPrivacyandSecurityAct_TXHouse.pdf$

²Letter to Tennessee Legislature, *available at https://americaninnovators.com/wp-*

content/uploads/2023/04/230417_State_BS73_TNPrivacy_TNSenate.pdf

³ Letter to Virginia Governor, *available at <u>https://americaninnovators.com/wp-content/uploads/2022/08/Virginia-Data-Privacy-Act-Letter.pdf</u>*

⁴ Fourteen states have passed the Consensus Privacy Approach including New Hampshire, Virginia, Florida, Kentucky, Tennessee, Indiana, Iowa, Montana, Texas, Colorado, Utah, Delaware, Connecticut, and Oregon.

patchwork of laws that will be confusing to consumers and potentially impossible for small businesses to comply.

A recent report from ITI highlighted that a national patchwork of privacy laws would cost the United States economy \$1 trillion and disproportionately impact small businesses with a \$200 billion economic burden.⁵ A majority of small businesses are worried a patchwork of state laws will increase litigation and compliance costs.⁶

The APRA draft does not address concerns previously raised with preemption language used in the 117th Congress's American Data Privacy and Protection Act ("ADPPA"). Although APRA states it seeks a "uniform national data privacy and security standard," the operative language APRA uses to preempt state laws is limited and could inadvertently lead to a federal floor and encourage states to pass more restrictive privacy laws. APRA only preempts "any law, regulation, rule, or requirement *covered by* the provisions of this Act or a rule, regulation, or requirement promulgated under this Act."

To provide the strongest preemption, according to a Congressional Research Service report, Congress should avoid merely preempting what a proposed bill is "covering" or "covered by," because such clauses are considered by the United States Supreme Court to be less restrictive on states than phrases like "related to."⁷ According to the Supreme Court, "Covering" is a more restrictive term [on what can be preempted] which indicates that preemption will lie only if the federal regulations substantially subsume the subject matter of the relevant state law."⁸ A national privacy law that merely preempts what it "covers" and then provides for exceptions to that preemption would likely be taken by many as evidence that Congress has not intended to "substantially subsume" regulation.

The APRA draft also establishes exceptions to preemption in the areas of consumer protection, health data, and remedies established under California's Consumer Privacy Act and highly abused lawsuits under the Illinois Biometric Privacy Law. These exceptions could easily be exploited in lawsuits and by activist legislatures to get around desired preemption.

We, therefore, encourage the House Energy & Commerce Committee to adopt strong preemption language. In recent years, legislation has been authored by Republican and Democrats that would provide strong preemption concerning broad issues as opposed to only preempting what a law covers:

- In the 115th Congress, H.R. 3388, the unanimously passed "SELF DRIVE Act" which preempted broad categories of safety issues.
- In the 117th Congress, H.R. 1816, the Information Transparency and Personal Data Control Act provided that, "No State or political subdivision of a State may adopt, maintain,

 ⁵ https://itif.org/publications/2022/01/24/50-state-patchwork-privacy-laws-could-cost-1-trillion-more-single-federal/.
 ⁶ https://americaninnovators.com/wp-content/uploads/2023/09/Empowering-Small-Business-The-Impact-of-Technology-on-U.S.-

Small-Business.pdf

⁷ *Id.* at 10.

⁸ Congressional Research Service, "Federal Preemption: A Legal Primer" (Mary 18, 2023) available at

https://crsreports.congress.gov/product/pdf/R/R45825. (Citing CSX Transportation, Inc. v. Easterwood, 507 U.S. 663 (1993)).

enforce, or continue in effect any law, regulation, rule, requirement, or standard *related to* the data privacy or associated activities of covered entities."⁹

• In the 118th Congress, House Financial Services Committee Chairman Patrick McHenry has proposed the "Data Privacy Act of 2023," which provides that legislation "supersedes any statute or rule of a State."¹⁰

II. <u>Private Right of Action</u>

Comprehensive privacy legislation should leave enforcement to agencies like the Federal Trade Commission and state attorneys general and not empower the private trial bar at the expense of business innovation and viability. Frivolous, non-harm-based litigation has been used in the past to extract costly settlements from companies, even small businesses, based on privacy law provisions granting a private right of action. Private rights of action are ill-suited in privacy laws because:¹¹

- Private rights of action undermine appropriate agency enforcement and allow plaintiffs' lawyers to set policy nationwide, rather than allowing expert regulators to shape and balance policy and protections. By contrast, statutes enforced exclusively by agencies are appropriately guided by experts in the field who can be expected to understand the complexities of encouraging compliance and innovation while preventing and remediating harms.
- They can also lead to a series of inconsistent and dramatically varied, district-bydistrict court rulings. Agency enforcement can provide constructive, consistent decisions that shape privacy protections for all American consumers and provide structure for companies aiming to align their practices with existing and developing law.
- Combined with the power handed to the plaintiffs' bar in Federal Rule of Civil Procedure 23, private rights of action are routinely abused by plaintiffs' attorneys, leading to grossly expensive litigation and staggeringly high settlements that disproportionally benefit plaintiffs' lawyers rather than individuals whose privacy interests may have been infringed.
- They also hinder innovation and consumer choice by threatening companies with frivolous, excessive, and expensive litigation, particularly if those companies are at the forefront of transformative new technologies.

Private rights of action would be particularly devastating for business under a privacy law that does not have a strong preemptive effect. Not only would states be able to continue

⁹ <u>https://www.congress.gov/bill/117th-congress/house-bill/1816/text</u> (emphasis added)

¹⁰ https://financialservices.house.gov/uploadedfiles/glb_2023_xml_2.24_934.pdf

¹¹ U.S. Chamber Institute for Legal Reform, *III-Suited: Private Rights of Action and Privacy Claims* (July 2019) available at https://instituteforlegalreform.com/wp-content/uploads/2020/10/III-Suited_-

_Private_RIghts_of_Action_and_Privacy_Claims_Report.pdf.

passing their own laws, but individual judicial district precedent could also create further confusion and conflict.

III. Substantive Concerns

We also note the following substantive concerns with APRA as drafted:

- <u>Artificial Intelligence & Algorithms</u>—As drafted Sections 13 and 14 of APRA would significantly impair America's ability to compete with respect to Artificial Intelligence. APRA as drafted would encourage lawsuits against companies that do not allow individuals to opt out of using basic technologies in any place of public accommodation. This could severely limit access to things like insurance, credit, employment opportunities, and other apps and services consumers enjoy.
- <u>Small Business Impacts</u>—Although the bill exempts small business from the requirements of APRA, as drafted small businesses would have to meet three elements of a vague test to determine if they are identified as a small business. Under this draft, given APRA's inclusion of a private right of action, small businesses will have to bear high litigation costs in court just to prove they are not covered by the bill. Even if a small business is not directly covered by the bill, we are concerned that the digital tools small businesses rely on could be threatened by other elements of APRA.
- <u>Digital Advertising</u>—The online advertising ecosystem is what enables Americans to enjoy the benefits of low-cost access to websites and apps. Unfortunately, as drafted APRA's data minimization, new FTC authorities to define what data is subject to opt-in consent, and universal opt-out for targeted advertising will threaten the contextual and personalized advertising that has driven U.S. internet growth and innovation.
- <u>Data Broker Requirements</u>—While the Chamber does not take issue with a data broker registry, we are concerned that the bill's mass "Do Not Collect" requirements for data brokers will inhibit societally beneficial users of data like fraud prevention, small business marketing, healthcare charitable services, and commercial credit and financing services.
- <u>Loyalty Program</u> We are concerned that the APRA draft's prohibition on price and service discrimination could negatively impair customer loyalty programs. In particular Section 8(b)(a)(i)(IV) would require companies obtain "affirmative express consent for the transfer of any data collected in connection with a bona fide loyalty program." There is concern this provision would require consent every time data is transferred and would subject companies to private rights of action for inadvertent errors if consent is required every time. This would have a chilling effect on offering loyalty programs like hotel, restaurant, and retail programs consumers enjoy.

The Chamber's goal is to have a national set of privacy requirements that protects children and consumers, allows businesses of all sizes to use the latest technology, and permits

the United States to be the global leader in technology and innovation. We believe that in its current form the APRA fails to meet those goals. The APRA would degrade the privacy protections enjoyed by almost 100 million Americans, would harm small businesses, and would endanger American global innovation leadership.

While the Chamber opposes the APRA in its current form, we stand ready to work with you to address our concerns and provide strong privacy protections for all Americans.

Sincerely,

Jordan Genshaur

Jordan Crenshaw Senior Vice President Chamber Technology Engagement Center U.S. Chamber of Commerce

cc: Members of the House Committee on Energy & Commerce



1411 K Street N.W., Suite 900 Washington, D.C. 20005 202-525-5717

Free Markets. Real Solutions. www.rstreet.org

April 16, 2024

The Honorable Gus Bilirakis Chair Subcommittee on Innovation, Data, & Commerce Committee on Energy & Commerce U.S. House of Representatives Washington, D.C. 20515 The Honorable Jan Schakowsky Ranking Member Subcommittee on Innovation, Data, & Commerce Committee on Energy & Commerce U.S. House of Representatives Washington, D.C. 20515

Dear Chairman Bilirakis, Ranking Member Schakowsky and members of the Subcommittee:

Thank you for holding a hearing on April 17, 2024, titled "Legislative Solutions To Protect Kids Online And Ensure Americans' Data Privacy Rights." My name is Brandon Pugh, and I serve as the policy director and resident senior fellow for the Cybersecurity and Emerging Threats team at the R Street Institute, which includes our data privacy and security portfolio. I had the honor of testifying before your subcommittee in the 117th Congress on data privacy and security.[i] The R Street Institute and I continue to urge the enactment of a comprehensive federal data privacy and security law in the United States and see it as a top priority for this Congress.

By way of background, the R Street Institute is a nonprofit, nonpartisan, public policy research organization, whose mission is to engage in policy research and outreach to promote free markets and limited, effective government. A central focus of ours has been finding consensus on a federal data privacy and security law. In 2022, we published a report in conjunction with the Harvard Kennedy School's Belfer Center to provide recommendations that address some of the most challenging aspects of a federal data privacy and security law like preemption, a private right of action, and the role of the Federal Trade Commission (FTC).[ii] Our research included consultations with over 125 entities of varying ideologies. A key aspect of our ongoing work is the intersection of privacy and security, including how national security and data security should be key drivers in passing a federal law.

We appreciate Congress' continued interest in passing a comprehensive federal data privacy and security law on a bipartisan, bicameral basis. We're particularly pleased by the steadfast leadership

of Congresswoman Cathy McMorris Rodgers and Senator Maria Cantwell, as most recently seen through the release of their American Privacy Rights Act of 2024 (APRA) discussion draft. R Street was fortunate to release one of the first analyses comparing the similarities and differences between the American Data Privacy and Protection Act (ADPPA) and APRA.[iii] We believe a comprehensive federal data privacy and security law would benefit consumers, industry, and security. We look forward to continuing to work with the sponsors and any member interested in the discussion draft, but we believe it is a positive step forward for several reasons.

Preemption is critical for a comprehensive federal privacy and security law.

The number of states with privacy laws continues to increase rapidly with at least fifteen state versions already on the books and many others at varying stages of the legislative process.[iv] This is not a new trend as we saw at least 60 comprehensive bills introduced in at least 25 states in 2023.[v] Some point out that the differences between the already-enacted state laws are insignificant, but the differences that do exist already, combined with those that are under consideration, and those likely to emerge should not be understated. What is more, most states can amend legislation quickly or engage in far-reaching rulemaking.

This has created a compliance challenge for businesses, especially small- and medium-sized businesses, as they have to traverse this evolving landscape. This forces many to put limited time and resources into navigating a privacy maze instead of innovating and furthering their business goals. In fact, some estimate that each state added to the privacy patchwork costs startups between \$15,000 - \$60,000+ in additional compliance costs.[vi]

I understand why some might call for a federal privacy law to be a "floor" and to allow for there to be stricter state laws. However, this would not improve the patchwork of laws we see now. Instead, entities might need to deal with a compliance thicket of both a federal law and fifty state variants. Not to mention, a federal law constructed appropriately could be a barrier to state approaches that are less friendly to innovation.

For this reason, both ADPPA and APRA have correctly relied on preemption. However, APRA includes a congressional intent section that clearly articulates that it "establishes a uniform national privacy and data security standard in the United States" and "expressly preempts laws of a State" as provided in this section, which is followed by preemption language of not having "any law, regulation, rule, or requirement covered by the provisions of this Act or a rule, regulation, or requirement promulgated under this Act." This helps alleviate concerns in ADPPA around the section's intent and whether states might leverage ambiguity to legislate or regulate privacy, which must be avoided.

A recommendation of R Street's past research, notably on preemption, called for substantive privacy bills at the state level to be preempted with select state carve outs.[vii] Our research identified ten areas where this ought to be done. This is an approach that APRA continues from ADPPA, including "state law preservation" for criminal law, contract law, and state laws addressing surveillance. These are areas that APRA is largely silent on so it makes clear that the intent is not to create a gap in areas that states have been acting on for years and where states have had traditional state control even before the emergence of state privacy frameworks. However, I fully agree that these carve outs must not become a backdoor to states legislating or regulating privacy on a comprehensive basis, which would contradict R Street's prior recommendations and appears contradictory to the sponsors' intent.

Data security and national security would be advanced by a federal privacy law.

The risk of adversaries collecting and exploiting vast amounts of Americans' sensitive data is not theoretical, it is a reality. This has been pointed out by a number of prominent government officials and has been highlighted in a number of U.S. policy documents, including the recent Executive Order "to protect Americans' sensitive data from exploitation by countries of concern."[viii] As one example, Federal Bureau of Investigation Director Christopher Wray claimed "if you are an American adult, it is more likely than not that China has stolen your personal data"[ix] and that "China's vast hacking program is the world's largest, and they have stolen more Americans' personal and business data than every other nation combined."[x] This data can be used to carry out more effective cyber-attacks, target disinformation campaigns, carry out blackmail against high profile individuals, or even direct physical violence to those in conflict.[xi]

The White House E.O. and H.R. 7520, the "Protecting Americans' Data from Foreign Adversaries Act," aim to address some of these concerns by targeting commercial sales to select countries. However, they do not address the underlying risks around data collection, use, and security when done incorrectly. Many members of industry proactively embrace privacy and do more than required, but that is not always the case.

A comprehensive data privacy and security law would provide additional safeguards. Absent limited exceptions like regulated industries, there is generally no requirement to safeguard collected data. APRA would require covered entities to establish and maintain reasonable data security practices to protect "the confidentiality, integrity, and accessibility of covered data" and "covered data of the entity against unauthorized access." A number of considerations are provided to ensure requirements are not rigid and not a one size fits all approach. While nothing is foolproof, this would go a long way toward ensuring that data is safeguarded and out of the hands of bad actors.

In addition, privacy policies would be required to contain information on whether covered data is "transferred to, processed in, retained in, or otherwise accessible to a foreign adversary …" This is

important so consumers know whether their data might be accessible by "foreign adversaries" like China. Other relevant measures range from provisions on data brokers to parameters for sensitive data collection and use. Equally as important, APRA includes security under permitted purposes for collection and use of data.

Data in itself has many beneficial purposes and is essential to innovation and emerging technologies, but it is critical that we ensure this data is safeguarded and to take steps to prevent bad actors from leveraging it further.

Compromise is important to make a comprehensive federal privacy law a reality and to have a United States vision for privacy.

Countries around the world have acted on privacy legislation, like the European Union's General Data Protection Regulation (GDPR). Meanwhile, the United States is becoming an outlier without a federal law. This forces U.S. companies to follow frameworks from around the world and allows international frameworks to become the default standard. These often have provisions or approaches that hamper innovation and place large burdens on industry. The U.S. has an opportunity to correct course by enacting a comprehensive federal law that strikes a better balance between privacy, security and innovation.

Differences in approaches and substantive provisions have been the downfall of past attempts to pass a privacy law at the federal level. While Congress should not pass a bad bill simply to fill the void, we do believe compromise is important and will require all sides to consider provisions that might not be ideal from their perspective. We also believe that all or nothing thinking is generally unnecessary when considering the provisions of a comprehensive privacy law. This is one of the reasons we are encouraged to see another bipartisan attempt to identify areas for both consensus and compromise.

Thank you again for holding this hearing and for taking my views into consideration. Please do not hesitate to let me know if R Street or I can be a resource or any answer questions that might arise. We look forward to hopefully making a comprehensive federal data privacy and security law a reality in 2024.

Sincerely,

Brandon J. Pugh Brandon J. Pugh, Esq. Director and Senior Fellow Cybersecurity and Emerging Threats R Street Institute [i] Testimony of Brandon J. Pugh, Subcommittee on Innovation, Data, and Commerce, House Committee on Energy and Commerce, "Economic Danger Zone: How America Competes To Win The Future Verses China," 117th Congress, February 2022.

https://www.rstreet.org/commentary/house-subcommittee-on-innovation-data-and-commercehearing-overview-featuring-r-streets-brandon-pugh.

[ii] Tatyana Bolton et al., "The Path to Reaching Consensus for Federal Data Security and Privacy Legislation," R Street Institute, May 26, 2022. <u>https://www.rstreet.org/commentary/the-path-to-reaching-consensus-for-federal-data-security-and-privacy-legislation</u>.

[iii] Brandon Pugh, "Breaking Down The American Privacy Rights Act Discussion Draft," R Street Institute, April 7, 2024. <u>https://www.rstreet.org/commentary/breaking-down-the-american-privacy-rights-act-discussion-draft</u>.

[iv] Andrew Folks, "US State Privacy Legislation Tracker," International Association of Privacy Professionals, April 8, 2024. <u>https://iapp.org/resources/article/us-state-privacy-legislation-tracker</u>.

[v] Heather Morton, "2023 Consumer Data Privacy Legislation," National Conference of State Legislatures, September 28, 2023. <u>https://www.ncsl.org/technology-and-communication/2023-consumer-data-privacy-legislation</u>.

[vi] "Privacy Patchwork Problem: Costs, Burdens, and Barriers Encountered by Startups," Engine, March 2023. <u>https://link.quorum.us/f/a/1GX7ijzLTEyxEwbOv8s7TA~~/AACYXwA~/RgRn-</u>9duP0SNaHR0cHM6Ly9zdGF0aWMxLnNxdWFyZXNwYWNILmNvbS9zdGF0aWMvNTcxNjgx NzUzYzQ0ZDgzNWE0NDBjOGI1L3QvNjQxNGE0NWY1MDAxOTQxZTUxOTQ5MmZmLzE2 NzkwNzQ0MDA1MTMvUHJpdmFjeStQYXRjaHdvcmsrUHJvYmxlbStSZXBvcnQucGRmVwNz cGNCCmYQeVIZZmwHecdSEWJwdWdoQHJzdHJIZXQub3JnWAQAAAAA.

[vii] Tatyana Bolton et al., "Preemption in Federal Data Security and Privacy Legislation," R Street Institute, May 31, 2022. <u>https://www.rstreet.org/commentary/preemption-in-federal-data-security-and-privacy-legislation</u>.

[viii] Brandon Pugh, "Is 2024 The Year We Finally Care About Adversaries Buying And Exploiting Our Data?," R Street Institute, Feb. 28, 2024. <u>https://www.rstreet.org/commentary/is-2024-the-year-we-finally-care-about-adversaries-buying-and-exploiting-our-data</u>.

[ix] Christopher Wray, "The Threat Posed by the Chinese Government and the Chinese Communist Party to the Economic and National Security of the United States," Hosting Entity: Hudson Institute, July 7, 2020. <u>https://www.fbi.gov/news/speeches/the-threat-posed-by-the-chinese-</u>

government-and-the-chinese-communist-party-to-the-economic-and-national-security-of-theunited-states.

[x] Chloe Folmar, "FBI head: China has 'stolen more' US data 'than every other nation combined'," The Hill, Nov. 15, 2022. <u>https://thehill.com/policy/cybersecurity/3737251-fbi-head-china-has-stolen-more-us-data-than-every-other-nation-combined</u>.

[xi] Jessica Dawson and Brandon Pugh, "Ukraine conflict heightens US military's data privacy vulnerabilities," Defense News, April 14, 2022.

https://www.defensenews.com/opinion/2022/04/14/ukraine-conflict-heightens-us-militarys-data-privacy-vulnerabilities.







The Honorable Cathy McMorris Rodgers Chairwoman Committee on Energy and Commerce U.S. House of Representatives 2188 Rayburn House Office Building Washington, D.C. 20515

The Honorable Gus Bilirakis Chairman Subcommittee on Innovation, Data & Commerce U.S. House of Representatives 2125 Rayburn House Office Building Washington, D.C. 20515 The Honorable Frank Pallone Ranking Member Committee on Energy and Commerce U.S. House of Representatives 2107 Rayburn House Office Building Washington, D.C. 20515

The Honorable Jan Schakowsky Ranking Member Subcommittee on Innovation, Data & Commerce U.S. House of Representatives 2322 Rayburn House Office Building Washington, D.C. 20515

April 16, 2024

Dear Chairwoman McMorris Rodgers, Ranking Member Pallone, Chairman Bilirakis, and Ranking Member Schakowsky:

Thank you for the opportunity to comment on the proposed discussion draft *American Privacy Rights Act* of 2024 (APRA). These comments are submitted jointly by the American Council of Life Insurers (ACLI), Finseca, Insured Retirement Institute (IRI), National Association for Fixed Annuities (NAFA), and the National Association of Insurance and Financial Advisors (NAIFA).

The joint trades and our members appreciate the continuing efforts of the House Energy and Commerce Committee and Senate Committee on Commerce, Science and Transportation to develop a comprehensive federal privacy law. The undersigned trade associations, and their members, support federal legislation that provides preemptive, uniform national standards, in principle and application, for all consumers to govern their interactions with all business sectors. We have long advocated for common-sense, consumer-oriented policy proposals. For more than 175 years, customers have relied upon the insurance industry's ability to secure financial security. That level of trust extends to the way we maintain the privacy and security of the personal information we receive.

The joint trades firmly believe consumers, financial security professionals and companies need consistent privacy rules providing equal protections across the country, and support current federal laws and regulations regarding the confidentiality and security of personal information. A patchwork quilt of differing state-by-state privacy regulations is confusing, frustrating, and potentially harmful to consumers. A well-crafted federal consumer privacy law with uniform standards will help ensure consumers benefit from innovation while uniformly protecting Americans' privacy nationally.

Although we support a national uniform privacy law, we have concerns with several aspects of the discussion draft. These include, but are not limited to, the inclusion of private rights of action which will vary state by state, the lack of clear preemption over all state privacy laws, and the federal enforcement mechanism as contained in the discussion draft.

Respectfully, we ask that the Committees consider the process currently underway to allow for more dialogue to address these issues. The joint trades and our members are deeply invested in the success of a federal privacy law. We welcome a continued discussion of these complex topics and are willing to serve as a resource as you continue to receive input on the APRA discussion draft.

Thank you very much for your consideration.

Sincerely,

American Council of Life Insurers Finseca Insured Retirement Institute National Association for Fixed Annuities National Association of Insurance and Financial Advisors



April 17, 2024

The Honorable Gus Bilirakis Chairman Innovation, Data, and Commerce Subcommittee 2306 Rayburn House Office Building Washington, DC 20515

The Honorable Jan Schakowsky Ranking Member Innovation, Data, and Commerce Subcommittee 2408 Rayburn House Office Building Washington DC, 20515

RE: Hearing on Legislative Solutions to Protect Kids Online and Ensure Americans' Data Privacy Rights.

Dear Chairman Bilirakis and Ranking Member Schakowsky:

Thank you for convening today's hearing on legislative proposals to ensure Americans' data privacy rights, including the recently released discussion draft of the American Privacy Rights Act (APRA). BSA commends House Energy & Commerce Chair Cathy McMorris Rodgers and Senate Commerce Chair Maria Cantwell for their bicameral and bipartisan work on APRA but note that we have concerns with the current version of the discussion draft. Establishing a strong comprehensive federal privacy law is a top priority for BSA and we welcome continued engagement to ensure that the next version of APRA is effective, workable, and provides consumers and businesses with the certainty they deserve.

BSA | The Software Alliance is the leading advocate for the global software industry.¹ Our members are enterprise software companies that create the business-to-business technology products and services that power the digital transformation of companies in every industry. BSA members provide design and project management services, customer relationship management software, human resource management programs, cybersecurity services, identity management services, and remote collaboration software, along with a range of other enterprise technology products.

Every day, American consumers share their personal information with businesses just by using routine products and services. Consumers deserve to know that their data is being used responsibly. As more states consider or advance comprehensive privacy legislation, consumers and businesses alike face the possibility of fragmented regulatory regimes that

¹ BSA's members include: Adobe, Alteryx, Asana, Atlassian, Autodesk, Bentley Systems, Box, Cisco, CNC/Mastercam, Databricks, DocuSign, Dropbox, Elastic, Graphisoft, HubSpot, IBM, Informatica, Kyndryl, MathWorks, Microsoft, Okta, Oracle, PagerDuty, Palo Alto Networks, Prokon, Rubrik, Salesforce, SAP, ServiceNow, Shopify Inc., Siemens Industry Software Inc., Splunk, Trend Micro, Trimble Solutions Corporation, TriNet, Twilio, Workday, Zendesk, and Zoom Video Communications, Inc.

could prove to be difficult to both navigate and enforce. A strong national data privacy standard will provide consumers and businesses the certainty they deserve. It should address three key issues:

- Establish Consumer Rights. A federal privacy law should create new rights for consumers, including the rights to access, correct, and delete their personal data, as well as the right to opt out of the sale and sharing of their personal information. These rights can help provide consumers control over their information and increase their ability to both trust and verify how their data is used.
- Create Clear Obligations for Businesses to Handle Data Responsibly. A federal privacy law should place meaningful limits on businesses that handle consumers' personal data and require them to handle consumers' data responsibly. Those limits should also reflect a business's role in handling consumer data, including whether a company decides why and how to collect a consumer's personal data, or instead acts as a service provider that processes a consumer's data on behalf of another company and pursuant to that company's instructions. The distinction between these two types of companies is critical to a host of privacy laws worldwide and in newly enacted state laws. These laws recognize that both types of businesses have important responsibilities and obligations to safeguard consumers' personal data and that those obligations must reflect how the company interacts with consumers' data to avoid creating new privacy and security risks for consumers.²
- **Provide Strong and Consistent Enforcement**. Effective enforcement is important to protecting consumers' privacy, ensuring that organizations meet their commitments and legal obligations, and deterring potential violations. A federal privacy law should not be enforced by a single regulator, but by federal and state agencies working together. We support enforcement of a federal privacy law not only by the FTC but also all state Attorneys General, to create consistent and effective enforcement.

The APRA discussion draft recently released by Chairs McMorris Rodgers and Cantwell makes notable bipartisan progress on the above key issues, but there is still significant work to be done to ensure the final product is effective, workable, and functions as intended. To achieve such an outcome, we urge you to increase clarity by further defining key terms and to make the following revisions:

- Develop and refine the bill's approach to minimizing the risk of bias in Al systems. BSA strongly agrees that when Al is used in ways that could adversely impact civil rights or access to important life opportunities, the public should be assured that such systems have been thoroughly vetted to identify and mitigate risks associated with unintended bias. BSA has worked with member companies for several years on Al issues and we appreciate that Section 13(b) of the APRA focuses on requiring impact assessments and design evaluations for certain Al systems. However, key improvements are needed to ensure these provisions are effective and workable, including providing clear thresholds and ensuring that obligations fit the organization's role.
- Revise the data minimization provisions to provide appropriate grounds for processing and avoid undermining the role of service providers. The APRA

² See BSA, Controllers and Processors: A Longstanding Distinction in Privacy, *available at* https://www.bsa.org/files/policy-filings/10122022controllerprodistinction.pdf.

aims to require companies to minimize the amount of data they process. This is an important principle of privacy laws globally. However, legislation should permit the type of processing that a consumer would expect, such as improving a product or service. It is also important that the minimization requirement not inadvertently lead to *more* parties looking at personal data, such as by requiring a service provider to review its customer's data.

• Further clarify the role and responsibilities of service providers. We welcome the bill's recognition of the distinct roles of covered entities and service providers, and we strongly support defining these terms in line with the globally-recognized definitions of controllers and processors, as APRA does. However, APRA undercuts the longstanding and widespread distinction between these two roles by applying obligations designed for covered entities to service providers. As a result, some obligations are not appropriate to the role of service providers and do not align with how the services they provide function.

BSA supports strong privacy protections for consumers, and we appreciate the opportunity to provide these recommendations for improving the recently released APRA discussion draft. We look forward to working with lawmakers to ensure that any privacy legislation is effective, workable, and provides consumers and businesses with the certainty they deserve. We welcome and look forward to further engagement with the Committee on these important issues.

Sincerely,

G.M. Cer

Craig Albright Vice President, US Government Relations

CC: The Honorable Cathy McMorris Rodgers The Honorable Frank Pallone

Teen Mental Health Is Plummeting, and Social Media is a Major Contributing Cause

Testimony of Jonathan Haidt

Professor of Ethical Leadership, New York University – Stern School of Business Before the Senate Judiciary Committee, Subcommittee on Technology, Privacy, and the Law May 4, 2022

I am a social psychologist who has been studying moral psychology and moral development since 1987. I began to notice something going wrong with the mental health and social behavior of college students around 2014, which led me to collaborate with Greg Lukianoff to write an Atlantic article in 2015 titled <u>The Coddling of the American mind</u>. We expanded our research and published a book with the same title in 2018. Since then I have worked with Jean Twenge (a professor of psychology at San Diego State University, and author of *iGen*) to aggregate the academic research on teen mental health and its relation to social media use in two large collaborative reviews, carried out in Google Docs open to other researchers. It is these two collaborative reviews that form the basis of my testimony today. They can be accessed here:

1) Adolescent mood disorders, self-harm, and suicide rates: A collaborative review <u>https://tinyurl.com/TeenMentalHealthReview</u>

2) Social Media and Mental Health: A Collaborative Review tinyurl.com/SocialMediaMentalHealthReview

I believe I can be most helpful to this committee by first summarizing the academic literature on the changes that have occurred in teen mental health since 2012, and then spending a bit more time explaining the research linking deteriorating teen mental health to the arrival and widespread adoption of social media, which transformed childhood activity, attention, social relationships, and consciousness in the years between 2009 and 2012. I will conclude with some specific recommendations for policies that I believe would have a substantial and positive impact on the crisis.

In the interest of time, I will focus my remarks on the effects of social media on teen mental health. I am also extremely concerned about the effects of social media on America's political dysfunction, which I have written about in a recent Atlantic article, titled: <u>Why the past 10</u>

<u>years of American life have been uniquely stupid</u>. My claims in that article are supported by a third open source collaborative review, titled: <u>Social Media and Political Dysfunction: A</u> <u>Collaborative Review</u>. I curate that Google Doc with professor Chris Bail of Duke University, the author of *Breaking the Social Media Prism*.

I will state my case in outline form in this document, with links to relevant sources. I will expand on this outline in my testimony, and I welcome questions and challenges from committee members.

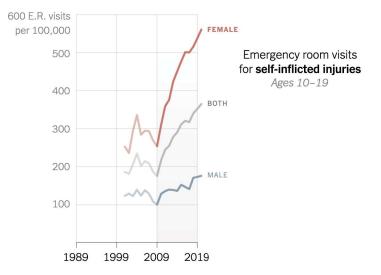
PART 1: THE SPECIFIC, GIGANTIC, SUDDEN, AND INTERNATIONAL MENTAL HEALTH CRISIS

(See the <u>adolescent mood disorders</u> Google Doc for supporting evidence)

1.1. The crisis is specific to mood disorders – those related to depression and anxiety. It is not a general across-the-board increase in other illnesses.

1.2. The crisis is not a result of changes in the willingness of young people to self-diagnose,

nor in the willingness of clinicians to expand terms or over-diagnose. We know this because the same trends occurred, at the same time, and in roughly the same magnitudes, in behavioral manifestations of depression and anxiety, including hospital admissions for self-harm, and completed suicides. Figure 1, below, from a <u>New York Times article</u> (April 23, 2020), shows just how sharp and sudden the increase has been for hospital admissions for teen girls who had intentionally harmed themselves, mostly by cutting themselves.



Emergency room visits for self-harm by children and adolescents rose sharply over the last decade, particularly among young women.

By The New York Times | Source: Centers for Disease Control and Prevention Figure 1: Emergency room visits for self harm increased very rapidly among teen girls beginning

in 2010

1.3 The crisis came on suddenly, in the early 2010s.

The curves you can see in the Adolescent Mood Disorders Google Doc are not just the continuation of trends already in evidence for the Millennial generation (born 1982 through 2016). They are more like "hockey sticks," with a long relatively flat period before the early 2010s, and then a sharp upturn or elbow. This is rare in mental health data. It suggests that something changed in the lives of American teens around 2010.

1.4 The increases in mental illness are very large.

When you compare rates in 2009 –before most teens were daily users of social media—to 2019—the last full year before Covid made things even worse—the increases are generally between 50% and 150%, depending on the disorder, gender, and subgroup.

1.5 The crisis is gendered.

The collapse of mental health has hit both sexes, and on many measures, boys and girls are up by roughly similar percentages. However there are two important caveats: A) the base rate for mood disorders is always higher for girls than boys, particularly after puberty, which means that a doubling of the rate produces far more additional sick girls than boys, as you can see in Figure 2 below, and B) there are some disorders and age groups for which girls are up far more, especially for self-harm, which is a much more common way of manifesting anxiety in girls than in boys.

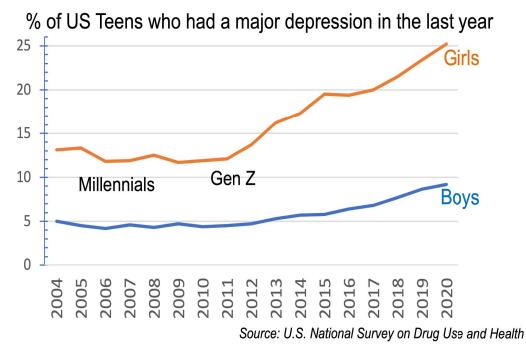
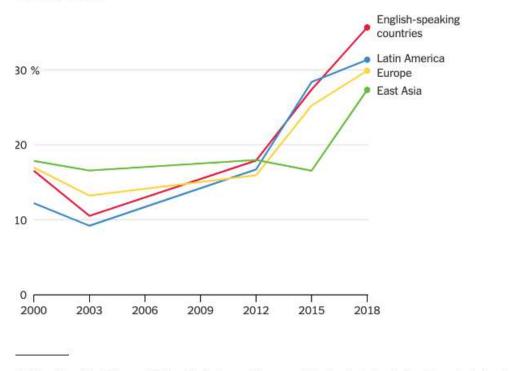


Figure 2: rates of major depression roughly doubled, for boys and for girls, from 2010 to 2020.

1.6 The crisis has hit many countries, not just the USA.

The patterns are nearly identical in the UK and Canada, and the trends are similar though not identical in Australia and New Zealand. We do not yet see signs of similar epidemics in continental Europe or in East Asia, although I have not yet found good data from those regions. Jean Twenge and <u>analysed the PISA dataset</u> – the one global survey given to adolescents around the world. The survey focuses on educational outcomes, but it contains seven questions related to loneliness at school. Sure enough, we found a sudden increase between 2012 and 2015 in all regions of the world. These patterns indicate that whatever happened to American teens was not uniquely caused by trends and events in the USA (e.g., a sudden fear of school shootings after the Newtown massacre of 2012). The cause is likely to be something that affected teens in many or all regions of the world at the same time. Figure 3 below is drawn from our <u>New York Times op-ed</u> about our academic essay:

Lonely at School



The share of students reporting high levels of loneliness at school has increased sharply since the early 2010s.

Figure 3. Loneliness at school increased in all regions of the world after 2012.

PART 2: THE EVIDENCE THAT SOCIAL MEDIA IS A SUBSTANTIAL CONTRIBUTOR TO THE CRISIS

(See the Social Media and Mental Health collaborative review for supporting evidence)

2.1 Correlational studies consistently show a link between heavy social media use and mood disorders, but the size of the relationship is disputed.

See the studies in <u>section 1.1</u> of the review. Nearly all studies find a correlation, and it is usually curvilinear. That is, moving from no social media use to one or two hours a day is often not associated with an increase in poor mental health, but as usage rises to 3 or 4 hours a day, the increases in mental illness often become quite sharp. You can see this pattern below in two studies, the first from the USA, the second from the UK.

By The New York Times | Note: English-speaking countries include Australia, Canada, Ireland, New Zealand, United Kingdom, United States. Source: "Worldwide increases in adolescent loneliness" by Jean M. Twenge, Jonathan Haidt, et al.

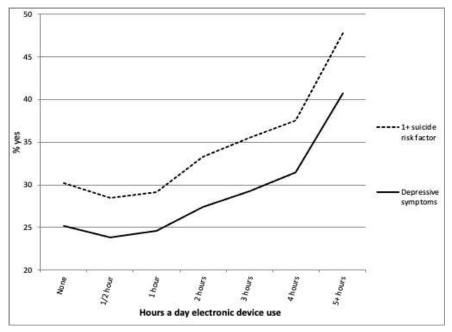


Figure 4: Exposure-response relationship between electronic device use and a) having at least one suicide-related outcome/ risk factor or b) depressive symptoms (feeling sad or hopeless for two weeks or more in a row), U.S. 9–12th graders, Youth Risk Behavior Surveillance Survey (YRBSS), 2009–2015. Taken from: **1.1.3b** Twenge, Joiner, Rogers, & Martin (2020).

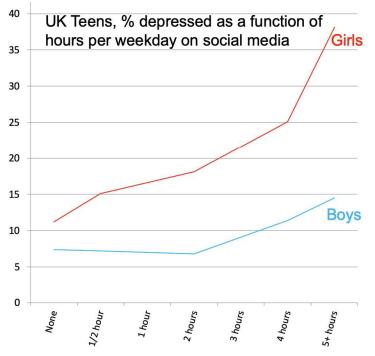


Figure 5. Percent of UK adolescents with "clinically relevant depressive symptoms" by hours per weekday of social media use, including controls. Haidt and Twenge created this graph from the data given in Table 2 of <u>Kelly</u>, <u>Zilanawala</u>, <u>Booker</u>, <u>& Sacker (2019)</u>, page 6.

2.2 The correlation is much larger than for "eating potatoes" or "wearing glasses."

There is one academic publication that is more widely cited than any other in essays that are skeptical of a link between social media use and mental health: <u>Orben & Przybylski (2019)</u>, titled: The association between adolescent well-being and digital technology use, published in the journal *Nature Human Behavior*. This study used an advanced statistical technique on three very large data sets in which teens in the US and UK reported their "digital media use" and answered questions related to mental health. Orben and Przybylski report that the average regression coefficient (using social media use to predict positive mental health) is negative but tiny, indicating a level of harmfulness so close to zero that it is roughly the same size as they find (in the same datasets) for the association of mental health with "eating potatoes" or "wearing eyeglasses." The relationships are equivalent to correlation coefficients less than r = .05. The authors conclude that "these effects are too small to warrant policy change."

How can this finding of a nearly-zero effect size be reconciled with the obviously larger relationships seen in figures 4 and 5? Jean Twenge and I argued in a <u>published response paper</u> in the same journal that Orben and Przybylski made 6 analytical choices, each one defensible, that collectively ended up reducing the statistical relationship and obscuring an association that is actually equivalent to a correlation coefficient of around r=.20. The first issue to note is that the "potatoes" comparison was what they reported for all "digital media use," not for social media use specifically. Digital media includes all screen based activities, including watching TV or Netflix videos with a sibling, which are not harmful activities. In their own published report, when you zoom in on "social media" only, the relationship is between 2 and 6 times larger than for "digital media." Also crucial is that Orben and Przybylski lumped together all teens (boys and girls), while many studies have found that the correlations with harm are larger for girls. So even if the association is weak for all kids using all screens, the association is much larger if you zoom in on girls using social media.

2.3 There is an emerging consensus that the correlation is in the ballpark of r = .10 to r = .15. Orben and Przybylski obtained an unusually low numbers for the relationship between "digital media use" and mental illness, compared to other published studies. How large is the relationship when we just look at social media? Amy Orben herself conducted a "narrative review" of many other reviews of the academic literature (<u>Orben, 2020</u>). Her own conclusion is that "The associations between social media use and well-being therefore range from about r = -0.15 to r = -0.10." I agree with this assessment, for both sexes combined.

2.4 The correlations are larger for girls.

What would the correlation be if we could just look at girls? Several studies have found that it is substantially larger than for boys. See <u>Kelly, Zilanawala, Booker, & Sacker (2019)</u>, <u>Nesi &</u> <u>Prinstein (2015)</u>, and <u>Twenge, J.M. (2020)</u>. I know of no study that has found a larger relationship for boys. A ballpark figure for the correlation just for girls is roughly r = .15 to r = .22.

2.5. The effect size is even larger for girls going through puberty.

A very recent study—<u>Orben, Przybylski, Blakemore, & Kievit (2022)</u>—found that the link between social media use and mental illness varies by age and sex. For girls, it is largest between the ages of 11 and 13 -- the years when they are in early puberty. For boys the most sensitive age is later (14-15), consistent with the fact that boys hit puberty later than girls. This means that zooming in on girls and social media is not enough. We must pay special attention to girls going through puberty while on social media. For them, the size of the correlation with poor mental health could be well above r = .20. This recent study points us to the urgency of getting social media out of middle schools, at the very least. That is where the harm seems to be greatest.

2.6. Correlations between .15 and .20 are not "small."

Many researchers learned in graduate school that a correlation coefficient of r=.5 and above is a "large" correlation, r=.3 and above is a "medium" sized correlation and r = .10 and above is a "small" correlation, with r < .10 being trivial, not even "small." But recently, psychologists have noted that these cutoffs make no sense; what counts as large or small varies by domain. The key paper here is Gotz, Gosling, and Rentfrow (2020), Small Effects: The Indispensable Foundation for a Cumulative Psychological Science. The authors note that in the domains of public health and education, many of the things that warrant public expenditure are correlated with outcomes in the ballpark of r = .05 to r = .15. For example, Gotz et al. note that the correlation of calcium intake and bone mass in pre-menopausal women is r = .08, which is enough to recommend that women take calcium supplements. The correlation of childhood lead exposure and adult IQ is r = .11, which is enough to justify a national campaign to remove lead from water supplies. These correlations are *smaller* than the links between mood disorders and social media use for girls. Gotz et al. note that such putatively "small" effects can have a very large impact on public health when we are examining "effects that accumulate over time and at scale", such as millions of teens spending 20 hours per week, every week for many years, trying to perfect their Instagram profiles while scrolling through the even-moreperfect profiles of other teens.

2.7. The experimental evidence confirms the correlational findings.

All social scientists know that "correlation does not imply causation." We generally give more weight to experimental studies that randomly assign individuals to a treatment or control condition. Some experiments require participants to reduce or eliminate social media use for a few days or weeks; some experiments randomly assigned participants to spend time on a social media platform (vs. some other activity). <u>Section 3</u> of the social media collaborative review collects the abstracts of all the experiments we've been able to find that were published after 2014. At present, ten of the studies show a statistically significant effect on mental health or happiness, while just four studies failed to find an effect. It must be noted that nearly all of these experiments used college students or older samples; none used middle school students, who are likely to be the most vulnerable to the harms of social media. (Doing experiments with younger teens should be an urgent research priority.)

2.8. The "eyewitness testimony" confirms the academic findings: social media is a culprit.

Section 4 of the Social Media collaborative review collects studies that have directly asked teens what they think is going on. Teens often say that they enjoy social media while they are using it — which is something heroin users are likely to say too. The more important question is whether the teens themselves think that social media is, overall, good for their mental health. The answer is consistently "no." Facebook's own internal research, brought out by <u>Frances</u> Haugen in the Wall Street Journal, concluded that "Teens blame Instagram for increases in the rate of anxiety and depression … This reaction was unprompted and consistent across all groups."

Insight 34

Young people think social media is the main reason youth mental health is getting worse.

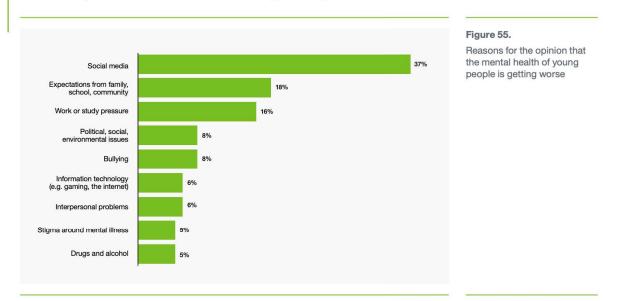


Figure 6: Australian teens believe that social media is the main reason that youth mental health is getting worse. Source: <u>Headspace National Youth Mental Health Survey (2018).</u>

PART 3: WHAT LEGISLATION WOULD BE HELPFUL IN ADDRESSING THE CRISIS?

The United States is experiencing a catastrophic wave of mood disorders (anxiety and depression) and related behaviors (self harm and suicide). The crisis is so severe that the U.S. Surgeon General, Vivek Murthy, recently issued an <u>Advisory on Youth Mental Health</u>.

This crisis did not emerge gradually. There was no sign of it before 2010, but by 2015 it was everywhere, overwhelming mental health centers that catered to teens and college students. The crisis emerged in the exact years when American teens were getting smart phones and becoming daily users of social media platforms such as Instagram. Correlational, experimental, and eye-witness testimony points to social media as a major cause of the crisis. I do not believe that social media is the *only* cause of the crisis, but there is no alternative hypothesis that can explain the suddenness, enormity, and international similarity that I laid out in part 1 of this document. Researchers and spokespeople for the major platforms who tell you that the evidence is "inconclusive" or that the effect sizes are "too small" should be asked directly: "OK, then what do YOU think caused this?" What should be done? What legislation can Congress pass that might address and reverse America's rolling mental health disaster? My main essay on the effects of social media on teen mental health is a 2021 Atlantic essay titled <u>The Dangerous Experiment on Teen Girls</u>. In that essay I laid out the evidence, as I have in this document, and then I offered three policy suggestions. **The first was that Congress pass the very bill that you are considering today**:

First, Congress should pass legislation compelling Facebook, Instagram, and all other social-media platforms to allow academic researchers access to their data. One such bill is the **Platform Accountability and Transparency Act**, proposed by the Stanford University researcher Nate Persily.

My second suggestion was that you consider updating COPPA:

Second, Congress should toughen the 1998 Children's Online Privacy Protection Act. An early version of the legislation proposed 16 as the age at which children should legally be allowed to give away their data and their privacy. Unfortunately, e-commerce companies lobbied successfully to have the age of "internet adulthood" set instead at 13. Now, more than two decades later, today's 13-year-olds are not doing well. Federal law is outdated and inadequate. The age should be raised. More power should be given to parents, less to companies.

I strongly believe that Congress must undo the disastrous mistake of setting the age too low and letting the companies off the hook for enforcing even the low age of 13. Puberty and middle school are already so hard, especially for girls. Social media makes it all worse, and that recent study by <u>Orben, Przybylski, Blakemore, & Kievit</u> shows us that this vulnerable period is when mental health damage is most likely. We do not know if the damage done in middle school is permanent, or if the children will outgrow it if they were to leave the most toxic social media environments. But we can all work together to ensure that middle school children are not on Instagram and other platforms, especially when they are only 11 or 12 years old.

I now believe there is an additional approach that is extremely promising, in part because it is politically very feasible. This is my third suggestion: **to simply pass the** <u>Age Appropriate Design</u> <u>Code</u> **that the UK Parliament has already enacted.** The genius of this approach, developed by Beeban Kidron of the House of Lords, is that it recognizes that children are everywhere, on nearly all platforms, including those designed for adults. It specifies the responsibilities of all platforms to provide a suitable environment for children, if they fail to keep children off. The state of California is currently considering implementing the UK's code. The bill recently passed out of a subcommittee on a unanimous and bipartisan vote. The bill, AB 2273, would create the

California Age Appropriate Design Code Act. You can read about the bill <u>in this essay</u>. Of course, a state by state patchwork of bills makes no sense for the Internet. I strongly urge this committee to consider putting forth a federal version of the same bill.

My fourth and final suggestion is that **Congress authorize and facilitate research on this topic**. Of course, many researchers are already working on it, but we are working in the dark. We do not have access to the best and most informative data -- the data held closely by the companies themselves. The Platform Accountability and Transparency Act will help researchers gain access. **The Children and Media Research Advancement Act (CAMRA)** which you are currently considering would provide funds to speed up this research. I urge you to enact it.

* * * * *

Surgeon General Murthy wrote in his Advisory: "Our obligation to act is not just medical—it's moral" (p. 4). Will the Senate rise to meet this obligation? Can it find the bipartisan will to address the most non-partisan of all issues: the widespread and increasing suffering of America's children?

Written Testimony of Arturo Bejar before the Subcommittee on Privacy, Technology, and the Law, November 7, 2023

Subcommittee Chair Blumenthal, Subcommittee Ranking Member Hawley, and members of the Subcommittee:

My name is Arturo Bejar and I am a dad with firsthand experience of a child who experienced unwanted sexual advances on Instagram and an expert with 20 years of experience working as a senior leader, including leading online security, safety, and protection at Facebook.

From 2009 to 2015, I was the senior engineering and product leader at Facebook responsible for its efforts to keep users safe and supported. I ran a group called Protect & Care. It was responsible for "Site Integrity" – stopping attacks and malicious behavior; "Security Infrastructure" – which engineered resilient systems and worked on compliance; and a group called "Care"– which developed Facebook's user-facing and internal customer care tools. I also oversaw the child-safety tools. I reported directly to CTO Mike Schroepfer, who himself reported to Mark Zuckerberg. For each of these areas I was responsible for the combined effort of engineering, product, user research, data, and design. This included doing strategic product reviews every six months with the Facebook executive team including: Mark Zuckerberg, Sheryl Sandberg, and Chris Cox.

When there was a significant engineering security, site integrity, child safety, or care issue, I was one of the people that the executive team worked with to oversee investigations, help craft accurate responses to external enquiries, and to coordinate engineering and product changes where needed in those areas. For most of that time I was also the manager for Facebook's "Product Infrastructure" team, which built key parts of the product engineering frameworks of Facebook, and developed REACT, one of the core technologies of the web today. Prior to that I had been recruited to Facebook from Yahoo! where I worked from 1998 to 2009. I was hired as Yahoo!'s first product security engineer, eventually becoming head of Information Security reporting to the CTO.

Earlier this year, I was subpoenaed to testify under oath about emails I sent Facebook's executive team as part of a government investigation and I realized that I had written these emails over two years ago and yet nothing had changed. Meta continues to publicly misrepresent the level and frequency of harm that users, especially children, experience on the platform, And they have yet to establish a goal for actually reducing those harms and protecting children. It's time that the public and parents understand the true level of harm posed by these "products" and it's time that young users have the tools to report and suppress online abuse.

While leading Facebook's Protect & Care group up until 2015, I spent much of my time working on ways to make it easier for users to tell the company when things weren't going right for them on the service. That included building tools to make it easier to report problems, as well as creating survey tools so the company could understand what people were experiencing and how they felt about the service and its features. When I left in 2015, after six years at the company, I felt good that we had built numerous systems that made using our products easier and safer.

I left in part because I wanted more time with my family. My daughter was entering her teenage years. Like most young Americans she is an avid user of social media, particularly Instagram and Snapchat. But as a result, I got an up-close look at the experience of a real young person's daily experience on these products. While there is plenty of good that comes from her time using social media, frequently she has to deal with awful problems. Since they were 14, my daughter and all of her friends have repeatedly faced unwanted sexual advances, misogyny, and harassment. This has been profoundly distressing to them (and to me). But even though social media services enabled these distressing experiences, the services provided little or no help to her in dealing with them. And their experience is far from unique. In fact it's common. So in 2019, I decided I wanted to see why my kids and their friends were having these problems, and went back to Facebook as an independent consultant. I stayed for two years, working with the team at Instagram that focused on "well-being."

It was not a good experience. Almost all of the work that I and my colleagues had done during my earlier stint at Facebook through 2015 was gone. The tools we had built for teenagers to get support when they were getting bullied or harassed were no longer available to them. People at the company had little or no memory of the lessons we had learned earlier.

The most important lesson we learned about teens before 2015 was that when one of them asks for help, the content that was involved in the incident does not matter as much as giving them support to help them in the moment. So we built a tool that asked them–using language we tested and developed in partnership with teens–what was happening, what emotion they were experiencing, and how intense it was. Based on that information, we could better offer specific help.

The process worked, at the beginning of this process, when we were giving them tools to deal with 'bullying and harassment,' 11% of 13-14 year olds completed the flow, as we called this series of questions. By the end of it, for a flow with more steps that covered a wider variety of problems, 82% were completing the flow. What that showed us is that if the steps we offer are helpful in a moment of need, teens will take them.

At this time we knew that well over 90% of the issues that people were reporting did not technically violate company policy. Most importantly and initially surprisingly, we learned that

in 50% of the issues teens were flagging as the most intense bad experiences, the content involved was discernibly benign to us, as outside observers.

And our feedback tools also showed that 90% of the time, the people who posted content that got reported by another user, said they did not intend it to be upsetting to someone else.

By the time I left, in 2015, based on experience, we had learned that to obtain the best measure of the success of a support flow, we simply needed to ask 'Did you get help with what you needed?'

When I returned in 2019, I was confounded. There were a great many motivated and talented team members working on online safety. But no one on that team was aware of the work we had done at Facebook and the lessons we had learned four years earlier. The group at Instagram and the talented internal research teams had developed some very troubling evidence that young teens were experiencing great distress and abuse on the Instagram platform. But senior management was externally reporting different data that grossly understated the frequency of harm experienced by users.

I was committed to understanding this gap and began to assemble some of the research in order to convey the problem to senior leaders. Eventually, on October 5, 2021, after having the analysis reviewed internally, I sent a detailed email to Mark Zuckerberg and the other senior leaders detailing what I had found. First, I pointed out how the reporting process grossly understated misconduct on the site. I explained that the number of people reporting to surveys that they had a negative experience on Instagram was 51% *every week* but only 1% of those reported the offending content and only 2% of those succeeded in getting the offending content taken down.

Thereafter, I detailed the staggering levels of abuse that teens aged 13-15 were experiencing every week. The initial data from the research team indicated that as many as 21.8% of 13-15 year olds said they were the target of bullying *in the past seven days*, 39.4% of 13-15 year old children said they had experienced negative comparison, *in the past seven days*, and 24.4% of 13-15 year old responded said they received unwanted advances, all in the prior seven days. Later, the research team revised the survey results to state that the likely number of 13-15 year old children receiving unwanted sexual advances in the past seven days was likely *only* 13 percent, still a shocking number. Obviously, an even higher percentage of these children are receiving unwanted sexual advances on a monthly basis.

The reaction was not constructive. Sheryl Sandberg expressed empathy for my daughter but offered no concrete ideas or action. Adam Mosseri responded with an request for a follow up meeting, Mark Zuckerberg never replied. That was unusual. It might have happened, but I don't

recall Mark ever not responding to me previously in numerous communications, either by email or by asking for an in-person meeting.

Today, most harm remains unaddressed

Most of the distress people experience online because of unwanted contact and content is not addressed today by Meta and other social media companies. I say that based on my extensive experience working to keep users safe, along with my direct knowledge of extensive research and data about what people experience on Meta's services and elsewhere online. But it's not just that the companies disregard people's distress. The way they respond to problems often makes those problems worse, because it normalizes harmful behavior and encourages unwanted contact and content. In addition, the way companies talk about these problems to regulators, policy makers, and the general public is seriously misleading.

It's been almost two years since I left Instagram, and as it stands right now, I don't believe anything is going to change. All this time there has been extensive harm happening to teenagers, and the leadership has been aware of it, but they have chosen not to investigate or address the problems. I know because I respectfully communicated this directly to the executive team in 2021, and have watched them do essentially nothing in response. One key fact I told company leaders, for example, was that based on carefully-crafted and vetted surveys, we had identified the disturbing fact that 13% of Instagram users aged 13-15 self reported having received unwanted sexual advances via the platform *within the previous seven days*. That is an awful statistic. Looked at over time, it is likely the largest-scale sexual harassment of teens to have ever happened, and one that clearly calls for action.

Instagram's stated mission is to provide a safe and supportive place. As I was preparing these documents, someone wrote to a teenager I know asking them to sell nude photographs of themselves. It is September of 2023, two years after my briefings, and there is still no way, so far as I or teenagers I know can determine, for a minor to flag a conversation in Instagram to indicate it contains unwanted sexual advances. And this is just one of several categories of meaningful harm that teenagers experience. An environment where unwanted sexual advances are normalized is hardly safe and supportive.

There are plenty of things that need to change about how social media systems function in society. A number of states are already introducing laws that impose restrictions on how young people can use such systems. The U.S. Surgeon General recently released a statement underscoring his grave concern about what the services are doing to our children.

The platforms must change how they identify and measure unwanted contact

But regardless of other reforms, I have realized that in order to begin to reduce the harm they facilitate, social media companies have to be compelled to change how they identify and measure users' exposure to unwanted contact. In addition, the services must be compelled to publicly report these measurements. Doing so will inevitably encourage them to introduce features that enable users to better deal with those harms. For example, public earnings calls or other formal public processes should include a report on the percentage of teenagers who experienced unwanted sexual advances in that quarter.

Social media companies are not going to start addressing the harm they enable for teenagers on their own. They need to be compelled by regulators and policy makers to be transparent about these harms and what they are doing to address them.

In order to support regulatory and transparency efforts, I am proposing, based on my experience as a senior leader who used to manage these areas and respond to regulatory enquiries, a group of measures that I believe are pragmatic and straightforward to implement. These could help start the process of change. These measures do not require significant investments by the platforms in people to review content or in technical infrastructure. However, they do require the leadership of social media companies to prioritize. They will ensure that the companies have enough people, infrastructure, and know-how to implement these recommendations quickly. This document provides an overview. Below are links to documents with more detailed explanations, which aim to support further action around the different areas.

My goal in all this, as a father and as an engineer who has worked on these problems for many years, is to help regulators, policy-makers, academics, journalists, and the public better understand how companies think about these problems and what it would take to address them. I also want to create a meaningful increase in support for integrity and trust and safety workers at the companies. I am not selling anything, nor will I be looking for work in this field. This is my statement of retirement from the technology industry, which I will make freely available and open for comments. Any work I do in the future to support regulators or others committed to reducing harm on social media will be pro bono.

Meta's current approach to these issues only addresses a fraction of a percent of the harm people experience on the platform. In recent years, repeated examples of harm that has been enabled by Meta and other companies has come to light, through whistleblowing, outside research studies, and many stories of distressing experiences people have there. Whenever such reports emerge, Meta's response is to talk about 'prevalence', and its investment in moderation and policy, as if that was the only relevant issue. But there is a material gap between their narrow definition of prevalence and the actual distressing experiences that are enabled by Meta's products. However, managers including Meta CEO Mark Zuckerberg do not seem to seek to understand or actually address the harms being discussed. Instead, they minimize or downplay published findings, and

even sometimes the results of their own research. They also try to obfuscate the situation by quoting statistics that are irrelevant to the issues at hand.

Successful reforms must be based on data

Social media companies, and Meta in particular, manage their businesses based upon a close and ongoing analysis of data. Nothing gets changed unless it is measured, so it is critical that when it comes to unwanted and distressing content, the data gathered and metrics established be based on people's actual experiences. This is a company guided by data. Once Meta establishes metrics for anything, employees are given concrete incentives to drive those metrics in the direction the company deems useful and valuable. Metrics determine, for example, how many people work in a given department. Most of all, metrics establish the companies' priorities.

When outside critics point to harms caused by Facebook or Instagram, I have often observed Meta CEO Mark Zuckerberg and his managers try to change the conversation to the things they measure. If the problems identified are not problems that the company's systems are designed to detect and measure, managers literally have no means to understand them. Zuckerberg is unwilling to respond to criticisms of his services that he feels are not grounded in data. For Meta, a problem that is not measured is a problem that doesn't exist.

When I worked at Facebook, I helped design, introduce, and manage systems that measured important harms as well as methods to reduce those harms, for teens and others. However, many of those systems were later shut down or changed completely in ways that degraded their effectiveness. Meanwhile, the range of unwanted content that people receive has increased in scope, reach, and intensity. So now I believe it is necessary for outsiders—that means governments and regulators—to step in and require metric-based goals based on the harm that teenagers experience, as well as transparent systems of public reporting and disclosure based upon what those tools reveal. I know from experience that this is possible to do methodically and effectively.

I have specific recommendations for regulators, to require any company that operates social media services for teenagers to develop certain metrics and systems. These approaches will generate extensive user experience data, which then should be regularly and routinely reported to the public, probably alongside financial data. I believe that if such systems are properly designed, we can radically improve the experience of our children on social media. The goal must be to do this without eliminating the joy and value they otherwise get from using such services.

I don't believe such reforms will significantly affect revenues or profits for Meta and its peers. These reforms are not designed to punish companies, but to help teenagers. And over time, they will create a safer environment.

Any of these reforms could have been introduced voluntarily by the companies earlier, and in fact the Protect & Care team successfully implemented measures based on these principles at Facebook as much as 10 years ago. But those were abandoned, along with the entire underlying approach we developed. Now, we are faced with the unwillingness of companies on their own to seek to understand the range of unwanted content they recommend and the unwanted contact they enable. Because of their unwillingness to develop and maintain tools and improvements in the face of material data and evidence of harms, they must be required to do so.

There are many opportunities for impactful and helpful innovation, if companies are required to set their priorities and devote resources with the goal of reducing the amount of unwanted and distressing content that teens experience. Much of that innovation might eventually spring from the companies themselves. But the product features, policies, and punishments Meta and other companies have today are necessary but not sufficient. They are clearly not able to create a safe environment for teens online. These include their existing reporting, policy, and punishment systems, as well as the inadequate tools they offer today to enable users to block or restrict other users.

What regulators and governments can do right away

Regulators should require changes in three areas:

- 1. Users ought to be given the ability to signal that they have experienced unwanted contact in messages or comments to their posts. They also need to be able to share with the platform the reason why that contact is unwanted. Currently, platforms make it unnecessarily difficult for people to report unwanted contact, and they often compel users to mischaracterize their experience in order to report it within the narrow categories defined by their policies. The reporting categories they provide do not match what people are experiencing. People, especially teens, need to be presented with options that are relevant, clear, and flexible. For example, the options presented to users for the reason contact may be unwanted could include "because it's gross", "it's harassing me", "it's fake", etc. When we did such work in the past, giving teens options that matched their experience led to meaningful increases in their use of the support tools.
- 2. People should have a voice about the content they experience. That can be achieved by giving them the ability to curate their own content "feed" to avoid unwanted or unhealthy interactions. This can be done by creating a feedback mechanism to indicate the content

that makes them uncomfortable and the reason why. Such a process would be straightforward to implement, it is already implemented in advertising for Instagram and Facebook. Such a mechanism should also be applied to products like Reels or other algorithmically-controlled recommendation systems. Again, users should be given the ability to share the reason why certain interactions or information they are exposed to makes them uncomfortable. One example of a possible response made available for teens might be "it makes me feel bad about myself." Information gathered from such responses should be used to improve recommendations, and to improve the community experience over time. Algorithms are only as good as their inputs, and without meaningful feedback and programming adjustments, they will continue recommending unwanted content.

3. Work on addressing these harms needs to be done in partnership with experts in the relevant fields. Company product managers and engineers don't have sufficient knowledge or expertise in social science and other areas of relevance. Policy team members, who often do have more knowledge, do not, however, drive product design. Issues such as self-image, addiction or problematic use, and bullying and harassment ought to be addressed by creating product features in close partnership with people who have experience and are experts in the subject, such as outside academics. Meta has sometimes said that this cannot be done without violating user privacy and security, but that is misleading. As part of my work at Facebook we did this regularly and without impinging on user privacy. The company can bring in third parties and give them access to all the necessary data, while still remaining bound by the privacy and security standards it has promised. There are also processes which appropriately anonymize data in order to share findings.

(I include more detailed thoughts about how to consider regulation below)

Those who initiate unwanted actions need to be considered, too

When it comes to the people who initiate unwanted messages or post unwanted content, mechanisms should be implemented to give them private feedback so they can understand the impact of their actions. The feedback they receive should explain the reason why that content was not desired or appropriate. Of course, safety is a key consideration in the design of these features. The principle ought to be that all users, even apparent offenders, deserve to be treated with respect and, at least initially, be given sufficient information to enable them to operate as respectful community members. Today, content creators are often surprised when they lose access to their account, or see the distribution of their content restricted, and frequently do not know why it happens. Most creators would in fact appreciate knowing the reasons why they lose users and what they can do to help their content reach more people. Only if they repeatedly disregard such warnings should they be restricted from features or distribution.

If you give people respectful private feedback, I learned in my work there that many if not most of them will adjust their behavior. Most people who initiate interactions that others don't want do so with what they themselves consider to be positive intentions. Several sociological studies have come to this conclusion, and it corresponds to what I learned at Facebook, where research studies that were conducted multiple times found that, for content other users had reported as problematic, the intent of the content creator was, in their own mind, positive or neutral 90% of the time. Of course, there were 6% of people who posted problematic content who did so despite knowing it could be upsetting, and 4% of them did it with a deliberate intent to provoke. There are trolls on these services, for sure. But if you put yourself in the seat of the people who share content you've seen that is upsetting, you will often find that they have shared it because it was important to them, because they thought it was funny, or maybe because they are afraid of something happening to their friends. Most people who have unintentionally done something that is distressing to someone else would like to know about it, as long as the feedback is delivered privately and respectfully.

Importantly, the process of giving feedback to people who take unwanted actions helps a service then identify those who nonetheless ignore that feedback. People who repeatedly engage in behavior that is distressing to others definitely require further response and restrictions. These measures are intended to separate well-meaning community members from trolls.

I oppose censorship

It is essential to note that in all of these approaches I'm <u>not advocating for censorship</u>. I believe in the importance of free expression. However, free expression should not allow an individual to send someone direct messages (DMs) that harass them, or to make misogynistic or hateful comments on a teenager's posts. There should be no right to harass.

Underlying this approach is the belief that in order to reduce distressing experiences for people, the most important area social media companies should work on is social norms. The current approach, based on setting legalistic definitions within policies and reactively removing content, is not sufficient. More importantly, it does not address the majority of the distressing experiences people face. What must guide the design of features to make people feel safe with each other in social media should be the actual experience of users.

Social media is unlike most environments where people spend time, because in general it does not have sufficient accepted and maintained social norms. What makes a workplace, school, or park feel safe, by contrast, is mostly not the policing, but rather how people just know how to behave. We would never tolerate routine sexual advances to teens at our local supermarket. However, on Instagram, Meta, and other social services at the moment, we completely tolerate that happening.

Real World Standards Should Apply to Social Media

It has been implicitly argued by many that we must accept unconscionable levels of misogyny, sexually explicit content and unwanted advances, depression, bullying and other harms as an unavoidable cost of having social media. Many at Meta and elsewhere would falsely argue that we must accept it because it is merely a reflection of the "real world." This is wholly false. First, as we have seen, dangerous and harmful experiences occur on Instagram at a rate exponentially greater than the real world. Second, the reverse is actually true. The tools and algorithms that can be applied to our social media mean that Instagram and Facebook should be far safer than the real world. Meta can make these platforms far safer for our children if they were motivated to do so.

Mandatory Measurement and Transparency Will Drive Accountability

I have spent my career working in some of the most successful corporations. One thing that is common among any successful company is a discipline of setting quantifiable goals and then holding people accountable for achieving those goals. It works. What works even better is public accountability. Every public company reports its financial results every quarter and the public markets impose swift consequences for companies and executives that fall short of the quantifiable goals. Because of that accountability, the leaders are sharply focused on those results.

The same principle can apply to online safety. Establishing consistent measurements of key harms and then requiring publication of those results every quarter will ensure parents and the public can hold companies accountable. And embarrassing or eroding safety measurements will be something that leaders will want to avoid. Public and measurable accountability is a key element of making these platforms safe for children.

More Detailed Thoughts about Regulatory Approaches and Processes

The most effective way to regulate social media companies is to require them to develop metrics that will allow both the company and outsiders to evaluate and track instances of harm, as experienced by users. This plays to the strengths of what these companies can do, because data for them is everything. If something cannot be evaluated by data analysis, it is generally very difficult for Meta and other such companies to understand the problem or take action.

Process-based or policy-based regulations are essential for security and privacy. In order to effectively regulate the safety of a social media environment, the focus should be on metrics based on user experience.

It is critically important that users be given tools inside the product to communicate to the company about their experience of unwanted experiences and harm in the product. These should take the form of a statistically significant rolling survey. Companies have well developed methodologies to create surveys that accurately represent the different populations that use their product. As well as tools to communicate when something goes wrong. And when they use such tools, not only should they get a useful response from the company, but their experience should contribute to anonymized aggregated data that the companies are required to compile and publicly report.

My years of work in engineering, product, security, and compliance have convinced me that the most effective way to regulate the harms that social media enables is to require platforms to use and report different metrics than those they have historically used. (In the past the companies have not sufficiently tracked negative experiences of users.) If the proper metrics are transparently reported, a societal dialogue can develop which will eventually lead to our teenagers operating in safer online spaces.

We hear often in the press of new kinds of harms being experienced on these services. We also hear about existing harms being handled inappropriately. Whenever that happens, it represents a failure in the design or implementation of the service's tools for reporting problems..

Below, I include a variety of recommendations for specific ways that regulators can require data to be regularly published by social media platforms.

A few notes on the recommendations that follow:

- Social media companies have robust tools and sophisticated processes to do "quantitative surveys". These are surveys that gather enough data to be representative of a population. what's known as "statistically-significant." This surveying approach is sustainable because it reduces the number of people that need to be surveyed, and applies different well-known techniques that can reduce the impact of bias in survey responses.
- I say users ought to be able to "flag" content when it causes them discomfort. By this I mean giving users a simple way to indicate to the service that an interaction or piece of content is unwanted. It could be done by swiping, hitting an 'X' button, or by some other method. Flagging should always be followed by the option to give more context. If the

user does not want to supply this information, that option should be able to be easily ignored by scrolling away. Such interactions should feel rewarding and easy to use.

- The process to follow in order to develop the right options in user dialogues about harms they experience can be based on the document <u>Lessons learned while working on online bullying</u>.
- "Support tools" help people with an issue they encounter, regardless of whether it would properly be "reported" for content review. Depending on the nature of the issue, the support tools might include the option for the user to submit a report.
- "Report flows" are the steps people take to submit content for content moderation review.

Any social media service that is used extensively by teenagers should be required to gather and publicly report the following sorts of data:.

 Create and deploy a survey process that asks questions of teenagers who have experienced harm. This should be done through a quantitative survey, based upon a statistically-significant population. The survey should be carefully designed in order to understand the experience of harms encountered by teenagers across the service, and be reflective of the demographics of the full population (for example age, location). Results should be disclosed based upon metrics like age, gender, geography, race, etc.

Example questions:

- In the last 7 days, did you receive any unwanted sexual advances?
- In the last 7 days, has someone insulted or disrespected you, spread rumors about you, threatened you, or excluded you?
- In the last 7 days, have you seen someone saying something discriminatory against someone else because of their body?
- In the last 7 days, have you felt worse about yourself because of someone else's posts?

Data should include:

- The area or feature of the service where the harms have been experienced. Was it in direct messages? In the comment on a post or photograph? In a photograph itself? Each of these categories should be reported.
- A breakdown of such experiences by the age of the user.
- What did the person do after they experienced the harm?
- 2. In order to ensure that teens are always able to report problems or ask for help when they need to, the following quantitative survey should be run routinely, and the results ought to be publicly reported every quarter. It should be a stated goal that 90% of teenagers should answer yes to both of the following questions. If that percentage is not achieved,

penalties should be levied against the company. The goal ought to be to make sure that there is something users can easily do when they have a bad experience, and that users know it. They also should feel the company's response helps them deal with the issue at hand.

- If something bad happens to me or someone else:
 - I know what to do, and it is helpful.
 - The actions I take help make the community safer.
- 3. Users ought to be able to flag any content, using tools that give the company information about why that piece of content made them uncomfortable. The results of such interactions ought to be tracked and quantified and reported publicly. Examples include:

• Unwanted contact in messages.

As part of the design of any direct-messaging feature, the user should have an easily-findable "unwanted contact" button. They should be given the option after they click it to provide context. Users should be given choices such as the following, to indicate why the contact was unwanted:

- It's gross.
- It's fake.
- It is harassing me.

• Unwanted actions on my content.

People should be able to flag unwanted comments, regardless of whether the content violates policy. Options should include:

- It's attacking someone else.
- It's gross.
- It is disrespectful.

• Unwanted content in my feed or in other recommendation areas.

The algorithms social media services use to create recommendations often serve up inappropriate suggestions. People should thus be able to flag unwanted content that is recommended to them, and provide a reason why. For example:

- It's gross.
- Someone is going to get hurt.
- $\circ~$ It is an inappropriate depiction of body image.
- The options that a user is given to block, restrict, or take other actions on content created by others should be accompanied by secondary options that easily give the person the chance to indicate why they took that action. For example, they may block someone merely to mute an annoying friend for a day, or they may be seeking to keep away a predator. Without having such context, it is very difficult

for a platform to use the information that someone was blocked as a means to make the community safer.

- 4. Teens should be provided with **support tools** that help them deal with the issue they are experiencing, regardless of whether they submit a report. As part of the support tools, it should be clear how to **submit a report for review**. Support tools should be measured by subsequent surveys.
 - a. A significant majority of users should reply "yes" to the following question: "I got help with the issue I am experiencing." The percentage ought to be publicly reported.
 - b. There should be an option to submit feedback even if the person chooses to not use the tool. Some sample questions may include:
 - \circ $\;$ There is no option for my issue.
 - I don't think reporting this issue will help me.
- 5. Every quarter, companies should be required to transparently report a variety of statistics regarding the usage of **support and reporting tools**. The following are some of the kinds of information that should be required to be disclosed:
 - The number of people who enter the report flow (see definition above).
 - The percentage of users who abandon the flow at each step.
 - Out of the people who entered the flow, the percentage of those who submitted content for review.
 - The percentage of report requests that resulted in content or an account being removed, banned, etc.

In making these recommendations I am not necessarily arguing for an increase in the number of people reviewing content. My own experience in following some of these steps during Facebook's Compassion work was that most content sent to review does not violate policy. When we added options that reflected user experience, for example by helping teenagers say that someone else was being annoying, the volume of reports that needed to be reviewed went down. This freed up critical resources and people to focus on the reports for which they could take the most useful actions.

I believe that giving teenagers a voice around the things they experience will, over time, make a safer environment. These recommendations are not a solution. They are a necessary start to the work that is needed in order to create an online environment where teens can express themselves and learn to be respectful to each other. This should be an environment where appropriate teasing and playfulness is welcome, but where unwanted contact and harassment is not. I believe the only way this can happen is through regulation imposed from the outside. Meta has consistently demonstrated that it will not address these issues on its own.

Biography of Arturo Bejar, Former Director of Engineering for Protect and Care, Facebook.

From 2009 to 2015, Arturo was the senior engineering and product leader at Facebook responsible for its efforts to keep users safe and supported, reporting to Mike Schroepfer, the CTO. Arturo was responsible for "Site Integrity" – stopping attacks and malicious behavior; "Security Infrastructure" – which engineered resilient systems and worked on compliance; and a group called "Care" – which developed Facebook's user-facing and internal customer care tools, as well as child safety tools. Arturo was responsible for the combined effort of engineering, product, user research, data, and design. This included regularly doing strategic product reviews with the Facebook executive team. Arturo was also the engineering manager for Facebook's "Product Infrastructure" team, which built key parts of the product engineering frameworks of Facebook, and developed REACT, one of the core technologies of the web today

From 2019 to 2021, Arturo returned to Facebook to work as a part-time independent consultant and industry expert for the Well-being team at Instagram.

In 2022, Arturo was a Technical Advisor, for the Facebook Oversight Board.

Prior to that Arturo was recruited to Facebook from Yahoo! where he worked from 1998 to 2009 . Arturo was hired as Yahoo!'s first security engineer, eventually becoming the head of Information Security reporting to the CTO.

Arturo started working for IBM in Mexico City when he was 15, was able to study Mathematics at King's College London thanks to the support of Steve Wozniak, and first started working on security and social systems in Silicon Valley in 1994 as part of a startup called Electric Communities.

Social Media and Youth Mental Health

The U.S. Surgeon General's Advisory





2023

Contents



Social Media and Youth Mental Health	
Social Media Has Both Positive and Negative In on Children and Adolescents	npacts
The Potential Benefits of Social Media Use Among Children and Ad	lolescents
The Potential Harms of Social Media Use Among Children and Adol	lescents
What Drives Mental Health and Well-Being Cor A Snapshot of the Scientific Evidence	ncerns:
Potential Risk of Harm from Content Exposure	
Potential Risk of Harm from Excessive and Problematic Use	
Critical Questions Remain Unanswered	
Known Evidence Gaps	
Known Evidence Gaps	
Known Evidence Gaps We Must Take Action: A Way Forward	
Known Evidence Gaps We Must Take Action: A Way Forward What Policymakers Can Do	
Known Evidence Gaps We Must Take Action: A Way Forward What Policymakers Can Do What Technology Companies Can Do	
Known Evidence Gaps We Must Take Action: A Way Forward What Policymakers Can Do What Technology Companies Can Do What Parents and Caregivers Can Do	
Known Evidence Gaps We Must Take Action: A Way Forward What Policymakers Can Do What Technology Companies Can Do What Parents and Caregivers Can Do What Children and Adolescents Can Do	

About the Advisory



A Surgeon General's Advisory is a public statement that calls the American people's attention to an urgent public health issue and provides recommendations for how it should be addressed. Advisories are reserved for significant public health challenges that require the nation's immediate awareness and action.

This Advisory calls attention to the growing concerns about the effects of social media on youth mental health. It explores and describes the current evidence on the positive and negative impacts of social media on children and adolescents, some of the primary areas for mental health and well-being concerns, and opportunities for additional research to help understand the full scope and scale of social media's impact. This document is not an exhaustive review of the literature. Rather, it was developed through a substantial review of the available evidence, primarily found via electronic searches of research articles published in English and resources suggested by a wide range of subject matter experts, with priority given to, but not limited to, meta-analyses and systematic literature reviews. It also offers actionable recommendations for the institutions that can shape online environments — policymakers and technology companies — as well as for what parents and caregivers, young people, and researchers can do.

For additional background and to read other Surgeon General's Advisories, visit **SurgeonGeneral.gov**

Social Media and Youth Mental Health



Social media¹ use by youth is nearly universal. Up to 95% of youth ages 13–17 report using a social media platform, with more than a third saying they use social media "almost constantly."² Although age 13 is commonly the required minimum age used by social media platforms in the U.S.,³ nearly 40% of children ages 8–12 use social media.⁴ Despite this widespread use among children and adolescents, robust independent safety analyses on the impact of social media on youth have not yet been conducted. There are increasing concerns among researchers, parents and caregivers, young people, healthcare experts, and others about the impact of social media on youth mental health.^{5,6}

More research is needed to fully understand the impact of social media; however, the current body of evidence indicates that while social media may have benefits for some children and adolescents, there are ample indicators that social media can also have a profound risk of harm to the mental health and well-being of children and adolescents. At this time, we do not yet have enough evidence to determine if social media is sufficiently safe for children and adolescents. We must acknowledge the growing body of research about potential harms, increase our collective understanding of the risks associated with social media use, and urgently take action to create safe and healthy digital environments that minimize harm and safeguard children's and adolescents' mental health and well-being during critical stages of development.

Up to 95% of youth ages 13–17 report using a social media platform, with more than a third saying they use social media "almost constantly."

Social Media Has Both Positive and Negative Impacts on Children and Adolescents



The influence of social media on youth mental health is shaped by many complex factors, including, but not limited to, the amount of time children and adolescents spend on platforms, the type of content they consume or are otherwise exposed to, the activities and interactions social media affords, and the degree to which it disrupts activities that are essential for health like sleep and physical activity.⁶ Importantly, different children and adolescents are affected by social media in different ways, based on their individual strengths and vulnerabilities, and based on cultural, historical, and socio-economic factors.^{7.8} There is broad agreement among the scientific community that social media has the potential to both benefit and harm children and adolescents.^{6.9}

Brain development is a critical factor to consider when assessing the risk for harm. Adolescents, ages 10 to 19, are undergoing a highly sensitive period of brain development.^{10, 11} This is a period when risk-taking behaviors reach their peak, when well-being experiences the greatest fluctuations, and when mental health challenges such as depression typically emerge.^{12, 13, 14} Furthermore, in early adolescence, when identities and sense of self-worth are forming, brain development is especially susceptible to social pressures, peer opinions, and peer comparison.^{11, 13} Frequent social media use may be associated with distinct changes in the developing brain in the amygdala (important for emotional learning and behavior) and the prefrontal cortex (important for impulse control, emotional regulation, and moderating social behavior), and could increase sensitivity to social rewards and punishments.^{15, 16} As such, adolescents may experience heightened emotional sensitivity to the communicative and interactive nature of social media.¹⁶ Adolescent social media use is predictive of a subsequent decrease in life satisfaction for certain developmental stages including for girls 11–13 years old and boys 14–15 years old.¹⁷ Because adolescence is a vulnerable period of brain development, social media exposure during this period warrants additional scrutiny.



The Potential Benefits of Social Media Use Among Children and Adolescents

Social media can provide benefits for some youth by providing positive community and connection with others who share identities, abilities, and interests. It can provide access to important information and create a space for self-expression.⁹ The ability to form and maintain friendships online and develop social connections are among the positive effects of social media use for youth.^{18, 19} These relationships can afford opportunities to have positive interactions with more diverse peer groups than are available to them offline and can provide important social support to youth.¹⁸ The buffering effects against stress that online social support from peers may provide can be especially important for youth who are often marginalized, including racial, ethnic, and sexual and gender minorities.^{20, 21, 22} For example, studies have shown that social media may support the mental health and well-being of lesbian, gay, bisexual, asexual, transgender, queer, intersex and other youths by enabling peer connection, identity development and management, and social support.²³ Seven out of ten adolescent girls of color report encountering positive or identity-affirming content related to race across social media platforms.²⁴ A majority of adolescents report that social media helps them feel more accepted (58%), like they have people who can support them through tough times (67%), like they have a place to show their creative side (71%), and more connected to what's going on in their friends' lives (80%).²⁵ In addition, research suggests that social media-based and other digitally-based mental health interventions may also be helpful for some children and adolescents by promoting help-seeking behaviors and serving as a gateway to initiating mental health care.^{8, 26, 27, 28, 29}

The Potential Harms of Social Media Use Among Children and Adolescents

Over the last decade, evidence has emerged identifying reasons for concern about the potential negative impact of social media on children and adolescents.

A longitudinal cohort study of U.S. adolescents aged 12–15 (n=6,595) that adjusted for baseline mental health status found that adolescents who spent more than 3 hours per day on social media faced double the risk of experiencing poor mental health outcomes including symptoms of depression and anxiety.³⁰



As of 2021, 8th and 10th graders now spend an average of 3.5 hours per day on social media.³¹ In a unique natural experiment that leveraged the staggered introduction of a social media platform across U.S. colleges, the roll-out of the platform was associated with an increase in depression (9% over baseline) and anxiety (12% over baseline) among college-aged youth (n = 359,827 observations).³² The study's co-author also noted that when applied across the entirety of the U.S. college population, the introduction of the social media platform may have contributed to more than 300,000 new cases of depression.^{32,} ³³ If such sizable effects occurred in college-aged youth, these findings raise serious concerns about the risk of harm from social media exposure for children and adolescents who are at a more vulnerable stage of brain development.

Limits on the use of social media have resulted in mental health benefits for young adults and adults. A small, randomized controlled trial in college-aged youth found that limiting social media use to 30 minutes daily over three weeks led to significant improvements in depression severity.³⁴ This effect was particularly large for those with high baseline levels of depression who saw an improvement in depression scores by more than 35%.³⁵ Another randomized controlled trial among young adults and adults found that deactivation of a social media platform for four weeks improved subjective well-being (i.e., self-reported happiness, life satisfaction, depression, and anxiety) by about 25–40% of the effect of psychological interventions like self-help therapy, group training, and individual therapy.³⁶

In addition to these recent studies, correlational research on associations between social media use and mental health has indicated reason for concern and further investigation. These studies point to a higher relative concern of harm in adolescent girls and those already experiencing poor mental health, ^{37, 38, 39} as well as for particular health outcomes like cyberbullying-related depression,⁴⁰ body image and disordered eating behaviors,⁴¹ and poor sleep quality linked to social media use.⁴² For example, a study conducted among 14-year-olds (n = 10,904) found that greater social media use predicted poor sleep, online harassment, poor body image, low self-esteem, and higher depressive symptom scores with a larger association for girls than boys.⁴³ A majority of parents of adolescents say they are somewhat, very, or extremely worried that their child's use of social media could lead to problems with anxiety or depression (53%), lower self-esteem (54%), being harassed or bullied by others (54%), feeling pressured to act a certain way (59%), and exposure to explicit content (71%).⁴⁴

What Drives Mental Health and Well-Being Concerns: A Snapshot of the Scientific Evidence



Scientific evidence suggests that harmful content exposure as well as excessive and problematic social media use are primary areas for concern.

Potential Risk of Harm from Content Exposure

Extreme, inappropriate, and harmful content continues to be easily and widely accessible by children and adolescents. This can be spread through direct pushes, unwanted content exchanges, and algorithmic designs. In certain tragic cases, childhood deaths have been linked to suicide- and self-harm-related content and risk-taking challenges on social media platforms.^{45, 46} This content may be especially risky for children and adolescents who are already experiencing mental health difficulties.⁴⁷ Despite social media providing a sense of community for some, a systematic review of more than two dozen studies found that some social media platforms show live depictions of self-harm acts like partial asphyxiation, leading to seizures, and cutting, leading to significant bleeding.⁴⁸ Further, these studies found that discussing or showing this content can normalize such behaviors, including through the formation of suicide pacts and posting of self-harm models for others to follow.

Social media may also perpetuate body dissatisfaction, disordered eating behaviors, social comparison, and low self-esteem, especially among adolescent girls.^{49, 50, 51, 52} A synthesis of 20 studies demonstrated a significant relationship between social media use and body image concerns and eating disorders, with social comparison as a potential contributing factor.⁴¹ Social comparison driven by social media is associated with body dissatisfaction, disordered eating, and depressive symptoms.^{53, 54, 55, 56} When asked about the impact of social media on their body image, nearly half (46%) of adolescents aged 13–17 said social media makes them feel worse, 40% said it makes them feel neither better nor worse, and only 14% said it makes them feel better.⁵⁷

Additionally, roughly two-thirds (64%) of adolescents are "often" or "sometimes" exposed to hate-based content.⁵⁸ Among adolescent girls of color, one-third or more report exposure to racist content or language on social media platforms



at least monthly.²⁴ In a review of 36 studies, a consistent relationship was found between cyberbullying via social media and depression among children and adolescents,⁴⁰ with adolescent females and sexual minority youth more likely to report experiencing incidents of cyberbullying.^{59, 60} Nearly 75% of adolescents say social media sites are only doing a fair to poor job of addressing online harassment and cyberbullying.⁶¹

In addition, social media platforms can be sites for predatory behaviors and interactions with malicious actors who target children and adolescents (e.g., adults seeking to sexually exploit children, to financially extort them through the threat or actual distribution of intimate images, or to sell illicitly manufactured fentanyl).^{62, 63, 64} Adolescent girls and transgender youth are disproportionately impacted by online harassment and abuse, which is associated with negative emotional impacts (e.g., feeling sad, anxious or worried).^{65, 66} Nearly 6-in-10 adolescent girls say they've been contacted by a stranger on certain social media platforms in ways that make them feel uncomfortable.²⁴

Potential Risk of Harm from Excessive and Problematic Use

Excessive and problematic use of social media can harm children and adolescents by disrupting important healthy behaviors. Social media platforms are often designed to maximize user engagement, which has the potential to encourage excessive use and behavioral dysregulation.^{67, 68, 69,} ⁷⁰ Push notifications, autoplay, infinite scroll, quantifying and displaying popularity (i.e., 'likes'), and algorithms that leverage user data to serve content recommendations are some examples of these features that maximize engagement. According to one recent model, nearly a third (31%) of social media use may be attributable to self-control challenges magnified by habit formation.⁷¹ Further, some researchers believe that social media exposure can overstimulate the reward center in the brain and, when the stimulation becomes excessive, can trigger pathways comparable to addiction.^{68,72} Small studies have shown that people with frequent and problematic social media use can experience changes in brain structure similar to changes seen in individuals with substance use or gambling addictions.^{73, 74} In a nationally representative survey of girls aged 11–15, one-third or more say they feel "addicted" to a social media platform.²⁴ Over half of teenagers report that it would be hard to give



up social media.² Nearly 3-in-4 teenagers believe that technology companies manipulate users to spend more time on their devices.⁶⁸ In addition, according to a survey of 8th and 10th graders, the average time spent on social media is 3.5 hours per day, 1-in-4 spend 5+ hours per day and 1-in-7 spend 7+ hours per day on social media.³¹

Excessive and problematic social media use, such as compulsive or uncontrollable use, has been linked to sleep problems, attention problems, and feelings of exclusion among adolescents.^{43, 75, 76, 77} Sleep is essential for the healthy development of adolescents. A systematic review of 42 studies on the effects of excessive social media use found a consistent relationship between social media use and poor sleep quality, reduced sleep duration, sleep difficulties, and depression among youth.⁴² Poor sleep has been linked to altered neurological development in adolescent brains, depressive symptoms, and suicidal thoughts and behaviors.^{78, 79, 80} On a typical weekday, nearly 1-in-3 adolescents report using screen media until midnight or later.⁵⁸ While screen media use encompasses various digital activities, social media applications are the most commonly used applications by adolescents.⁵⁸

In a recent narrative review of multiple studies, problematic social media use has also been linked to both self-reported and diagnosed attention-deficit/ hyperactivity disorder (ADHD) in adolescents, although more research is necessary to understand whether one causes the other.⁸¹ A longitudinal prospective study of adolescents without ADHD symptoms at the beginning of the study found that, over a 2-year follow-up, high-frequency use of digital media, with social media as one of the most common activities, was associated with a modest yet statistically significant increased odds of developing ADHD symptoms (OR 1.10; 95% CI, 1.05-1.15).⁸² Additionally, social media-induced fear of missing out, or "the pervasive apprehension that others might be having rewarding experiences from which one is absent,"⁸³ has been associated with depression, anxiety, and neuroticism.⁸⁴

Critical Questions Remain Unanswered



Nearly every teenager in America uses social media, and yet we do not have enough evidence to conclude that it is sufficiently safe for them. Our children have become unknowing participants in a decades-long experiment. It is critical that independent researchers and technology companies work together to rapidly advance our understanding of the impact of social media on children and adolescents. This section describes the known gaps and proposes additional areas for research that warrant urgent consideration.

Known Evidence Gaps

The relationship between social media and youth mental health is complex and potentially bidirectional.¹⁹ There is broad concern among the scientific community that a lack of access to data and lack of transparency from technology companies have been barriers to understanding the full scope and scale of the impact of social media on mental health and well-being. Most prior research to date has been correlational, focused on young adults or adults, and generated a range of results.⁸⁵ Critical areas of research have been proposed to fill knowledge gaps and create evidence-based interventions, resources, and tools to support youth mental health.⁸⁶ Thus, there is an urgent need for additional research including on, but not limited to, the following questions:

- How do in-person vs. digital social interactions differ in terms of the impact on health, and what are the unique contributions of social media behavior to social connectedness, social isolation, and mental health symptoms?
- What are the potential pathways through which social media may cause harm to children's and adolescents' mental health and well-being? For example:
 - » How does social comparison affect one's sense of life satisfaction and in-person relationships?
 - » How does the use of social media, including specific designs and features, relate to dopamine pathways involved in motivation, reward, and addiction?
- What type of content, and at what frequency and intensity, generates the most harm? Through which modes of social media access (e.g., smartphone, computer) and design features? For which users and why?



- What are the beneficial effects of social media? For whom are the benefits greatest? In what ways, and under what circumstances?
- What individual-, community-, and societal-level factors may protect youth from the negative effects of social media?
- What types of strategies and approaches are effective in protecting the mental health and well-being of children and adolescents on social media (e.g., programs, policies, design features, interventions, norms)?
- How does social media use interact with a person's developmental stage for measuring risk of mental health impact?

It is critical that independent researchers and technology companies work together to rapidly advance our understanding of the impact of social media on children and adolescents.

We Must Take Action: A Way Forward



Our children and adolescents don't have the luxury of waiting years until we know the full extent of social media's impact. Their childhoods and development are happening now. While social media use can have positive impacts for some children, the evidence noted throughout this Surgeon General's Advisory necessitates significant concern with the way it is currently designed, deployed, and utilized. Child and adolescent use of platforms designed for adults places them at high risk of "unsupervised, developmentally inappropriate, and potentially harmful" use according to the National Scientific Council on Adolescence.⁸⁷ At a moment when we are experiencing a national youth mental health crisis, now is the time to act swiftly and decisively to protect children and adolescents from risk of harm.

To date, the burden of protecting youth has fallen predominantly on children, adolescents, and their families. Parents face significant challenges in managing children and adolescents' use of social media applications, and youth are using social media at increasingly earlier ages.^{4, 88} Nearly 70% of parents say parenting is now more difficult than it was 20 years ago, with technology and social media as the top two cited reasons.⁸⁹ While nearly all parents believe they have a responsibility to protect their children from inappropriate content online,⁸⁹ the entire burden of mitigating the risk of harm of social media cannot be placed on the shoulders of children and parents. Nearly 80% of parents believe technology companies have a responsibility to protect children from inappropriate content from inappropriate content as well.⁸⁹

We must provide children and their families with the information and tools to navigate the changing digital environment, but this burden to support our children must be further shared. There are actions technology companies can take to make their platforms safer for children and adolescents. There are actions researchers can take to develop the necessary research base to support further safeguards. And there is a role for local, state, and federal policy to implement protections for our children and adolescents.

The U.S. has a strong history of taking action in such circumstances. In the case of toys, transportation, and medications — among other sectors that have



widespread adoption and impact on children – the U.S. has often adopted a safety-first approach to mitigate the risk of harm to consumers. According to this principle, a basic threshold for safety must be met, and until safety is demonstrated with rigorous evidence and independent evaluation, protections are put in place to minimize the risk of harm from products, services, or goods. For example, the Consumer Product Safety Commission requires toy manufacturers to undergo third-party testing and be certified through a Children's Product Certificate as compliant with the federal toy safety standard for toys intended for use by children.⁹⁰ To reduce the risk of injury from motor vehicle accidents, the National Highway Traffic Safety Administration requires manufacturers to fit new motor vehicles with standard airbags and seat belts. among other safety features, and conduct crash tests to be compliant with the Federal Motor Vehicle Safety Standards.⁹¹ Medications must demonstrate safety to the Food and Drug Administration before being made available and marketed for use.⁹² Given the mounting evidence for the risk of harm to some children and adolescents from social media use, a safety-first approach should be applied in the context of social media products.

To better safeguard the mental health and well-being of children and adolescents, policymakers, technology companies, researchers, families, and young people must all engage in a proactive and multifaceted approach. Through the recommendations below, we can provide more resources and tools to children and families, we can gain a better understanding of the full impact of social media, and we can maximize the benefits and minimize the harms of social media platforms to create safer, healthier online environments for children.

We can maximize the benefits and minimize the harms of social media platforms to create safer, healthier online environments for children.

What Policymakers Can Do

Policymakers play an important role in addressing the complex and multifaceted issues related to social media use and in protecting youth from harm.

- Strengthen protections to ensure greater safety for children interacting with all social media platforms, in collaboration with governments, academic organizations, public health experts, and technology companies.
 - Develop age-appropriate health and safety standards for technology platforms. Such standards may include designing technology that is appropriate and safe for a child's developmental stage; protecting children and adolescents from accessing harmful content (e.g., content that encourages eating disorders, violence, substance abuse, sexual exploitation, and suicide or discusses suicide means); limiting the use of features that attempt to maximize time, attention, and engagement; developing tools that protect activities that are essential for healthy development like sleep; and regularly assessing and mitigating risks to children and adolescents.
 - » Require a higher standard of data privacy for children to protect them from potential harms like exploitation and abuse. Six-in-ten adolescents say they think they have little or no control over the personal information that social media companies collect about them.³²
 - Pursue policies that further limit access in ways that minimize the risk of harm — to social media for all children, including strengthening and enforcing age minimums.

- Ensure technology companies share data relevant to the health impact of their platforms with independent researchers and the public in a manner that is timely, sufficiently detailed, and protects privacy.
- Support the development, implementation, and evaluation of digital and media literacy curricula in schools and within academic standards.
 Digital and media literacy provides children and educators with digital skills to strengthen digital resilience, or the ability to recognize, manage, and recover from online risks (e.g., cyberbullying and other forms of online harassment and abuse, as well as excessive social media use).
- Support increased funding for future research on both the benefits and harms of social media use and other technology and digital media use for children, adolescents, and families.
- Engage with international partners working to protect children and adolescents against online harm to their health and safety.



What Technology Companies Can Do



Technology companies play a central role and have a fundamental responsibility in designing safe online environments and in preventing, minimizing, and addressing the risks associated with social media.

- Conduct and facilitate transparent and independent assessments of the impact of social media products and services on children and adolescents. Assume responsibility for the impact of products on different subgroups and ages of children and adolescents, regardless of the intent behind them.
 - » Be transparent and share assessment findings and underlying data with independent researchers and the public in a privacy protecting manner.
 - » Assess the potential risks of online interactions and take active steps to prevent potential misuse, reducing exposure to harms. When proactive responses fail, take immediate action to mitigate unintended negative effects.
 - » Establish scientific advisory committees to inform approaches and policies aimed at creating safe online environments for children. Scientific advisory committees should be comprised of independent experts and members of user subgroups, including youth.
- Prioritize user health and safety in the design and development of social media products and services.^{93, 94, 95, 96} Prioritize and leverage expertise in developmental psychology and user mental health and well-being in product teams to minimize risks of harm to children and adolescents.
 - » Ensure default settings for children are set to highest safety and privacy standards. Provide easy-to-read and highly visible information about policies regarding use by children.
 - » Adhere to and enforce age minimums in ways that respect the privacy of youth users.

- Design, develop, and evaluate platforms, products, and tools that foster safe and healthy online environments for youth, keeping in mind the needs of girls, racial, ethnic, and sexual and gender minorities. The platform design and algorithms should prioritize health and safety as the first principle, seek to maximize the potential benefits, and avoid design features that attempt to maximize time, attention, and engagement.
- Share data relevant to the health impact of platforms and strategies employed to ensure safety and well-being with independent researchers and the public in a manner that is timely and protects privacy.
- Create effective and timely systems and processes to adjudicate requests and complaints from young people, families, educators, and others to address online abuse, harmful content and interactions, and other threats to children's health and safety. Social media platforms should take these complaints seriously, thoroughly investigate and consider them, and respond in a timely and transparent manner.

Social Media and Youth Mental Health: The U.S. Surgeon General's Advisory

What Parents and Caregivers Can Do

The onus of mitigating the potential harms of social media should not be placed solely on the shoulders of parents and caregivers, but there are steps they can take to help protect and support children and adolescents against the risk of harm.

- Create a family media plan.⁹⁷ Agreed-upon expectations can help establish healthy technology boundaries at home-including social media use. A family media plan can promote open family discussion and rules about media use and include topics such as balancing screen/online time, content boundaries, and not disclosing personal information. For information on creating a family media plan, visit www.healthychildren. org/MediaUsePlan.
- Create tech-free zones and encourage children to foster in-person friendships.98 Since electronics can be a potential distraction after bedtime and can interfere with sleep, consider restricting the use of phones, tablets, and computers for at least 1 hour before bedtime and through the night. Consider keeping family mealtimes and in-person gatherings device-free to build social bonds and engage in a two-way conversation. Help your child develop social skills and nurture his or her in-person relationships by encouraging unstructured and offline connections with others and making unplugged interactions a daily priority. See the American Academy of Pediatrics (AAP) guidelines for media use.
- Model responsible social media behavior. As children often learn behaviors and habits from what they see around them, try to model the behavior you want to see.^{97,99} Parents can set a good example of what responsible and healthy social media use looks like by limiting their own use, being mindful of social media habits (including when and how parents share information or content about their child), and modeling positive behavior on your social media accounts.

- Teach kids about technology and empower them to be responsible online participants at the appropriate age.¹⁰⁰ Discuss with children the benefits and risks of social media as well as the importance of respecting privacy and protecting personal information in age-appropriate ways. Have conversations with children about who they are connecting with, their privacy settings, their online experiences, and how they are spending their time online. Empower and encourage them to seek help should they need it. Learn more about the benefits and risks of social media use and get guidance from experts at AAP's Center of Excellence on Social Media and Youth Mental Health and from the American Psychological Association's Health Advisory on Social Media Use in Adolescence.
- Report cyberbullying and online abuse and exploitation. Talk to your child about their reporting options, and provide support, without judgment, if he or she tells or shows you that they (a) are being harassed through email, text message, online games, or social media or (b) have been contacted by an adult seeking private images or asking them to perform intimate or sexual acts. You or your child can report cyberbullying to the school and/or the online platform, or your local law enforcement.¹⁰¹ Visit CyberTipline, Take it Down, or contact your local law enforcement to report any instances of online exploitation.
- Work with other parents to help establish shared norms and practices and to support programs and policies around healthy social media use. Such norms and practices among parents facilitate collective action and can make it easier to set and implement boundaries on social media use for children.



Social Media and Youth Mental Health: The U.S. Surgeon General's Advisory

The burden of mitigating the potential harms of social media does not rest solely on the shoulders of children and adolescents, but there are measures they can take to navigate social media in a safe and healthy way.

• Reach out for help. If you or someone you know is being negatively affected by social media, reach out to a trusted friend or adult for help. For information from experts, visit AAP's Center of Excellence on Social Media and Youth Mental Health. If you or someone you know is experiencing a mental health crisis, contact the 988 Suicide and Crisis Lifeline by calling or texting 988 for immediate help.

What Children and Adolescents Can Do

- Create boundaries to help balance online and offline activities. Limit the use of phones, tablets, and computers for at least 1 hour before bedtime and through the night to enable sufficient and quality sleep. Keep mealtimes and in-person gatherings device-free to help build social bonds and engage in two-way conversations with others. Nurture your in-person relationships by connecting with others and making unplugged interactions a daily priority.
- Develop protective strategies and healthy practices such as tracking the amount of time you spend online, blocking unwanted contacts and content, learning about and using available privacy and safety settings, learning and utilizing digital media literacy skills to help tell the difference between fact and opinion, and ensuring you are connecting with peers in-person. See this Tip Sheet on Social Media Use and Mental Health for healthy social media use created for and by young people.

- Be cautious about what you share. Personal information about you has value. Be selective with what you post and share online and with whom, as it is often public and can be stored permanently. If you aren't sure if you should post something, it's usually best if you don't. Talk to a family member or trusted adult to see if you should.
- Protect yourself and others. Harassment that happens in email, text messaging, direct messaging, online games, or on social media is harmful and can be cyberbullying. It might involve trolling, rumors, or photos passed around for others to see – and it can leave people feeling angry, sad, ashamed, or hurt. If you or someone you know is the victim of cyberbullying or other forms of online harassment and abuse:
 - » Don't keep online harassment or abuse a secret. Reach out to at least one person you trust, such as a close friend, family member, counselor, or teacher, who can give you the help and support you deserve. Visit stopbullying.gov for helpful tips on how to report cyberbullying. If you have experienced online harassment and abuse by a dating partner, contact an expert at Love is Respect for support or if your private images have been taken and shared online without your permission, visit Take it Down to help get them removed.
 - » **Don't take part in online harassment or abuse.** Avoid forwarding or sharing messages or images and tell others to stop. Another way is to report offensive content to the site or network where you saw it.



What Researchers Can Do

Researchers play a critical role in helping to gain a better understanding of the full impact of social media on mental health and well-being and informing policy, best practices, and effective interventions.

- Establish the impact of social media on youth mental health as a research priority and develop a shared research agenda.¹⁰² Research should include but not be limited to:
 - » Rigorous evaluation of social media's impact on youth mental health and well-being, including longitudinal and experimental studies. This could also include research on specific outcomes and clinical diagnoses (e.g., sleep duration and quality, attention, depression, anxiety, and body image), among specific populations (e.g., racial, ethnic, and sexual and gender minorities), and based on specific aspects of social media (e.g., designs, features, and algorithms).
 - » Role of age, developmental stage, cohort processes, and the in-person environment in influencing the onset and progression of poor mental health outcomes among social media users.
 - » Benefits and risks associated with specific social media designs, features, and content.
 - » Long-term effects on adults of social media use during childhood and adolescence.

- Develop and establish standardized definitions and measures for social media and mental health outcomes that are regularly evaluated and can be applied across basic research, population surveillance, intervention evaluation, and other contexts.
- Evaluate best practices for healthy social media use in collaboration with experts including healthcare providers, parents, and youth.^{94, 103, 104}
- Enhance research coordination and collaboration. Example opportunities include developing an accessible evidence database and forming a consortium of researchers focused on examining the positive and negative effects of social media on mental health and well-being. Researchers should work with community partners to make research findings publicly accessible and digestible.



Acknowledgments



We are grateful to all of the experts, academic researchers, associations, and community-based organizations across the country who shared their insights.

The U.S. Surgeon General's Advisory on Social Media and Youth Mental Health was prepared by the Office of the Surgeon General with valuable contributions from partners across the U.S. Government, including but not limited to:

Office of the Assistant Secretary for Health (OASH)

Office of the General Counsel (OGC)

Office of the Assistant Secretary for Planning and Evaluation (ASPE)

Centers for Disease Control and Prevention (CDC)

Office of the Director

National Center for Injury Prevention and Control (NCIPC)

National Center for HIV, Viral Hepatitis, STD, and TB Prevention, Division of Adolescent and School Health (DASH)

Health Resources and Services Administration (HRSA)

National Institutes of Health (NIH)

Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)

National Institute of Mental Health (NIMH)

Substance Abuse and Mental Health Services Administration (SAMHSA)

Endnotes

1. The definition of social media has been highly debated over the past few decades. As a result, there isn't a single, widely-accepted scholarly definition of social media. (Aichner et al., 2021) The definition may vary from the cited research in this document based on the methods used in each study. In making conclusions and recommendations, this document regards social media as "internet-based channels that allow users to opportunistically interact and selectively self-present, either in real-time or asynchronously, with both broad and narrow audiences who derive value from user-generated content and the perception of interaction with others." (Carr & Hayes, 2015) For the purposes of this product, we did not include studies specific to online gaming or e-sports. Source: Aichner, T., Grünfelder, M., Maurer, O., & Jegeni, D. (2021). Twenty-Five Years of Social Media: A Review of Social Media Applications and Definitions from 1994 to 2019. Cyberpsychology, Behavior And Social Networking, 24(4), 215-222. https://doi.org/10.1089/ cyber.2020.0134 Source: Carr, C. T., & Hayes, R. A. (2015). Social Media: Defining, Developing, and Divining. Atlantic Journal of Communication, 23:1, 46-65. https://doi.org/10.1080/15456870.2 015.972282

2. Vogels, E., Gelles-Watnick, R. & Massarat, N. (2022). Teens, Social Media and Technology 2022. Pew Research Center: Internet, Science & Tech. United States of America. Retrieved from https://www.pewresearch.org/internet/2022/08/10/teenssocial-media-and-technology-2022/

3. The minimum required age set by social media platforms is informed by the Children's Online Privacy Protection Act that requires social media platforms to collect verifiable parental consent before collecting, storing, and sharing data from children under age 13. **Source:** Federal Trade Commission. (n.d.). Children's Online Privacy Protection Act ("COPPA"). Federal Trade Commission. Retrieved from https://www.ftc.gov/legallibrary/browse/statutes/childrens-online-privacy-protection-act

4. Rideout, V., Peebles, A., Mann, S., & Robb, M. B. (2022). Common Sense Census: Media use by tweens and teens, 2021. San Francisco, CA: Common Sense. Retrieved from https://www. commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf

5. It is important to note that many factors can shape mental health, and a comprehensive approach, including prevention strategies, will be needed to support and protect the mental health of children and adolescents. **Source:** Office of the Surgeon General (OSG). (2021). Protecting Youth Mental Health: The U.S. Surgeon General's Advisory. US Department of Health and Human Services. Retrieved from https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf

6. American Psychological Association. (2023). Health Advisory on Social Media Use in Adolescence. American Psychological Association. Retrieved from https://www.apa.org/topics/socialmedia-internet/health-advisory-adolescent-social-media-use. pdf

7. Beyens, I., Pouwels, J. L., van Driel, I. I., Keijsers, L., & Valkenburg, P. M. (2020). The effect of social media on wellbeing differs from adolescent to adolescent. *Scientific reports*, 10(1), 10763. https://doi.org/10.1038/s41598-020-67727-7

8. Hollis, C., Livingstone, S., & Sonuga-Barke, E. (2020). Editorial: The role of digital technology in children and young people's mental health - a triple-edged sword?. *Journal of child psychology and psychiatry, and allied disciplines*, 61(8), 837–841. https://doi.org/10.1111/jcpp.13302

9. Uhls, Y. T., Ellison, N. B., & Subrahmanyam, K. (2017). Benefits and Costs of Social Media in Adolescence. *Pediatrics*, 140(Suppl 2), S67–S70. https://doi.org/10.1542/peds.2016-1758E

10. Fuhrmann, D., Knoll, L. J., & Blakemore, S. J. (2015). Adolescence as a Sensitive Period of Brain Development. *Trends in cognitive sciences*, 19(10), 558–566. https://doi.org/10.1016/j. tics.2015.07.008

11. Blakemore, S. J., & Mills, K. L. (2014). Is adolescence a sensitive period for sociocultural processing?. *Annual review of psychology*, 65, 187–207. https://doi.org/10.1146/annurev-psych-010213-115202

12. Romer D. (2010). Adolescent risk taking, impulsivity, and brain development: implications for prevention. *Developmental psychobiology*, 52(3), 263–276. https://doi.org/10.1002/dev.20442

13. National Academies of Sciences, Engineering, and Medicine (NASEM). (2019). The Promise of Adolescence: Realizing Opportunity for All Youth. Washington, DC: The National Academies Press. https://doi.org/10.17226/25388

14. Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustün, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current opinion in psychiatry*, 20(4), 359–364. https://doi.org/10.1097/YCO.0b013e32816ebc8c

15. Maza, M. T., Fox, K. A., Kwon, S. J., Flannery, J. E., Lindquist, K. A., Prinstein, M. J., & Telzer, E. H. (2023). Association of Habitual Checking Behaviors on Social Media With Longitudinal Functional Brain Development. *JAMA pediatrics*, 177(2), 160–167. https://doi.org/10.1001/jamapediatrics.2022.4924

16. Crone, E. A., & Konijn, E. A. (2018). Media use and brain development during adolescence. *Nature communications*, 9(1), 588. https://doi.org/10.1038/s41467-018-03126-x

17. Orben, A., Przybylski, A. K., Blakemore, S. J., & Kievit, R. A. (2022). Windows of developmental sensitivity to social media. *Nature communications*, 13(1), 1649. https://doi.org/10.1038/s41467-022-29296-3

18. Anderson, M. & Jiang, J. (2018). Teens' Social Media Habits and Experiences. Pew Research Center: Internet, Science & Tech. United States of America. Retrieved from https://www. pewresearch.org/internet/2018/11/28/teens-social-mediahabits-and-experiences/

19. Seabrook, E. M., Kern, M. L., & Rickard, N. S. (2016). Social Networking Sites, Depression, and Anxiety: A Systematic Review. *JMIR mental health*, 3(4), e50. https://doi.org/10.2196/mental.5842

20. According to the National Institutes of Health, sexual and gender minority (SGM) populations include, but are not limited to, individuals who identify as lesbian, gay, bisexual, asexual, transgender, Two-Spirit, queer, and/or intersex. Individuals with same-sex or -gender attractions or behaviors and those with a difference in sex development are also included. These populations also encompass those who do not self-identify with one of these terms but whose sexual orientation, gender identity or expression, or reproductive development is characterized by non-binary constructs of sexual orientation, gender, and/or sex. **Source:** U.S. Department of Health and Human Services. National Institutes of Health. (2022, December 8). Sex, gender, and Sexuality. National Institutes of Health. https://www.nih.gov/nih-style-guide/sex-gender-sexuality

21. Charmaraman, L., Hernandez, J., & Hodes, R. (2022). Marginalized and Understudied Populations Using Digital Media. In J. Nesi, E. Telzer, & M. Prinstein (Eds.), Handbook of Adolescent Digital Media Use and Mental Health (pp. 188-214). Cambridge: Cambridge University Press. https://doi. org/10.1017/9781108976237.011

22. Ybarra, M. L., Mitchell, K. J., Palmer, N. A., & Reisner, S. L. (2015). Online social support as a buffer against online and offline peer and sexual victimization among U.S. LGBT and non-LGBT youth. *Child abuse & neglect*, 39, 123–136. https://doi.org/10.1016/j.chiabu.2014.08.006

23. Berger, M. N., Taba, M., Marino, J. L., Lim, M. S. C., & Skinner, S. R. (2022). Social Media Use and Health and Well-being of Lesbian, Gay, Bisexual, Transgender, and Queer Youth: Systematic Review. *Journal of medical Internet research*, 24(9), e38449. https://doi.org/10.2196/38449

24. Nesi, J., Mann, S. and Robb, M. B. (2023). Teens and mental health: How girls really feel about social media. San Francisco, CA: Common Sense. Retrieved from https://www. commonsensemedia.org/sites/default/files/research/report/ how-girls-really-feel-about-social-media-researchreport_ final_1.pdf

25. Vogels, E., & Gelles-Watnick, R. (2023). Teens and social media: Key findings from Pew Research Center surveys. Pew Research Center: Internet, Science & Tech. United States of America. Retrieved from https://www.pewresearch.org/short-reads/2023/04/24/teens-and-social-media-key-findings-from-pew-research-center-surveys/

26. Kauer, S. D., Mangan, C., & Sanci, L. (2014). Do online mental health services improve help-seeking for young people? A systematic review. *Journal of medical Internet research*, *16*(3), e66. https://doi.org/10.2196/jmir.3103

27. Rice, S. M., Goodall, J., Hetrick, S. E., Parker, A. G., Gilbertson, T., Amminger, G. P., Davey, C. G., McGorry, P. D., Gleeson, J., & Alvarez-Jimenez, M. (2014). Online and social networking interventions for the treatment of depression in young people: a systematic review. *Journal of medical Internet research*, 16(9), e206. https://doi.org/10.2196/jmir.3304

28. Ridout, B., & Campbell, A. (2018). The Use of Social Networking Sites in Mental Health Interventions for Young People: Systematic Review. *Journal of medical Internet research*, 20(12), e12244. https://doi.org/10.2196/12244

29. Kruzan, K. P., Williams, K. D. A., Meyerhoff, J., Yoo, D. W., O'Dwyer, L. C., De Choudhury, M., & Mohr, D. C. (2022). Social media-based interventions for adolescent and young adult mental health: A scoping review. *Internet interventions*, 30, 100578. https://doi.org/10.1016/j.invent.2022.100578

30. Riehm, K. E., Feder, K. A., Tormohlen, K. N., Crum, R. M., Young, A. S., Green, K. M., Pacek, L. R., La Flair, L. N., & Mojtabai, R. (2019). Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth. *JAMA psychiatry*, 76(12), 1266–1273. https://doi.org/10.1001/ jamapsychiatry.2019.2325

31. Miech, R. A., Johnston, L. D., Bachman, J. G., O'Malley, P. M., Schulenberg, J. E., and Patrick, M. E. (2022). Monitoring the Future: A Continuing Study of American Youth (8th-and 10th-Grade Surveys), 2021. Inter-university Consortium for Political and Social Research [distributor]. https://doi.org/10.3886/ ICPSR38502.v1

32. Braghieri, L., Levy, R., & Makarin, A. (2022). Social Media and Mental Health. *American Economic Review*, 112(11), 3660-3693. https://pubs.aeaweb.org/doi/abs/10.1257/aer.20211218

33. Doucleff, M. (2023, April 25). The Truth About Teens, Social Media and the Mental Health Crisis. NPR. Retrieved May 2, 2023, from https://www.npr.org/sections/healthshots/2023/04/25/1171773181/social-media-teens-mentalhealth

34. Hunt, M. G., Marx, R., Lipson, C., & Young, J. (2018). No more FOMO: Limiting social media decreases loneliness and depression. *Journal of Social and Clinical Psychology*, *37*(10), 751–768. https://doi.org/10.1521/jscp.2018.37.10.751

35. From a mean Beck Depression Inventory (BDI) of 23 at baseline to a mean BDI of 14.5 at Week 4.

36. Allcott, H., Braghieri, L., Eichmeyer, S., & Gentzkow, M. (2020). The Welfare Effects of Social Media. *American Economic Review*, 110(3), 629-76. DOI: 10.1257/aer.20190658

37. Abi-Jaoude, E., Naylor, K. T., & Pignatiello, A. (2020). Smartphones, social media use and youth mental health. *Canadian Medical Association journal*, 192(6), E136–E141. https:// doi.org/10.1503/cmaj.190434 **38.** Orben, A., & Przybylski, A. K. (2020). Reply to: Underestimating digital media harm. *Nature human behaviour*, 4(4), 349–351. https://doi.org/10.1038/s41562-020-0840-y

39. Twenge, J. M., Haidt, J., Lozano, J., & Cummins, K. M. (2022). Specification curve analysis shows that social media use is linked to poor mental health, especially among girls. *Acta psychologica*, 224, 103512. https://doi.org/10.1016/j. actpsy.2022.103512

40. Hamm, M. P., Newton, A. S., Chisholm, A., Shulhan, J., Milne, A., Sundar, P., Ennis, H., Scott, S. D., & Hartling, L. (2015). Prevalence and Effect of Cyberbullying on Children and Young People: A Scoping Review of Social Media Studies. *JAMA pediatrics*, 169(8), 770–777. https://doi.org/10.1001/ jamapediatrics.2015.0944

41. Holland, G., & Tiggemann, M. (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body image*, 17, 100–110. https://doi.org/10.1016/j.bodyim.2016.02.008

42. Alonzo, R., Hussain, J., Stranges, S., & Anderson, K. K. (2021). Interplay between social media use, sleep quality, and mental health in youth: A systematic review. *Sleep medicine reviews*, 56, 101414. https://doi.org/10.1016/j.smrv.2020.101414

43. Kelly, Y., Zilanawala, A., Booker, C., & Sacker, A. (2019). Social Media Use and Adolescent Mental Health: Findings From the UK Millennium Cohort Study. *EClinicalMedicine*, 6, 59–68. https://doi.org/10.1016/j.eclinm.2018.12.005

44. Gelles-Watnick, R. (2022). Explicit Content, Time-wasting Are Key Social Media Worries For Parents Of U.S. Teens. Pew Research Center. United States of America. Retrieved from https://www.pewresearch.org/fact-tank/2022/12/15/explicitcontent-time-wasting-are-key-social-media-worries-forparents-of-u-s-teens/

45. Dyer C. (2022). Social media content contributed to teenager's death "in more than a minimal way," says coroner. *BMJ* (Clinical research ed.), 379, o2374. https://doi.org/10.1136/bmj.o2374

46. Carville, O. (2022, November 30). TikTok's Viral Challenges Keep Luring Young Kids to Their Deaths. Bloomberg. Retrieved from https://www.bloomberg.com/news/features/2022-11-30/istiktok-responsible-if-kids-die-doing-dangerous-viral-challenges

47. Sumner, S. A., Ferguson, B., Bason, B., Dink, J., Yard, E., Hertz, M., Hilkert, B., Holland, K., Mercado-Crespo, M., Tang, S., & Jones, C. M. (2021). Association of Online Risk Factors With Subsequent Youth Suicide-Related Behaviors in the US. *JAMA network open*, 4(9), e2125860. https://doi.org/10.1001/ jamanetworkopen.2021.25860

48. Dyson, M. P., Hartling, L., Shulhan, J., Chisholm, A., Milne, A., Sundar, P., Scott, S. D., & Newton, A. S. (2016). A Systematic Review of Social Media Use to Discuss and View Deliberate Self-Harm Acts. *PloS one*, 11(5), e0155813. https://doi.org/10.1371/journal.pone.0155813

49. Lonergan, A. R., Bussey, K., Fardouly, J., Griffiths, S., Murray, S. B., Hay, P., Mond, J., Trompeter, N., & Mitchison, D. (2020). Protect me from my selfie: Examining the association between photo-based social media behaviors and self-reported eating disorders in adolescence. *The International journal of eating disorders*, 53(5), 485–496. https://doi.org/10.1002/eat.23256

50. Meier, E. P., & Gray, J. (2014). Facebook photo activity associated with body image disturbance in adolescent girls. *Cyberpsychology, behavior and social networking*, 17(4), 199–206. https://doi.org/10.1089/cyber.2013.0305

51. Thai, H., Davis, C. G., Mahboob, W., Perry, S., Adams, A., & Goldfield, G. S. (2023). Reducing Social Media Use Improves Appearance and Weight Esteem in Youth With Emotional Distress. *Psychology of Popular Media*. 10.1037/ppm0000460.

52. Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology* of *Popular Media Culture*, 3(4), 206–222. https://doi.org/10.1037/ ppm0000047

53. Nesi, J., & Prinstein, M. J. (2015). Using Social Media for Social Comparison and Feedback-Seeking: Gender and Popularity Moderate Associations with Depressive Symptoms. *Journal of abnormal child psychology*, 43(8), 1427–1438. https:// doi.org/10.1007/s10802-015-0020-0

54. Appel, H., Gerlach, A. L., & Crusius, J. (2016). The Interplay Between Facebook Use, Social Comparison, Envy, And Depression. *Current Opinion in Psychology*, 9, 44–49. https://doi. org/10.1016/j.copsyc.2015.10.006

55. Kleemans, M., Daalmans, S., Carbaat, I., & Anschütz, D. (2018). Picture Perfect: The Direct Effect Of Manipulated Instagram Photos On Body Image In Adolescent Girls. *Media Psychology*, 21(1), 93–110. https://doi.org/10.1080/15213269.2016.1257392

56. Mabe, A. G., Forney, K. J., & Keel, P. K. (2014). Do You "Like" My Photo? Facebook Use Maintains Eating Disorder Risk. *The International journal of eating disorders*, 47(5), 516–523. https:// doi.org/10.1002/eat.22254

57. Bickham, D.S., Hunt, E., Bediou, B., & Rich, M. (2022). Adolescent Media Use: Attitudes, Effects, and Online Experiences. Boston, MA: Boston Children's Hospital Digital Wellness Lab. Retrieved from https://digitalwellnesslab.org/wpcontent/uploads/Pulse-Survey_Adolescent-Attitudes-Effectsand-Experiences.pdf

58. Rideout, V., & Robb, M. B. (2018). Social media, social life: Teens reveal their experiences. San Francisco, CA: Common Sense Media. Retrieved from https://www.commonsensemedia. org/sites/default/files/research/report/2018-social-mediasocial-life-executive-summary-web.pdf

59. Alhajji, M., Bass, S., & Dai, T. (2019). Cyberbullying, Mental Health, and Violence in Adolescents and Associations With Sex and Race: Data From the 2015 Youth Risk Behavior Survey. *Global pediatric health*, 6, 2333794X19868887. https://doi.org/10.1177/2333794X19868887

60. Rice, E., Petering, R., Rhoades, H., Winetrobe, H., Goldbach, J., Plant, A., Montoya, J., & Kordic, T. (2015). Cyberbullying perpetration and victimization among middle-school students. *American journal of public health*, 105(3), e66–e72. https://doi.org/10.2105/AJPH.2014.302393

61. Vogels, E. (2022). Teens and Cyberbullying 2022. Pew Research Center: Internet, Science & Tech. United States of America. Retrieved from https://www.pewresearch.org/ internet/2022/12/15/teens-and-cyberbullying-2022/

62. Wolak, J., Finkelhor, D., Walsh, W., & Treitman, L. (2018). Sextortion of Minors: Characteristics and Dynamics. *The Journal of adolescent health*, 62(1), 72–79. https://doi.org/10.1016/j.jadohealth.2017.08.014

63. Federal Bureau of Investigations. (2022, December 19). FBI and Partners Issue National Public Safety Alert on Financial Sextortion Schemes. FBI. Retrieved from https://www.fbi.gov/news/press-releases/fbi-and-partners-issue-national-public-safety-alert-on-financial-sextortion-schemes

64. U.S. Drug Enforcement Administration. (2021, July 23). DEA Washington warns of deadly counterfeit drugs on social media. DEA. Retrieved from https://www.dea.gov/stories/2021/2021-07/2021-07-23/counterfeit-drugs-social-media

65. Finkelhor, D., Turner, H.A., & Colburn, D. (2023). Which dynamics make online child sexual abuse and cyberstalking more emotionally impactful: Perpetrator identity and images? *Child Abuse & Neglect*, 137, 106020. https://doi.org/10.1016/j. chiabu.2023.106020

66. Finkelhor, D., Turner, H., & Colburn, D. (2022). Prevalence of Online Sexual Offenses Against Children in the US. *JAMA network open*, 5(10), e2234471. https://doi.org/10.1001/jamanetworkopen.2022.34471

67. 5Rights Foundation. (2021). Pathways: How Digital Design Puts Children At Risk. Retrieved from https://5rightsfoundation. com/uploads/Pathways-how-digital-design-puts-children-atrisk.pdf

68. Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction--a review of the psychological literature. *International journal of environmental research and public health*, 8(9), 3528–3552. https://doi.org/10.3390/ijerph8093528

69. Griffiths, M.D. (2018). Adolescent social networking: How do social media operators facilitate habitual use? *Education and Health*, 36(3), 66-69. Retrieved from https://sheu.org.uk/sheux/EH/eh363mdg.pdf

70. Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2018). The associations between problematic Facebook use, psychological distress and well-being among adolescents and young adults: A systematic review and meta-analysis. *Journal of affective disorders*, 226, 274–281. https://doi.org/10.1016/j. ypmed.2020.106270

71. Allcott, H., Gentzkow, M., & Song, L. (2022). Digital Addiction. *American Economic Review*, 112 (7): 2424-63. https://doi.org/10.1257/aer.20210867

72. Andreassen, C. S. (2015). Online Social Network Site

Addiction: A Comprehensive Review. *Current Addiction Reports*, 2, 175–184. https://doi.org/10.1007/s40429-015-0056-9

73. He, Q., Turel, O., & Bechara, A. (2017). Brain anatomy alterations associated with Social Networking Site (SNS) addiction. *Scientific reports*, 7, 45064. https://doi.org/10.1038/srep45064

74. Montag, C., Markowetz, A., Blaszkiewicz, K., Andone, I., Lachmann, B., Sariyska, R., Trendafilov, B., Eibes, M., Kolb, J., Reuter, M., Weber, B., & Markett, S. (2017). Facebook Usage On Smartphones And Gray Matter Volume Of The Nucleus Accumbens. *Behavioural Brain Research*, 329, 221–228. https:// doi.org/10.1016/j.bbr.2017.04.035

75. Shannon, H., Bush, K., Villeneuve, P. J., Hellemans, K. G., & Guimond, S. (2022). Problematic Social Media Use in Adolescents and Young Adults: Systematic Review and Meta-analysis. *JMIR mental health*, 9(4), e33450. https://doi.org/10.2196/33450

76. Boer, M., Stevens, G., Finkenauer, C., & van den Eijnden, R. (2020). Attention deficit hyperactivity disorder-symptoms, social media use intensity, and social media use problems in adolescents: Investigating directionality. *Child Development*, 91(4), e853-e865. https://doi.org/10.1111/cdev.13334

77. Franchina, V., Vanden Abeele, M., van Rooij, A. J., Lo Coco, G., & De Marez, L. (2018). Fear of Missing Out as a Predictor of Problematic Social Media Use and Phubbing Behavior among Flemish Adolescents. *International Journal Of Environmental Research And Public Health*, 15(10), 2319. https://doi.org/10.3390/ijerph15102319

78. Telzer, E. H., Goldenberg, D., Fuligni, A. J., Lieberman, M. D., & Gálvan, A. (2015). Sleep variability in adolescence is associated with altered brain development. *Developmental cognitive neuroscience*, 14, 16–22. https://doi.org/10.1016/j. dcn.2015.05.007

79. Liu, R. T., Steele, S. J., Hamilton, J. L., Do, Q. B. P., Furbish, K., Burke, T. A., Martinez, A. P., & Gerlus, N. (2020). Sleep and suicide: A systematic review and meta-analysis of longitudinal studies. *Clinical psychology review*, 81, 101895. https://doi.org/10.1016/j.cpr.2020.101895

80. Shochat, T., Cohen-Zion, M., & Tzischinsky, O. (2014). Functional consequences of inadequate sleep in adolescents: a systematic review. *Sleep medicine reviews*, 18(1), 75–87. https://doi.org/10.1016/j.smrv.2013.03.005

81. Dekkers, T. J., & van Hoorn, J. (2022). Understanding Problematic Social Media Use in Adolescents with Attention-Deficit/Hyperactivity Disorder (ADHD): A Narrative Review and Clinical Recommendations. *Brain Sciences*, 12(12), 1625. https:// doi.org/10.3390/brainsci12121625

82. Ra, C. K., Cho, J., Stone, M. D., De La Cerda, J., Goldenson, N. I., Moroney, E., Tung, I., Lee, S. S., & Leventhal, A. M. (2018). Association of Digital Media Use With Subsequent Symptoms of Attention-Deficit/Hyperactivity Disorder Among Adolescents. *JAMA*, 320(3), 255–263. https://doi.org/10.1001/jama.2018.8931

83. Przybylski A. K., Murayama K., DeHaan C.R., & Gladwell V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*; 29:1841–1848.

84. Fioravanti, G., Casale, S., Benucci, S.B., Prostamo, A., Falone, A., Ricca, V., & Rotella, F. (2021). Fear of missing out and social networking sites use and abuse: A meta-analysis. *Computers in Human Behavior*, 122, 106839. https://doi.org/10.1016/j. chb.2021.106839

85. Odgers, C. L., & Jensen, M. R. (2020). Annual Research Review: Adolescent mental health in the digital age: facts, fears, and future directions. *Journal of Child Psychology and Psychiatry*, and Allied Disciplines, 61(3), 336–348. https://doi.org/10.1111/ jcpp.13190

86. Office of the Surgeon General (OSG). (2021). Protecting Youth Mental Health: The U.S. Surgeon General's Advisory. U.S. Department of Health and Human Services. Retrieved from https://www.hhs.gov/sites/default/files/surgeon-general-youthmental-health-advisory.pdf

87. Odgers, C.L., Allen, N.B., Pfeifer, J.H., Dahl, R.E., Nesi, J., Schueller, S.M., Williams, J. L., & the National Scientific Council on Adolescence (2022). Engaging, safe, and evidencebased: What science tells us about how to promote positive development and decrease risk in online spaces, Council Report No 2. doi: 10.31234/osf.io/rvn8q

88. Clark, S. J., Schultz, S. L., Gebremariam, A., Singer, D. C., & Freed, G. L. (2021). Sharing too soon? Children and social media apps. C.S. Mott Children's Hospital National Poll on Children's Health, University of Michigan, 39(4). Retrieved from https://mottpoll.org/sites/default/files/documents/101821_ SocialMedia.pdf

89. Auxier, B., Anderson, M., Perrin, A., & Turner, E. (2020). Parenting Children in the Age of Screens. Pew Research Center: Internet, Science & Tech. Retrieved from https://www. pewresearch.org/internet/2020/07/28/parenting-children-inthe-age-of-screens/

90. U.S. Consumer Product Safety Commission. (n.d.). Toy Safety Business Guidance & Small Entity Compliance Guide. U.S. Consumer Product Safety Commission. Retrieved from https:// www.cpsc.gov/Business--Manufacturing/Business-Education/ Toy-Safety-Business-Guidance-and-Small-Entity-Compliance-Guide

91. Unites States Department of Transportation. (n.d.). National Highway Traffic Safety Administration. Retrieved from https://www.nhtsa.gov/

92. U.S. Food and Drug Administration. (n.d.). Center for Drug Evaluation and Research. U.S. Food and Drug Administration. Retrieved from https://www.fda.gov/drugs

93. Australian Government, eSafety Commissioner. (nd). Safety by Design. Retrieved from https://www.esafety.gov.au/industry/ safety-by-design

94. Information Commissioner's Office. (nd). Introduction To The Age Appropriate Design Code. Retrieved from https://ico.org.uk/for-organisations/childrens-code-hub/

95. Perrino, J. (2022, July 27). Using "Safety By Design" To Address Online Harms. Brookings Institute. https://www. brookings.edu/techstream/using-safety-by-design-to-addressonline-harms/ **96.** Lenhart, A., & Owens, K. (2021). The Unseen Teen: The Challenges of Building Healthy Tech for Young People. Data & Society. Retrieved from https://datasociety.net/library/theunseen-teen/

97. American Academy of Pediatrics (AAP). (2018, October 8). Kids & Tech: Tips for parents in the Digital age. HealthyChildren. org. Retrieved from https://www.healthychildren.org/English/ family-life/Media/Pages/Tips-for-Parents-Digital-Age.aspx

98. Morgan Stanley Alliance For Children's Mental Health & Child Mind Institute. (2022, May). How to set limits on screen time and internet use. Retrieved from https://www.morganstanley.com/assets/pdfs/setting-limits-on-screen-time-tip-sheet.pdf

99. Ehmke, R. (2023, March 13). How using social media affects teenagers. Child Mind Institute. Retrieved from https:// childmind.org/article/how-using-social-media-affects-teenagers/

100. American Psychological Association. (2019, December 12). Digital Guidelines: Promoting healthy technology use for children. American Psychological Association. Retrieved from https://www.apa.org/topics/social-media-internet/technologyuse-children

101. US Department of Health and Human Services, Assistant Secretary for Public Affairs (ASPA). (2021, November 10). Prevent cyberbullying. StopBullying.gov. Retrieved from https:// www.stopbullying.gov/cyberbullying/prevention https://www. stopbullying.gov/cyberbullying/how-to-report

102. National Academies of Sciences, Engineering, and Medicine (NASEM). (n.d.). Assessment of the Impact of Social Media on the Health and Wellbeing of Adolescents and Children. Retrieved from https://www.nationalacademies.org/our-work/ assessment-of-the-impact-of-social-media-on-the-health-andwellbeing-of-adolescents-and-children

103. American Academy of Pediatrics. (2023, February 7). Center of Excellence on Social Media and Youth Mental Health. Retrieved from https://www.aap.org/en/patient-care/mediaand-children/center-of-excellence-on-social-media-andyouth-mental-health/#:~:text=What%20We%20Do,protect%20 youth%20mental%20health%20online

104. American Academy of Pediatrics. (2017). *Bright Futures Guidelines for Health Supervision of Infants, Children, and Adolescents* (4th ed., pp. 229-234). American Academy of Pediatrics. https://downloads.aap.org/AAP/PDF/Bright%20 Futures/BF4_HealthySocialMedia.pdf

Unredacted complaint alleges Meta knew of 'huge volume' of child sexual harassment on its platforms THU, JAN 18 2024 by Eamon Javers

https://www.cnbc.com/2024/01/18/ag-suit-alleges-meta-estimated-100k-kids-per-day-sexuallyharassed-on-facebook-instagram.html#:~:text=Unredacted%20complaint%20alleges,34%20PM%20EST

KEY POINTS

- A new legal filing alleges a 2021 Meta internal estimate found as many as 100,000 children every day received sexual harassment on Facebook and Instagram.
- The filing is part of a complaint by the attorney general of New Mexico in an ongoing lawsuit against Meta over the company's steps to protect children online.
- "The complaint mischaracterizes our work using selective quotes and cherry-picked documents," a Meta spokesperson said.

WASHINGTON — A new legal filing about child exploitation on Meta's Facebook and Instagram apps alleges a 2021 internal company estimate found as many as 100,000 children every day received sexual harassment, such as pictures of adult genitalia, on the platforms.

This was revealed in newly unredacted portions of a complaint from the attorney general of New Mexico in an ongoing lawsuit against the social media giant over the company's steps to protect children online as the platforms exploded in popularity with young people.

Also included in the complaint is a description of a 2020 Meta internal company chat, in which one employee asked a colleague: "What specifically are we doing for child grooming (something I just heard about that is happening a lot on TikTok)?"

"Somewhere between zero and negligible," the colleague responded. "Child safety is an explicit non-goal this half."

That same year, Meta executives scrambled to respond to a complaint from an executive at Apple, whose 12-year-old child was solicited on Facebook, according to the newly unredacted filing.

"This is the kind of thing that pisses Apple off to the extent of threatening to remove us from the App store," a Meta employee told his colleagues. The same employee also asked when, "we'll stop adults from messaging minors on (Instagram) Direct."

A Meta spokesperson said the company has fixed many of the problems identified in the complaint. In one month alone, the company said, it disabled more than a half million accounts for violating child safety policies.

"We want teens to have safe, age-appropriate experiences online, and we have over 30 tools to support them and their parents. We've spent a decade working on these issues and hiring people who have dedicated their careers to keeping young people safe and supported online. The complaint mischaracterizes our work using selective quotes and cherry-picked documents," the company said. The lawsuit alleges that Facebook and Instagram failed to protect underage users from predators online, and that Meta employees urged the company to make safety changes that the company did not implement.

The suit, filed Dec. 5, alleges that the company refused to make the recommended changes because it placed a high priority on increased social media engagement and advertising growth than on child safety. Meta founder and CEO Mark Zuckerberg is named as a defendant.

Mark Zuckerberg told the world in October 2021 that he was rebranding Facebook to Meta as the company pushes toward the metaverse.

Mark Zuckerberg told the world in October 2021 that he was rebranding Facebook to Meta as the company pushes toward the metaverse.

"For years, Meta employees tried to sound the alarm about how decisions made by Meta executives subjected children to dangerous solicitations and sexual exploitation," New Mexico Attorney General Raul Torrez said Thursday.

"Meta executives, including Mr. Zuckerberg, consistently made decisions that put growth ahead of children's safety. While the company continues to downplay the illegal and harmful activity children are exposed to on its platforms, Meta's internal data and presentations show the problem is severe and pervasive," said Torrez.

Meta has long faced criticism surrounding its handling of problematic content targeting younger users. In 2021, whistleblower Frances Haugen leaked internal documents to the Wall Street Journal showing that the company knew of the harm caused to teenage girls by toxic content on Instagram, but did nothing to fix the problem.

Haugen later testified before a Senate panel, where she faced questions from outraged lawmakers who were concerned that the company was putting profits over the safety of users.

2023

Constant Companion:

A Week in the Life of a Young Person's **Smartphone Use**

common sense[®]



C.S. MOTT CHILDREN'S HOSPITAL

Constant Companion:

A Week in the Life of a Young Person's Smartphone Use COMMON SENSE IS GRATEFUL FOR THE GENEROUS SUPPORT AND UNDERWRITING THAT FUNDED THIS RESEARCH REPORT

Bezos Family Foundation

Carnegie Corporation of New York

Jennifer Caldwell and John H.N. Fisher

Margaret and Will Hearst

A Letter from Our Founder

Smartphones have become a constant companion in our teens' lives. From connection with family and friends to entertainment and background noise, young people rely on their smartphones for different types of mental health support, relaxation, and distraction—at home and at school, and during the day and night.

This year, Common Sense has focused our research efforts on hearing directly from young people about both the role and the impact of media and technology in their lives. This report fills a gap in our understanding of how teens actually use their smartphones, combining data from kids' phones themselves with feedback from our Youth Advisory Council. And they told us that the draw of their smartphone is both complicated and powerful. Here's what else we learned from this report:

- Teens are fielding a barrage of notifications from the apps on their phones. On a typical day, participants received a median of 237 notifications. Of those, about a quarter arrived during the school day, and 5% at night.
- School phone use is common, and policies are inconsistent. During school hours almost all of the participants used their phones at least once, for a median of 43 minutes. But they also reported that policies about phone use in schools vary—sometimes even from classroom to classroom—and aren't always enforced.
- Smartphones both help and hurt sleep. Over half of participants used their phones on school nights, often to listen to music to wind down or get to sleep. But sometimes their days are so busy that they only get to relax with their phone at bedtime, and that pushes sleep later.

The good news is, many young people reported they have grown savvier about their phone's attempts to draw them in, and they're taking steps to protect their digital wellbeing, like setting time limits and prioritizing certain types of notifications. But the business model of these apps and devices hinges upon young people picking up their phones and engaging with them as much as possible, and it's clear that teens are struggling to set boundaries.

Research like this helps shed light on what young people are really doing on their phones, and allows families, educators, and leaders to better understand where and when to provide support. But the industry can take steps to recognize that young people need to be able to use their phones for all of their important benefits but without the challenges that negative content, persuasive design, and aggressive business models pose to digital well-being.

At Common Sense, we will continue to provide parents, caregivers, educators, industry leaders, and policymakers with the tools, resources, research, and information they need to help kids build healthier relationships with the technology in their lives. And it's our hope that this research allows for continued focus on youth voices in our mission to make the digital world work better for kids everywhere.

Jim Steyer



James P. Steyer, Founder and CEO

Credits

Authors:	Jenny S. Radesky, M.D., Department of Pediatrics, University of Michigan Medical School Heidi M. Weeks, Ph.D., Department of Nutritional Sciences, University of Michigan School of Public Health Alexandria Schaller, B.A., Department of Pediatrics, University of Michigan Medical School Michael B. Robb, Ph.D., Former Head of Research, Common Sense Media Supreet Mann, Ph.D., Director of Research, Common Sense Media Amanda Lenhart, M.A., Head of Research, Common Sense Media
Copy editors:	Christopher Dare and Jennifer Robb
Designers:	Emely Garcia and Chris Arth
Acknowledgments:	This research was supported by Common Sense Media. We thank Candice Odgers for consultative assistance with survey measures. We also thank Andy Chen for assistance collecting app store data.

Suggested citation: Radesky, J., Weeks, H.M., Schaller, A., Robb, M., Mann, S., and Lenhart, A. (2023). Constant Companion: A Week in the Life of a Young Person's Smartphone Use. San Francisco, CA: Common Sense.

Table of Contents

Introduction	• • • •	•••	•••	•••	•••	••	•••	•••	•••	• •	•••	•	••	••	•	•••	••	•	•••	•••	•	. 1
Key Findings			•••	•••	•••	••	•••	•••		• •	• • •	•	•••	•••	•	••	•••	•			•	. 3
Methodology	••••	•••	•••	•••	•••	••	••	•••	•••	• •	•••	••	••	••	•	•••	••	•		•••	•	11
Main Findings	••••	•••	•••	•••	•••	••	•••	•••		• •	•••	•	•••	•••	•	•••	•••	•	•••		•	14
Discussion	••••	•••	•••	•••	•••	••	•••	•••		• •	•••	•	•••	••	•	•••	•••	•	•••	••	•	50
References	••••	•••	•••	•••	•••	••	•••	•••		• •	•••	•	•••	•••	•	•••	•••	•	•••		•	52
Supplemental	Table	es	•••	•••	•••	•••	•••	•••	•••	• •	•••	•	••	•••	•	••		•	•••		•	54

Introduction

Smartphones entered the lives of children and adolescents in 2007. Compared to earlier devices (flip phones), smartphones allowed more than just texting and taking photos. Young people could now browse the internet, choose from thousands of mobile applications ("apps") and games, and connect immediately with their communities through social platforms—from anywhere.

As internet speeds and computing power increased exponentially over the past 15 years, smartphones have become even more powerful and versatile, allowing livestreaming, multiplayer gaming, and creation and distribution of content. Over a relatively short period of time, these handheld computers have become a disruptive force in the lives of young people, in positive and negative ways that adults who grew up with landlines may not fully grasp.

Getting a smartphone is now a rite of passage for most children and adolescents in the United States. According to Common Sense Research, 43% of tweens (age 8 to 12) and 88% to 95% of teens (age 13 to 18) have their own smartphone (Rideout et al., 2022; Pew 2022). About half of U.S. children get their first smartphone by age 11 (Rideout et al., 2022). Young people describe a range of supportive and stressful experiences with their smartphones—some wish they hadn't gotten one so early, while also describing it as an appendage that they cannot live without (Moreno et al., 2019). The decision of when to get a smartphone, and negotiations about rules and boundaries around smartphone use, are frequent sources of parental stress and family arguments (Mathes et al., 2021; Francis et al., 2021; Hiniker, Schoenebeck, & Kientz, 2016).

Several factors contribute to young people's attachment to their phones. First, it is developmentally appropriate for adolescents to seek connection and feedback from their friends and communities, and to want to do so on a frequent basis. Children and adolescents have developmentally adaptive curiosity about information, culture, entertainment, and stories that help them make sense of their world. However, the design and marketing choices made by technology companies to meet their business objectives also make it challenging for young users to separate from their smartphones. More time spent on mobile apps translates to more advertising revenue and in-app purchases, so many apps contain persuasive design features to encourage prolonged engagement (Radesky et al., 2022; 5 Rights Foundation, 2021). These design features include encouragement of content creation (so there is always more content to recommend to users), reduction of friction (e.g., the swipe-up movement that allows a user to easily move on to another video), time pressure (e.g., notifications urging users to watch a livestream before it stops), quantified reinforcers (e.g., likes, shares, virtual currency), or algorithmic recommendations that analyze a user's digital behavior to predict what they might click on next.

Underlying these design features are marketing incentives to keep young people on their phones—and ideally win their brand alliance. Smartphones are an unprecedented marketing vehicle because they are taken everywhere and provide insight into users' daily behavior, preferences, and social networks. The data traces recorded by smartphones (such as location, purchases, likes, and shares) allow businesses to create user profiles, which can then be sold or used to earn revenue through targeted advertising.

Considering the competing interests of 1) a business model that prioritizes engagement and 2) a developing adolescent human user with various passions, drives, and obligations, it is not surprising that both young people and their parents complain of feeling like they spend more time on their phones than they intend (Pew 2022; James & Weinstein, 2022).

Smartphones are nearly ubiquitous in the life of U.S. adolescents, but research on how they are used has been elusive. This research typically relies on self-reporting of daily usage habits, momentary reports (e.g., pinging participants throughout their day to assess moment-to-moment changes in media use), or asking young users what they experience through their phones (e.g., social support or bullying; toxic or inspirational content). However, if we want to interrogate the role of smartphones—and all of their complex uses in the daily lives of young people, from communication to entertainment, creativity, marketing, and productivity—then we need research methods that *measure the behavior of phones*. This is possible through the harnessing of data that is already collected by technology companies and marketing firms to monitor smartphone users, but that is not *typically* shared with researchers on an individual-user basis.

For this study, we used software to collect data from the smartphones of a diverse sample of about 200 11- to 17-yearolds. We then interpreted this data with assistance from an advisory council of young people to understand the nuanced relationships that young people develop with their smartphones.

Our research aimed to address the following questions:

- How much time are preadolescents and adolescents spending on their smartphones?
- Which types of apps do they use most frequently and for the longest periods of time, and why?
- Are they accessing apps intended for older audiences?
- How many notifications are they receiving per day, and from which apps?
- How much smartphone use occurs during school hours, and why?
- How much smartphone use occurs at night, and why?
- How much tension or frustration are preadolescents and adolescents experiencing about their smartphones, and how do they manage this?
- Are there new insights about youth experiences and practices with smartphones that could lead to better design to improve young people's well-being?

To that end, we enrolled 203 11- to 17-year-olds in the United States to let us track their smartphone use for one week by installing Chronicle, a study app (Radesky et al., 2020). This app runs unobtrusively in the background and provides continuous data about which apps were used and when, how many pickups and notifications occurred, and how much smartphones were used during the school day and overnight hours. The study was conducted with Android phone users only, because Apple device tracking does not share with the research community the names of specific non-Apple apps that young people commonly use (e.g., social media apps, mobile games).

After analyzing results, we reviewed them with 15 members of the 2023 Common Sense Youth Advisory Council, a group of 14- to 18-year-olds of various races/ethnicities and genders who live in communities across the United States. These youth advisors worked with Common Sense from January to May 2023, but their phones were *not* tracked as part of the study. Through these conversations, we gained insights into the push and pull that adolescents feel with their phones, with the ultimate goal of imagining how smartphones could be designed to support the agency of younger users.

Along with our main findings, this report includes relevant and actionable takeaways for parents and policymakers, as well as discussion prompts for talking with kids about their sometimes complicated relationships with smartphones.

Key Findings

The key findings in this report combine granular data about young people's smartphone use with teens' own interpretation of the role that these devices play in their lives. This unique perspective gives us a glimpse into teens' relationships with their devices, including the attraction that smartphones and apps hold for teens, the corresponding pressures, and the strategies they use (whether barriers, rules, or friction) to manage smartphone use in their day-to-day experiences.

1. The smartphone is a constant companion, both providing background buzz and encouraging regular pickups over the more than four hours of teen smartphone use on an average day.

Smartphones are integrated into young people's lives in ways that help them connect with friends, give their brain a rest, or help them laugh and calm down during their busy days. On a typical day, the participants in our study used their smartphones for a median of almost four and a half hours. However, simply showing average daily smartphone duration across our sample doesn't tell the whole story. Some participants used their phones for only a few minutes per day, while others averaged over 16 hours a day (Figure 1).

Adolescents' smartphone use doesn't always match adults' narrative of "teens always staring at their screens." In addition to more active use, some teens in our focus groups talked about how they also use their smartphones to provide a background "buzz" by playing movies, videos, or music while they do homework or laundry.

And for most of the teens in our sample, their smartphones were close at hand and picked up and checked frequently throughout the day—a median of 51 times per day, ranging from two to 498 times per day. Younger participants (11- to 12-year-olds) tended to pick up their phones less frequently each day, while adolescents (age 13 and older) were more likely to check their phone over 100 times per day (Figure 2). Teens in our focus groups told us that younger smartphone users usually have more rules or restrictions placed on their use, while older teens are given more independence as they learn the appropriate time and place to use their phone. Younger teens may be less likely to have peers with smartphones, and fewer friends to contact.

FIGURE 1. Distribution of average daily duration of smartphone use

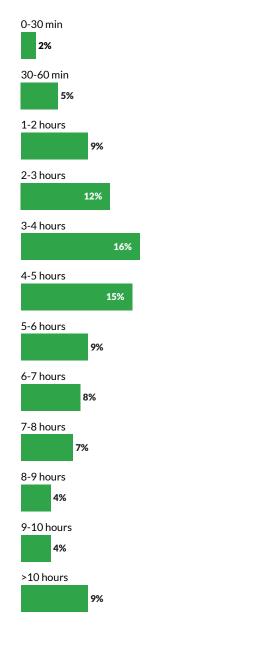
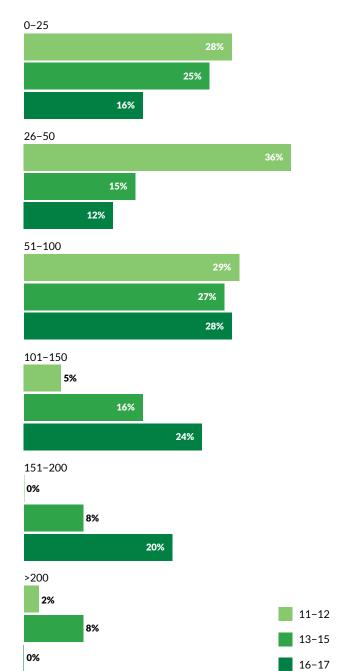


FIGURE 2. Average daily smartphone pickups, by participant age



2. Phone use during school hours is nearly universal but varies widely, reflecting a patchwork of different school policies.

Smartphone use at schools is fairly widespread, and it varies based on school rules, teacher and staff enforcement, and student compliance. During school hours (Monday through Friday, 8 a.m. to 3 p.m., excluding holidays), 97% of participants used their phones, for a median of 43 minutes (ranging from less than one minute to six and a half hours). The median number of pickups was 13 per school day, ranging from less than one to 229. The app categories that took up the highest proportion of time during school hours were social media (32% of smartphone use during school hours), gaming (17%), and YouTube (26%), among participants who used those app categories (Figure 3).

Youth advisors told us that schools have a wide variety of policies, and variable enforcement within those policies, which students may or may not follow:

For my school, we do have a phone policy and we're not technically allowed to have it out during class, but a lot of people do in spite of that. And definitely, I think if you track kids at my school, their phone usage, you would definitely see them checking their phones, and then checking Snapchat during class. —10th grader

It's kind of up to teacher discretion. So at the beginning of the year, they said it's not allowed, but it's really up to each teacher whether they allow it in the room or not. A lot of them do. -11th grader

FIGURE 3. Median^{*} duration of use of different smartphone app categories during school hours^{**}

Social Media (n=126)

YouTube (n=111)		
Gaming (n=119)		
Browser (n=150)		
Messaging (n=146)		
Streaming Video (n=30)		
Art and Photos (n=133)		
Music and Audio (n=81)		
Reading (n=23)		
Calls (n=132)		
Shopping (n=37)		
Education (n=51)		
Email (n=69)		
Parent Controls (n=19)		
0	10	2
~	10	2

Average School Day Minutes (Median)

*Median is the value that 50% of the users are under and 50% are over. **Includes only participants who used that category of apps during specified time frame.

3. Notifications are plentiful, with half of our participants receiving 237 or more per day. These interruptions are both delightful and distracting, leading many young users to feel the need to manage what they get notified of, and when.

While phone pickups signify how often a user is engaging with their phone, notifications show us how often a phone tries to engage its user. On a typical day, participants received a median of 237 notifications. Of the notifications delivered to their phone, participants saw or engaged with about a quarter (median 46 per day). Notification frequency varied widely, with maximums of over 4,500 delivered and over 1,200 seen (Figures 4 and 5).

About a quarter (23%) of notifications arrived during school hours, and about 5% during school night hours, suggesting that phones and apps could do a better job of eliminating unnecessary notifications at times of day that are more disruptive to young people. Very few participants received *no notifications* at all during school hours or school night hours.

Because notifications are so numerous and occur day and night, they require management by young users. Our youth advisors described different approaches to managing these interruptions. They said it was essential to filter or block notifications, particularly from "spam" content, favoring notifications of direct messages (DMs) from people.

Snapchat and Discord ranked highest in the number of notifications sent to participants in a typical day, with some participants receiving hundreds of messages from these platforms. But our youth council members noted that they've become savvy to the ways in which some apps try to pull them in with frivolous notifications.

Yeah, for me, I have notifications on for the apps that are messaging apps, but then for the other ones, I don't have notifications on for YouTube or Instagram ... For me, I don't like the notifications that just tell you to go back on the app or just something random like that, like an update or something. I don't really care about those ones. But the ones I do like getting are the ones that are from the messaging apps, like if someone sends me a text, I wanna know what it says. -10th grader

FIGURE 4. Average daily notifications received by smartphones

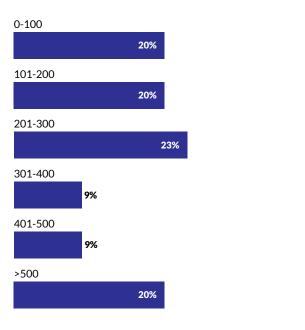
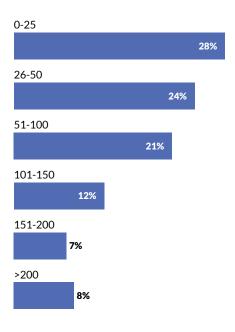


FIGURE 5. Average daily notifications seen by the user



4. TikTok is irresistible, offering bite-size pleasure and low-friction interaction that quickly adapts to the user's interests or mood.

TikTok was one of the most popular and longest-duration apps used in the sample of 11- to 17-year-olds whose phones we tracked. TikTok was used by 50% of our participants, for a median of one hour and 52 minutes per day. Compared to other social media apps, TikTok users were more likely to spend several hours per day using it (upwards of seven hours a day), often during school hours and overnight. In contrast, the longest amount of time spent on Snapchat and Instagram was around three hours per day.

Youth advisors explained to us that TikTok provides an experience that other social or video-sharing platforms don't. TikTok was described as "easy" because videos simply start to play the user doesn't have to make any decisions, so there's no friction. Adolescents we talked to said that the TikTok algorithm "knows" them so well, they can expect that they will likely find something fun to watch. If the user isn't interested in the video that starts to play, the app quickly adapts to something more engaging or that fits their mood or desires. Finally, the videos are short, so they provide small doses of pleasure when young people need a break but don't have a lot of time. Then TikTok, I honestly feel just because it's so easy to feel, 'Oh, I only have 10 minutes. Let me get onto TikTok right now 'cause I don't really have time for anything else.' Because it provides kind of instant entertainment, you don't really have to go in, like on YouTube you have to go in, you have to search for something, you have to find a video that you wanna watch. And on TikTok it's really just there. You can open it kind of whenever you want. And even on a short amount of time, you can still watch at least two or three videos.

—11th grader

I also think the TikTok algorithm is just way better than any of the others. Even Instagram reels and then YouTube Shorts is like the same thing as TikTok, but the algorithm for TikTok is just way more addicting, I feel like [it]... draws you in more, and it also adapts really quickly. So if I skip a few of the same type of video, it'll stop playing that pretty quickly ... I think it just happens naturally. You just scroll without really looking at a certain type of video a few times and then you'll see it adapts and gives you some other type. —11th grader

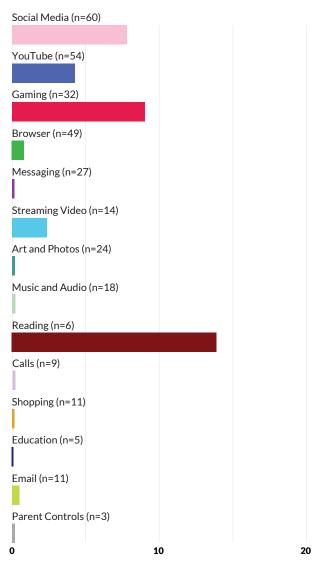
5. Over half of teens used their phones overnight on school nights, primarily for social media, gaming, or YouTube.

We defined school night usage as any use Monday through Friday during the hours of midnight to 5 a.m. (excluding holidays). Over half of participants (59%) used their phones on school nights, with a median of about 20 minutes per night, although use ranged from less than a minute to five hours. Similarly, 67% of participants had pickups on school nights, with a median of one per night, though at least one participant picked up their phone 18 times on a typical school night.

App categories that took up the highest proportion of school night use included YouTube (47% of smartphone usage on school nights), social media (39%), gaming (29%), and reading (18%), among participants who used those app categories. YouTube appeared to be the longest-running app due to several participants running it overnight, likely with music or white noise playing. TikTok was also commonly used in the overnight hours on school nights, but youth advisors reported that TikTok can be overstimulating and lead to difficulties in falling asleep.

I might say that for certain apps, like TikTok, it's really hard to fall asleep once you use it close to when you're gonna go to sleep. I can't use it within an hour, or else I'd struggle ... and then I'll just get back on the app 'cause I'm not sleeping anyway. —10th grader

FIGURE 6. Median* duration of use of different smartphone app categories during school nights**



Average School Night Minutes (Median)

*Median is the value that 50% of the users are under and 50% are over. **Includes only participants who used that category of apps during specified time frame.

6. Smartphones can allow access to age-inappropriate experiences, including social media for kids under 13 and apps with mature/adult-only ratings.

Of 85 participants who were under age 13, 68% used social media apps, and they all used at least one app rated "Teen" or higher. The most popular social platforms among 11- to 12-year-olds were TikTok (used by 47%), Snapchat (31%), Discord (25%), Instagram (16%), Facebook (16%), and Pinterest (14%).

In addition, almost half (45%) of our participants used apps with mature (17+) or adult only (18+) ratings, such as Pornhub, fantasy sports/betting apps (Yahoo Fantasy Sports & Daily, Sleeper Fantasy Football), Telegram, Reddit, Parler, 4chan, casino games, or violent games such as Call of Duty.

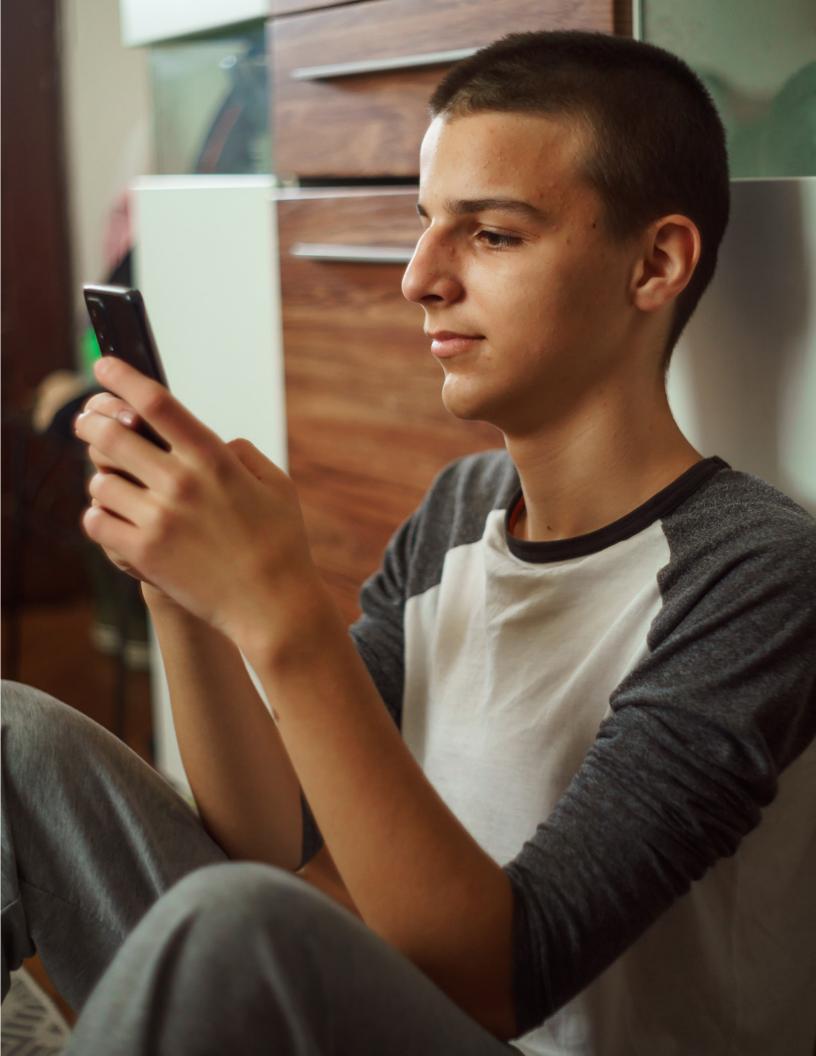
A small number (14) of participants used social media apps with risky features, like being able to connect with strangers for messaging, sending photos, or video chat. Although these riskier social media apps did not take up as much time as more mainstream social media apps, even brief use might lead to problematic interactions with adults.

7. Young users admit they have challenges managing their technology use, but through steps like curation and adding friction, they're working on it.

In addition to tracking their phones, we surveyed our 203 participants to ask whether they had any problems managing their technology use. Over two-thirds of these 11- to 17-yearolds said they "sometimes" or "often" find it difficult to stop using technology, use technology to escape from sorrow or get relief from negative feelings, and miss sleep due to being on their phone or the internet late at night. These impacts may be due to the natural pull that adolescents feel toward their social contacts through their phone, but the engagement-prolonging design of apps and platforms also likely contributes.

Interestingly, our youth advisors described ways of adding friction to their phones to try to use them more intentionally:

For me, even throughout the day, I keep 'do not disturb' on, not even because I wanna not respond to people or anything like that. I like being able to not have my phone buzzing, but being able to click on ... I don't know if I can show you guys, but like here, you see this. Like you have to click on that to see all of the notifications that people have sent or everything that ... All the notifications that you would have gotten if you weren't on 'do not disturb.' For me, I like the extra step because then it's like me having to do more work to be on my phone, and I don't know, I feel like it's a little strategy for me. --11th grader



Methodology

Study design

A diverse sample of 203 U.S. preadolescents (ages 11 to 12) and adolescents (ages 13 to 17) with their own smartphones were recruited by Horowitz Research between August and November 2022 (see Table 1). Parents and caregivers of tweens and teens were contacted with brief information about the study, and if interested, provided informed consent for the child and shared the child's email address. Children were then contacted by email and provided online informed consent before completing a baseline questionnaire and installing the Chronicle app (Methodic, Inc) onto their smartphone. Eligibility criteria included: 1) ages 11 through 17; 2) speaks English or Spanish fluently enough to complete informed consent and surveys; 3) has their own Android (version 6.0 or above) smartphone (e.g., Samsung, Google Pixel, Motorola, etc). iPhone users were not included because data collection access for detailed app usage (i.e., names of specific apps such as YouTube, Snapchat, etc.) was not available for researchers at the time of data collection. The study was approved by the University of Michigan IRB.

Baseline surveys

Parents reported their educational attainment, household income, and their child's race/ethnicity. Child participants completed a brief online survey that included the Technology Impairment Scale (six items, alpha = 0.76, Burnell & Odgers, 2023, adapted from Meerkerk et al., 2009) which assesses compulsive technology use or interference with daily activities (e.g., *Do you feel restless, frustrated, or irritated when you cannot access the internet or check your mobile phone? Do you use technology to escape from your sorrow or get relief from negative feelings?*) on a response scale of 0 = never, 1 = sometimes, 2 = often.

Mobile device tracking

Participants were instructed on how to install and set up the Chronicle app and keep it running on their device for nine complete days. This app was developed with NIH funding, pilot-tested and validated against pen-and-paper logs of smartphone use, and has been used in child and parent populations (Radesky et al., 2020). After nine days, participants were contacted and prompted to uninstall Chronicle and data were exported from the Methodic Chronicle dashboard. Chronicle provides timestamped data about which app is running in the foreground and when pickups and notifications occur, but does not collect information about contacts, message content, which websites are visited, or what content is viewed on platforms. In the informed consent form, participants were provided clear explanations of what data would be collected, how it would be used, and how soon it would be deleted.

Data cleaning and inspection processes were used to identify any missing gaps in smartphone data (e.g., no data for >12 hours) and reduce the duration of apps that sometimes run long but are not true usage (e.g., launcher, screen saver, alarm clock). Some participants' data crossed two time zones, indicating that they traveled during data collection, so we removed the time zones that occurred on fewer days before analyzing time-stamped data. We visually inspected all overnight data to ensure that it showed data characteristics of true usage (i.e., rather than data irregularities that occasionally occur). Chronicle data was then processed to calculate hourly and daily duration, pickups, and notifications, as well as duration and notifications for popular apps and app categories. Notification and pickup data were not available for four participants with older versions of the Android operating system. Data for each participant were also visualized using R.

App categorization

We pulled data from the Google Play store API corresponding to each app package name, including the app category (e.g., gaming, photography, shopping, social) and content rating (e.g., Everyone, Teen, 17+, 18+/Adult). Apps that could not be found on the Play store were manually categorized. We collapsed or expanded some categories to reflect the main types of apps used by 11- to 17-year-olds. For example, "communication" apps were recategorized into more precise categories that reflect different uses, such as calls, email, or chat/messaging. We categorized any app as Social Media if it involved a non-SMS platform that facilitated the exchange of text, video, and photo content with interaction by users (e.g., Snapchat). However, we separated YouTube into its own category (including YouTube, YouTube Kids, and YouTube TV) because of the unique usage patterns YouTube has shown in our prior work (e.g., Radesky et al., 2020).

Data analysis

We conducted descriptive analyses of the average daily duration of use, number of pickups (defined as the number of times the screen turned on due to a user action), and number of notifications. Notification data from the Chronicle app included both notifications delivered to the smartphone (regardless of whether the notification was audible or silenced, as Chronicle does not collect that information) as well as notifications seen by the user (indicating that the notification was interacted with by the user or appeared when the user had the phone screen on). Notifications are delivered by a wide range of apps, from utilities to texting apps, so duration and notification data were also analyzed for particular app categories and individual apps popular within the sample (e.g., TikTok). If a participant did not use their phone on a given day, that day was excluded from analyses, so that the estimates reflected what tweens and teens did during typical days of use. We also segmented estimates of duration and pickups into school hours (Monday through Friday, 8 a.m. to 14:59 p.m., excluding summer/holidays), or school overnight (Monday through Friday, 12 a.m. to 4:59 a.m., excluding summer/holidays) period. We calculated the number/percentage of participants who used app categories, specific common social media apps and video games, and whether participants endorsed positive or negative online experiences or different technology impairment symptoms.

We used Chi Square and Kruskal Wallis bivariate tests to study associations between smartphone usage variables and age range (11 to 12, 13 to 15, and 16 to 17).

Post-analysis youth focus groups

Fifteen members of the 2023 Common Sense Youth Advisory Council participated in four separate online focus groups with the goal of helping the research team interpret and contextualize findings from smartphone data. Parents or guardians of Youth Advisory Council members had provided consent for their children to participate, and members provided verbal consent for audiotaping of Zoom focus groups, which were then transcribed. First and last authors then reviewed themes that arose from these groups and selected quotes for the current report that aided with interpretation of findings from a youth point of view.

TABLE 1. Participant characteristics

Characteristic	N	%					
Age category							
11 to 12	85	41.9%					
13 to 15	93	45.8%					
16 to 17	25	12.3%					
Gender							
Female	89	43.8%					
Male	112	55.2%					
Nonbinary	1	0.5%					
Other/prefer not to answer	1	0.5%					
Race/Ethnicity							
Asian/Native Hawaiian/Pacific Islander	20	9.9%					
Black or African American	39	19.2%					
Hispanic/Latino/a/x/e	44	21.7%					
Some other race	9	4.4%					
White	91	44.8%					
Household annual income category							
<\$50,000	71	35.5%					
\$50,000 to \$99,999	77	38.5%					
\$100,000 or more	52	26.0%					
Respondent parent education							
High school/technical school or less	31	15.4%					
Some college	55	27.2%					
College degree	73	36.1%					
More than a college degree	43	21.3%					
Children in household (including par	ticipant)						
1	67	33.0%					
2	67	33.0%					
3	41	20.2%					
4 or more	28	13.8%					
Respondent parent marital status							
Married or living with a partner	146	71.9%					
Separated or divorced	21	10.3%					
Single	33	16.3%					
Widowed	3	1.5%					



Main Findings

How much time were preadolescents and adolescents spending with their smartphones?

Time spent with smartphones, or any digital media for that matter, can mean a variety of things. One hour of smartphone use might mean an hour laughing with friends, messaging about homework, consuming influencer content on social platforms, responding to harassing comments, or getting lost in a video game. Time spent with a smartphone might find an adolescent user fully engaged, or might reflect apps running in the background while the user multitasks. Therefore, these results regarding smartphone time are the most basic measure of a young person's relationship with their phone; however, they hint at how pervasively a phone occupies a teen's time on a typical day. When averaged across all days their smartphones were tracked, participants used their phones for a median of about four and a half hours per day, but there was a wide range of usage among different teens as shown by the duration categories in Figure 1. At the high end, almost 10% of participants used their smartphones for 10 or more hours per day on average.

Hour-by-hour averages of smartphone use are shown in Figure 7. Across all 203 participants, it is clear that the peak of usage occurs in the afternoon and evening hours. Our youth advisors stated that their smartphone is often by their side after school, while doing homework, or when trying to wind down before bed. Compared to younger participants, more older teens (16- to 17-year-olds) used their phone in the overnight hours.

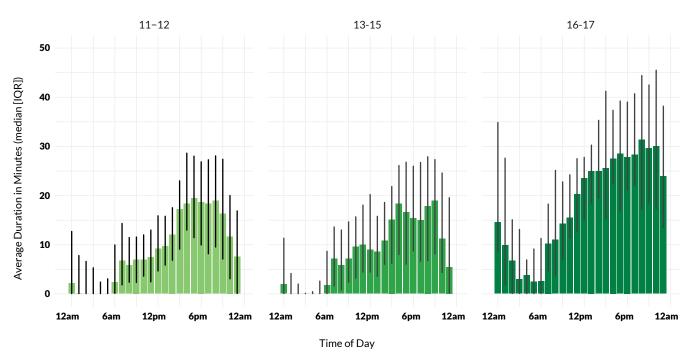


FIGURE 7. Hour-by-hour plots (from midnight to midnight) of average smartphone use* in minutes, split by age group

*Median is the value that 50% of the users are under and 50% are over. IQR is the Interquartile Range, which is the middle 50% of users, with 25% of users under the first value and 25% of users over the second value. Bar shows the median value; line shows IQR.

Participants picked up their phones a median of 51 times per day, ranging from two to 498 times per day. When pickups were graphed hour by hour (Figure 8), it was apparent that teens (age 13 to 17) check their phone regularly through the middle of the day (i.e., during school hours) as well as after school. Younger participants (age 11 to 12) had the lowest frequency of pickups per hour. Our youth advisors thought this was probably due to younger smartphone owners having more phone restrictions and rules placed by their caregivers as well as smaller social networks to keep in touch with.

Time spent on smartphones varies widely.

Youth advisors were also intrigued by the extreme ends of smartphone usage found in our study sample. While most agreed that five hours per day seemed like the amount of time most of their peers spend on their phone, they were surprised that some 11- to 17-year-olds would use phones for only a few minutes per day, or up to 16 hours/day. The daily usage patterns of five participants with the lowest-duration usage, and five with the most pervasive usage, are shown in Figures 9 and 10.

When talking about how much time their phone use takes up in a day, most youth advisors felt that their phone integrates into their daily experience in a non-burdensome way, and provides small amounts of pleasure or social connection while they do other things. When I'm doing work, I like putting my phone to the side, and whenever I give myself breaks, I'll go to my phone and check notifications. --11th grader

However, they also expressed that managing their smartphone takes work, and being without their phone can be freeing:

I feel like we'd all feel a lot better if we were on it less. Like, when I lost my phone ... I didn't have a phone for a week, and that week was amazing. Although I couldn't... I had to use my friends' phones to contact people if I needed to text them. Just not having a phone, it takes this weight off of you. It almost sets you free in a way. --11th grader

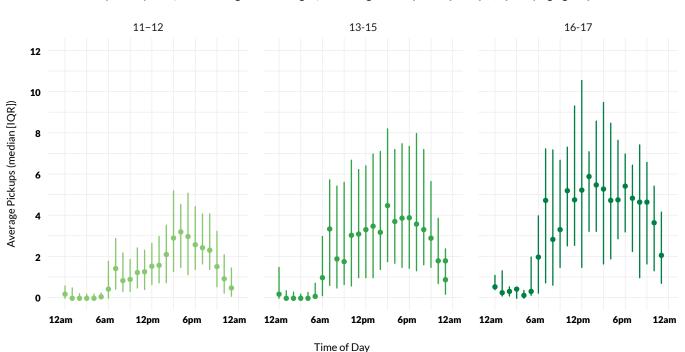


FIGURE 8. Hour-by-hour plots (from midnight to midnight) of average smartphone pickups*, split by age group

^{*}Median is the value that 50% of the users are under and 50% are over. IQR is the Interquartile Range, which is the middle 50% of users, with 25% of users under the first value and 25% of users over the second value. Dot shows the median value; line shows IQR.

The adolescents we talked to also reflected on the fact that, when looking at phone usage visualizations, it seemed that each participant had their own "style" of use—their "thing" that they tended to do more than any other activity on their phone, such as social media (shown as pink shading; Figure 11), mobile games (red shading; Figure 12), or YouTube (royal blue shading; Figure 13).

It seems like everybody has their own thing that they're obsessed with. Like this person has reading, versus another person has some sort of YouTube. And it's different for each person, but everybody seems to be using one thing as a means to stay connected or to spend time. -12th grader

Not all smartphone use is active; some is background noise.

Youth advisors emphasized that it's important not to assume that all usage appearing on participants' day-to-day visualizations was active smartphone usage. They described use of phones as "background noise"—for example, streaming movies or videos or music—while doing other activities. This ambient use of smartphones in the background was described as having a "stimulation" or calming purpose, in contrast to engaged usage, such as texting with a friend, that "you can't just blur out" into the background.

> Like I see kids in school literally just have TikTok on autoplay while they're doing work, like it's sitting on their desk, but they're not even looking at it. It's just like to have some sort of stimulation in their brain, I guess, while they're doing something. -10th grader

I know a lot of people who work with Netflix playing. They'll just have it playing either on their phone or on their computer, or they'll sleep to it. --11th grader

I definitely do that. Like if I'm doing laundry, if I'm doing homework, I'll just have something so that my room isn't quiet. I kind of enjoy that buzz. —12th grader

TAKEAWAYS

For most adolescents, smartphones take up a large proportion of their waking hours. Whether this feels like time well spent depends upon what they're experiencing, what the smartphone is augmenting vs. interrupting, and the other positive activities the person had access to that day.

It's important to remember that smartphones are going to be in both the background and the foreground of kids' minds.

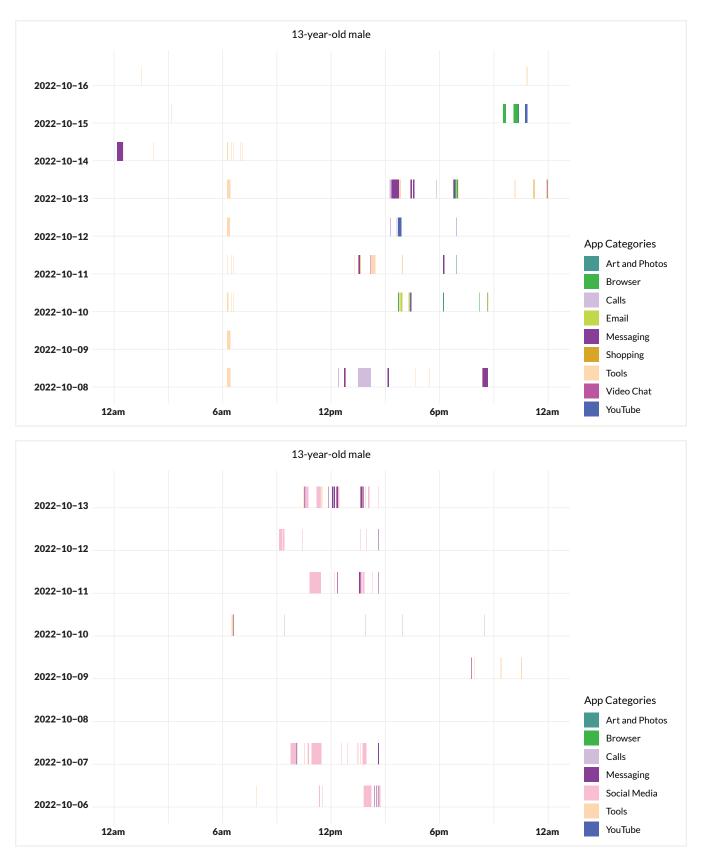
Young people's phone use patterns vary significantly from each other, and the unique way that smartphones interweave into a young person's day feels personal. Many kids have a signature or pattern to their phone use, their main "thing" that they love doing (or feel obsessed with) on their phone, so it's worth helping them reflect on how their particular personality influences their relationship with their phone.

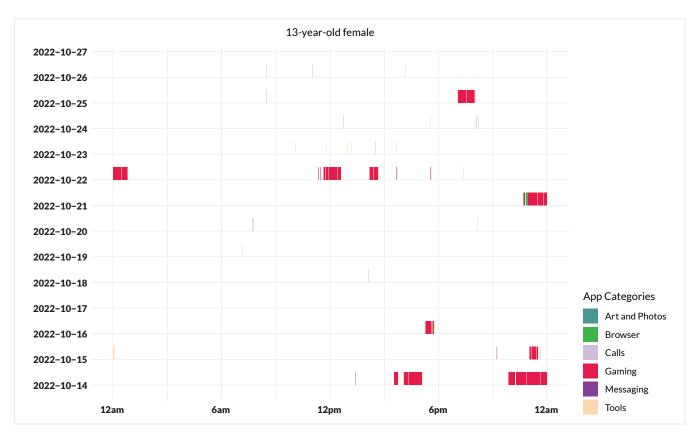
TALKING POINTS

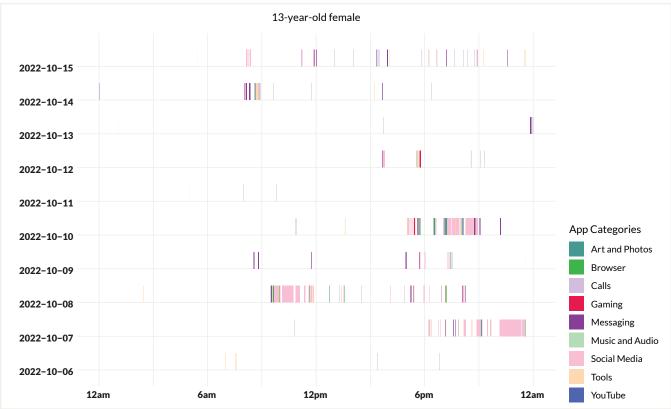
Adults can ask:

- What is your favorite app? Do you feel stressed or excited by it? Or both?
- Does it feel like a job or "work" to stay up to date on everything?
- What does it feel like when your phone is commanding your attention vs. just being in the background of your mind?
- What does it feel like when you don't have your phone or the room is too quiet? Are you worried about missing out on anything?
- Have you ever noticed what you're thinking about if there's no background noise on?
- Do you ever get a sense that you've been on your phone too long? What are the signs for you?

FIGURE 9. Participants with light smartphone usage







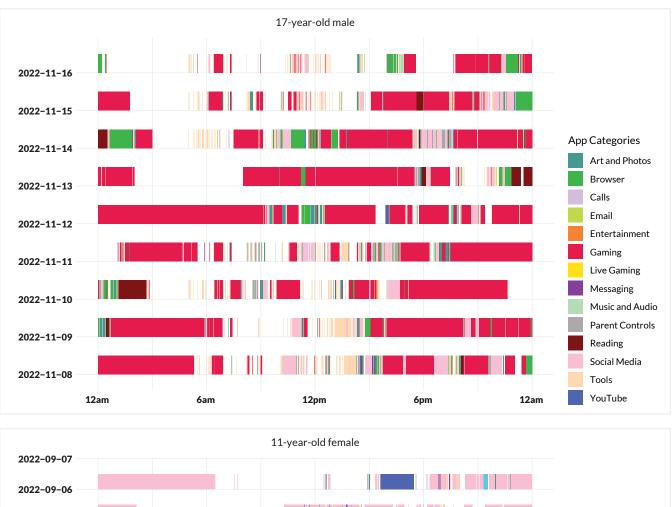
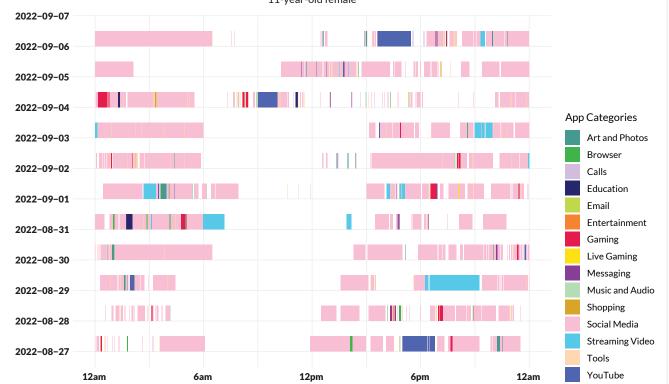
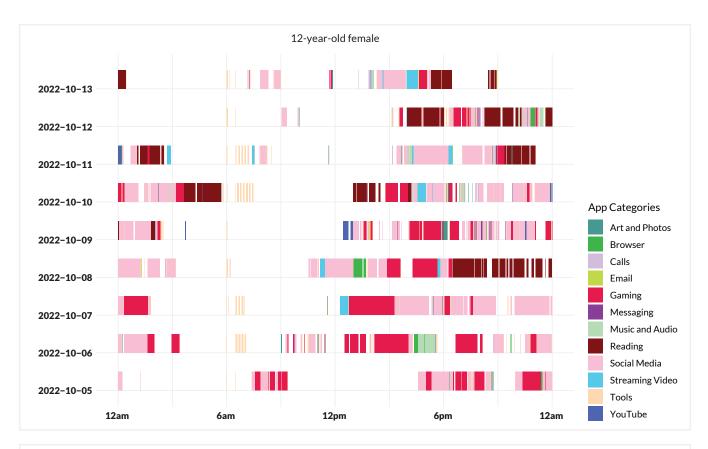
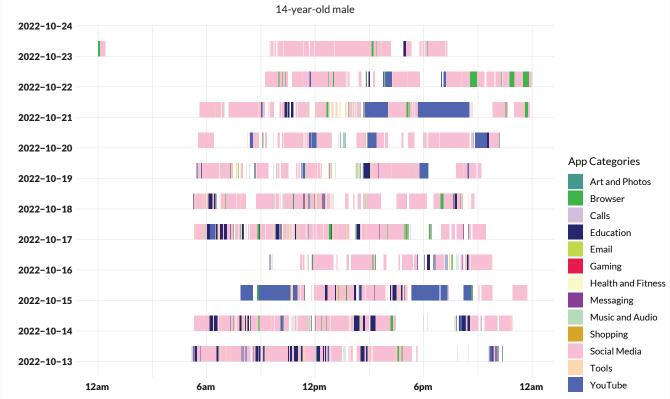


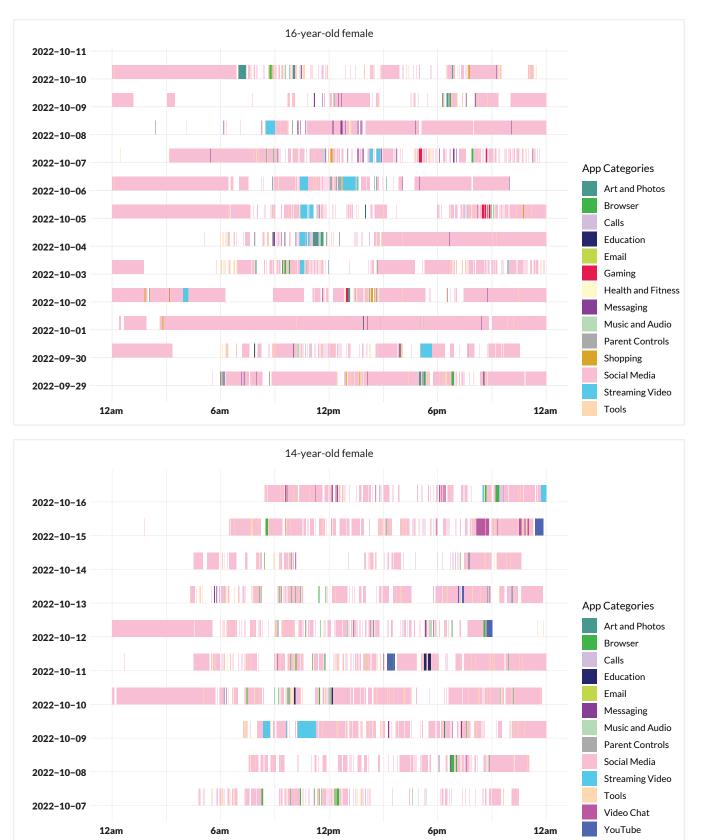
FIGURE 10: Participants with longer daily duration of smartphone use

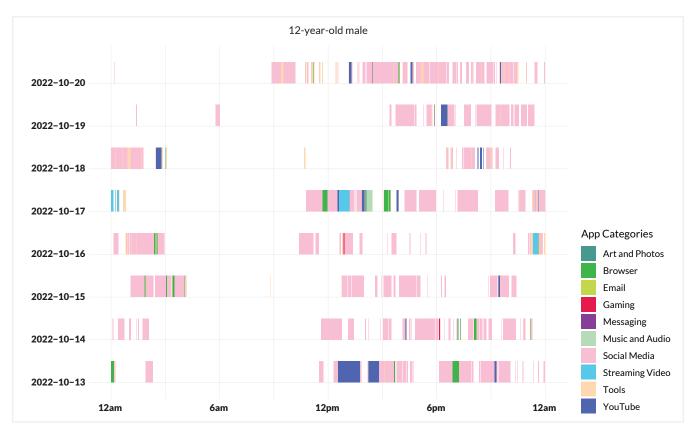




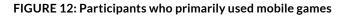


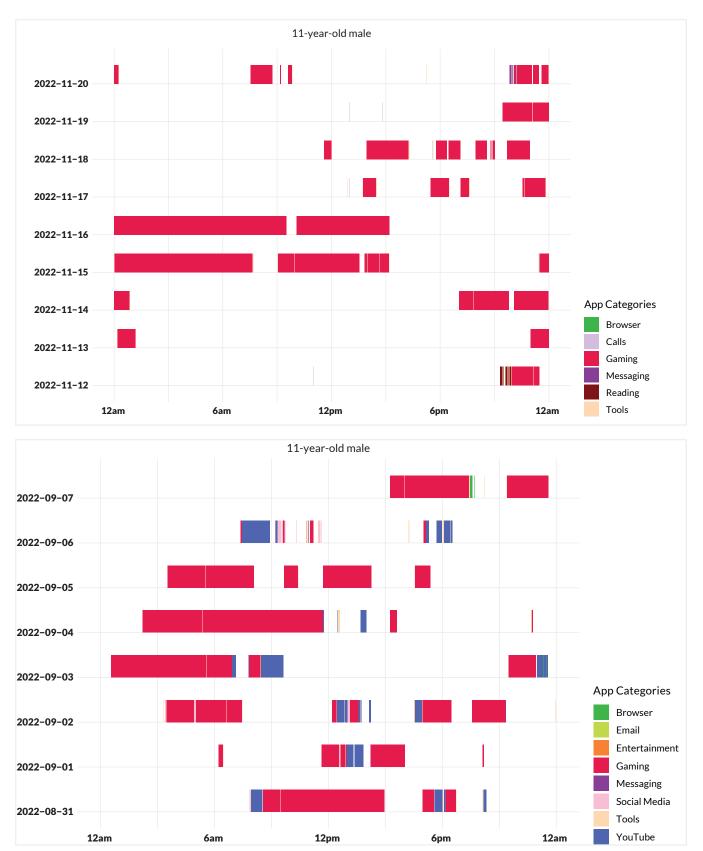


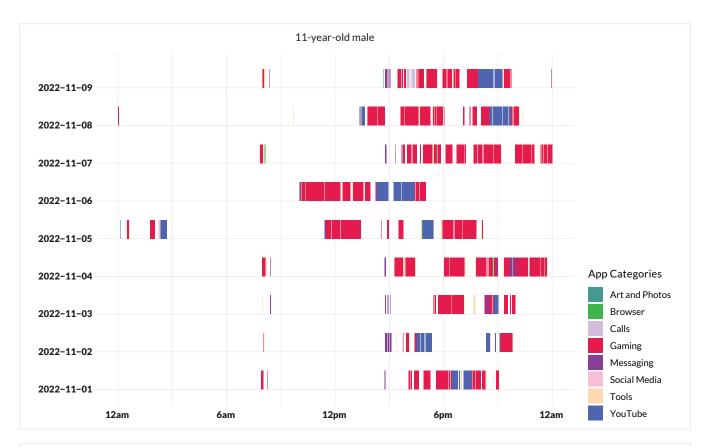


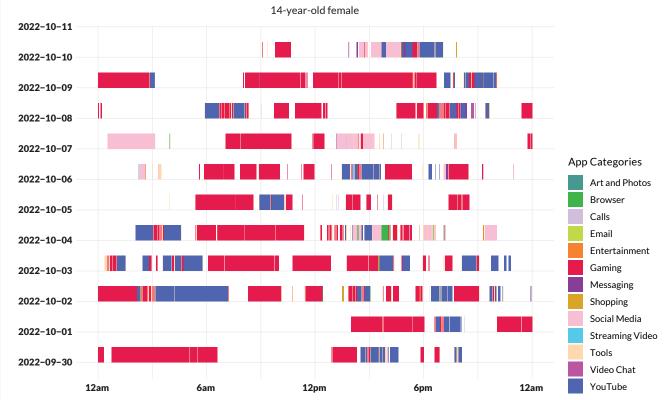


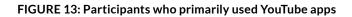


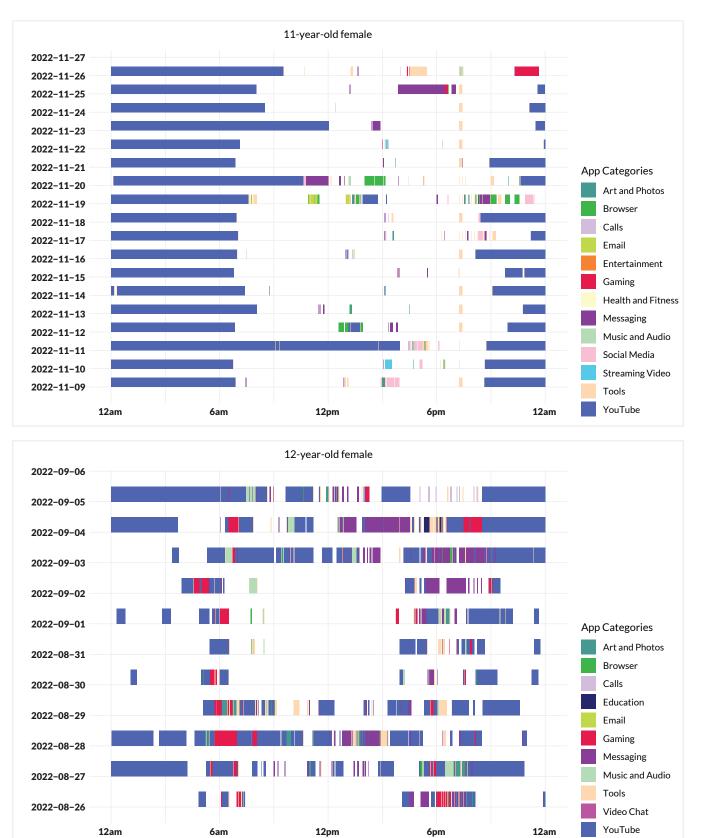


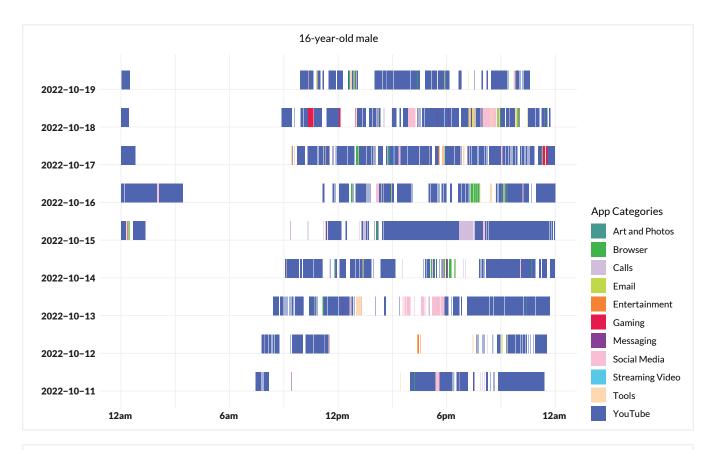


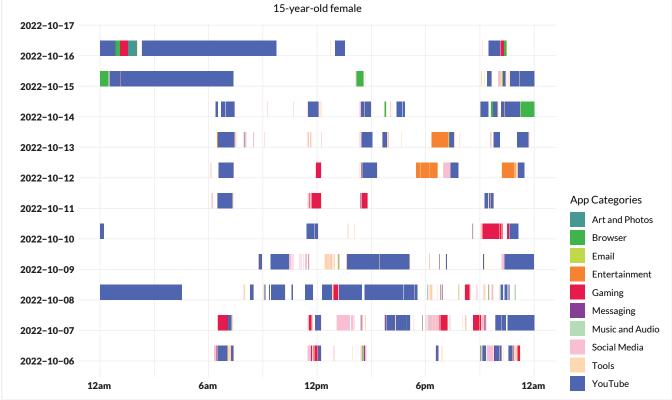












Which types of apps did participants use the longest, and why?

While time is often held out as the most important measure of how young people use their screen-based devices, time is only one dimension of the smartphone experience. What young people do, the content they view and the interactions they have on their smartphones are critical components of how they use their devices. Research shows that the quality of the content and types of activities youth engage with online are more strongly associated with well-being (Popat & Tarrant, 2023). For example, creative and positive social uses of media are associated with higher well-being, while viewing more violent or toxic content is linked with more distress. And while our methodology cannot tell us exactly what content youth saw on their phones, understanding what types of apps are used and in what duration gives us a framework to begin to understand youths' exposure to different types of content.

The 203 participants in our sample used a total of 1,644 unique apps over the week that their smartphones were tracked. Individual participants used anywhere from five to 125 different apps over the course of the week, averaging about 40 different apps overall.

When we looked at categories of apps, social media apps were used for the longest each day, on average, followed by YouTube (which includes YouTube, YouTube Kids, and YouTube TV), mobile games, browser, messaging, and streaming video (see Figure 14). When considered as a proportion of a participant's overall smartphone usage, social media (42%), YouTube (19%), and gaming (11%) apps took up the largest percentage of time per day, among participants who used those apps. In contrast, despite their popularity, photography/camera apps, phone calls, and music apps were only used for a few minutes per day.

FIGURE 14. Median and IQR* of daily duration of different app categories**, ranked from longest to shortest duration

Social Media (n=153)

YouTube (n=177)
Gaming (n=178)
Browser (n=200)
Messaging (n=193)
Streaming Video (n=93)
Art and Photos (n=192)
Music and Audio (n=144) —
Reading (n=44)
Calls (n=181) -
Shopping (n=79) -
Education (n=75)
Email (n=146)
Parent Controls (n=48)
0 25 50 75 100 125 150 175 200
Average Daily Minutes (Median [IOD])

Average Daily Minutes (Median [IQR])

*Median is the value that 50% of the users are under and 50% are over. IQR is the Interquartile Range, which is the middle 50% of users, with 25% of users under the first value and 25% of users over the second value. Bar shows the median value; black line shows IQR.

**Includes only participants who used that category of apps.

Younger participants had the longest duration of the gaming category of apps. One youth advisor explained the change in smartphone habits by age this way:

Definitely with more mature teenage audiences, I feel like there's less game usage ... but I think it also kind of just depends on who the phone user is. But I also think that it can be a mix of both. Like you said, we kind of all get drawn to our phones when we don't have anything to do, and definitely I think that social media has kind of replaced games for older audiences, because it's like you can pick it up and it's quick entertainment, which is kind of like what a game is, it's interactive quick entertainment. -9th grader Over the study week, 657 different mobile games were played overall, of which 211 (32%) had violent content ratings. When looking at the mobile gaming patterns found in our participants, youth advisors found it interesting that some gaming took place at seemingly random times of day. This was explained by the fact that some games send notifications to re-engage the player every day, while other games are designed in ways that expect frequent engagement to maintain progress in the game:

This used to apply to me. I'm not active on it anymore. But the game Hay Day is kind of ... it's one of the games where you have to come back at certain intervals to maintain your farm. So I can see that, like waking up at 8 a.m. and coming back to it consistently every day, just being integrated into your schedule because that's how a lot of people are with it. They know that whenever they wake up, oh, there's new things to check, you have to go and maintain your farm, and it's just like part of their everyday lives. --11th grader

TABLE 2. Popular apps, their number of users, average daily duration, and percentage of total smartphone use they composed on a typical day*

App name	N (%) users	Average daily duration Median [IQR]**	Range (hour:minutes)	Percentage of daily use (median)***
TikTok	102 (50.2%)	1:52 [0:24 - 2:57]	<0:01 - 7:48	38.4%
YouTube	175 (86.2%)	0:40 [0:05 - 1:52]	<0:01 - 10:13	18.2%
Instagram	70 (34.5%)	0:16 [0:03 - 0:52]	<0:01 - 2:56	5.9%
Snapchat	79 (38.9%)	0:10 [0:02 - 0:36]	<0:01 - 3:13	3.6%
Discord	72 (35.5%)	0:07 [0:02 - 0:24]	<0:01 - 12:20	2.5%
Roblox	74 (36.5%)	0:06 [0:01 - 0:40]	<0:01 - 6:25	2.6%
Chrome	191 (94.1%)	0:04 [0:01 - 0:13]	<0:01 - 1:24	1.5%
Netflix	53 (26.1%)	0:03 [0:01 - 0:17]	<0:01 - 7:31	0.8%
Spotify	81 (39.9%)	0:01 [<0:01 - 0:04]	<0:01-0:31	0.6%
Facebook	40 (19.7%)	0:01 [<0:01 - 0:04]	<0:01 - 1:34	0.1%
Google quick search box	180 (88.7%)	0:01[<0:01-0:03]	<0:01-0:21	0.6%
Amazon	47 (23.2%)	0:01 [<0:01 - 0:03]	<0:01-0:20	0.3%
Pinterest	36 (17.7%)	0:01 [<0:01 - 0:03]	<0:01-0:48	0.4%

*Calculated only among participants who used that app.

**Median is the value that 50% of the users are under and 50% are over. IQR is the Interquartile Range, which is the middle 50% of users, with 25% of users under the first value and 25% of users over the second value.

***Percentage of daily use is calculated among those who use the app and as a percentage of all their smartphone use in a day.

Apps that dominate time: TikTok and YouTube

Some of the most popular apps used by 11- to 17-year-olds in our sample are shown in Table 2. Of these, those with the longest daily duration were TikTok, YouTube, Instagram, Snapchat, Discord, Roblox, Chrome, and Netflix. (Of note, although Spotify usually streams music for long periods of time, it is not recorded by our study app as 'in use' because the screen is usually off while music streams).

Figure 15 shows the distribution of daily duration of use of the longest-running popular apps in our sample. TikTok and YouTube had far more users who spent several hours per day using these apps, with 64% spending more than an hour/day on TikTok, and 41% doing the same on YouTube. Our youth advisors attributed this finding to video length, the friction-less features of these platforms, and the algorithmic tailoring of videos to a users' interests, making it difficult to disengage. In contrast, 22% of Snapchat and 7% of Discord users averaged more than one hour/day on these platforms, which youth advisors noted are primarily for chatting with friends, so they are used for briefer snippets of time.

TikTok: Teens talk about the ease and capture of the endless short video scroll

When we asked the youth advisors why their peers scrolled TikTok for nearly two hours a day, taking up almost 40% of their total phone time, they had lots to say! While text-based platforms like Twitter are "more work," TikTok was described as "so easy" because users can simply open up the app and videos start to play endlessly, compared to having to "actively" click on videos. Discussing TikTok, two youth advisors shared:

It's just you watch a video and it's interesting and you scroll and it's another interesting video. You don't even have to find videos on your own, it's right there, it's customized, and you can share funny things with your friends, so it's addicting. -12th grader

I'd say compared to YouTube, [TikTok] is that you don't have to search through to find a video that you wanna watch ... I mean if you're on the Explorer tab for Instagram, or for YouTube, you have to kind of decide, but it does it for you. So you can open the app and instantly have a video you'll probably like. -10th grader

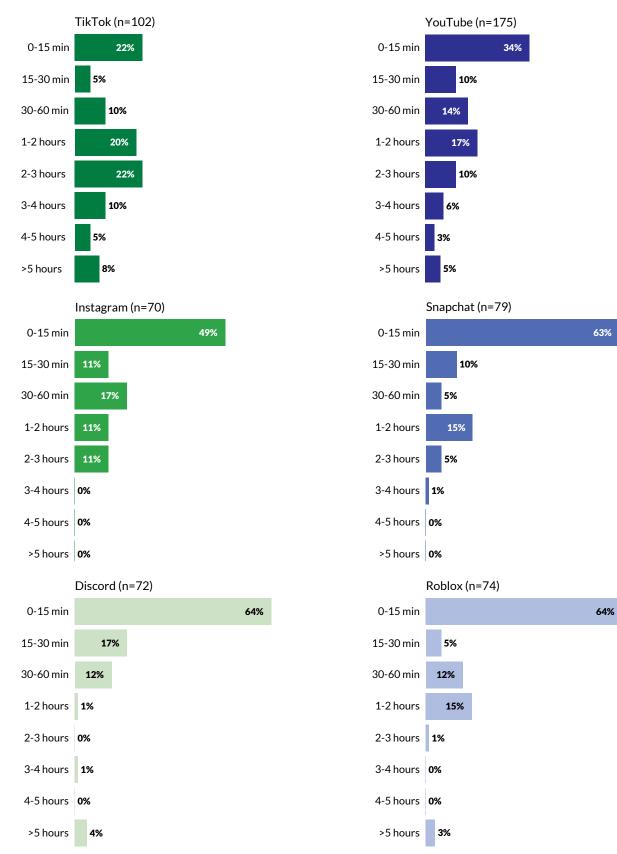


FIGURE 15. Average daily duration of select popular apps

Another key piece of TikTok's appeal to teens was that it could be consumed in small bites of time, such as in between classes, compared to more "time-consuming" platforms that need a time or mental investment, such as YouTube or Netflix. They also noted with TikTok how quickly the algorithm can learn what they want and shift to meet their current needs.

A lot of people I know are actually defaulting more to TikTok and social media sites where they can get kind of like the quick hit of just like a short video. So I was surprised that some people spent that much time on YouTube 'cause most people I know, if they wanna watch video content, then they'll go to TikTok. You can easily just scroll past it. But then also, they're just so short that even if you're not necessarily that interested, watching it won't really take up that much time anyway.

—10th grader

Youth advisors also mentioned how design features like lack of friction, infinite content, and the short video format influenced their behavior on TikTok:

Something that usually breaks that chain of scrolling on Twitter is ... I'll see a tweet that I've already seen before, so I'm like, 'OK, time for me to get off.' Whereas TikTok there's nothing to really break that chain of constant new information and the stimulation ... But TikTok is definitely more of an internal struggle to actually be like, 'let me get off,' simply 'cause the content is just so easy to consume, so it just feels like an urge to continue to keep scrolling. --11th grader TikTok is one of the worst forms of it because it's not much work, you're just scrolling, and also, you keep on scrolling and you're finding maybe these things interesting because your feed is accustomed to you. And it's easy, it's quick, and I feel like that's also why a lot of our attention spans are getting much shorter, because even sometimes ... I'm not on TikTok as much as I used to be, but when I was really on it, I would find myself skipping videos that were over 30 seconds because I couldn't ... I just wanted to keep on scrolling, keep on scrolling. --11th grader

Automatic advancement of content feeds also contributed to the "overflowing" experience of using TikTok or YouTube, and the challenges some teens feel in breaking away from the feed of videos:

You have to have a bunch of ideas and a bunch of different videos flowing into your mind and just that constant flow of information just overflowing, kind of being overwhelming, I feel like, to an extent. And I feel like for Netflix, though, it's helpful and it's better in terms of splitting up the movies you watch because there's that like ... It's like start the new episode, and then you kinda get that guilt like, 'Oh, should I start this whole new episode and waste another 20 minutes, or should I just go start my homework?' So I feel like that's why TikTok is so much more time-consuming, and YouTube as well, because it just never stops. There's no end... so they all just, I would say, inevitably just keep going on and just blend together. -10th grader

We asked youth advisors whether they had tried out time limit features on TikTok or YouTube, and some had—with mixed success:

I think that most teens don't really follow it, especially if they set it themselves. It has to be parent-enforced with a passcode or whatever for teens to actually follow it. But I feel like, in my experience, for TikTok, I'm spending two or three hours a day on TikTok. And I'll set these restrictions, yet I'll just block it every time I see it. So I find it annoying after a while, but I think it's helpful once I get the notification over and over to realize that I'm really just wasting my time. —10th grader

Personally, I have one on my TikTok for 45 minutes, but there definitely are some days where I see it and it's like, 'You have five minutes left for the day for TikTok,' and I'm like, 'I don't care,' and I just ignore it. [chuckle] So I think it depends on how I'm feeling in the day, 'cause sometimes I do follow that guideline or that restriction, but sometimes I don't. -11th grader

But I also know that YouTube has a sleep notification. Like sometimes I get, 'It's time for bed,' and then you could dismiss it or continue on the app. -11th grader

TAKEAWAYS

Time on smartphones among young people is dominated by apps that provide social interaction, entertaining videos, and games-many of which have design features that encourage prolonged engagement. These include finely tuned algorithms that can even adapt to how a child or teen is feeling in the moment, infinite scrolling of content made by creators who are competing for attention, and "frictionless" navigation. (In contrast, a design feature that adds friction would slow down navigation, cause the user to pause and make a decision, let them know that they are "caught up," or encourage them to take a break.) TikTok in particular was described by our youth advisors as having a lot of engaging ingredients as well as an ability to be consumed in bite-size bits during downtime or in between classes. In contrast, apps that young people use for goal-oriented purposes (such as taking photos, shopping, or looking something up on a browser) commanded much less time. Caregivers should be sensitive to the fact that the companies who build apps have incentives to design features that capture kids' attention for longer (such as wanting more advertising revenue or data collected for targeted marketing), and it's not just kids' lack of "willpower" that keeps them on their phones.

TALKING POINTS

Adults can ask:

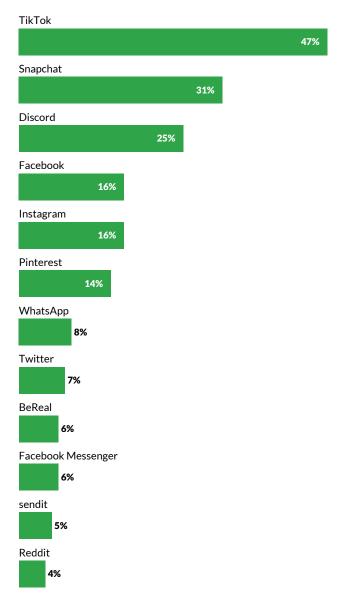
- Which apps take up most of your time (and my own time, as a parent)? Why is this?
- Are there design features that make your favorite app hard to put down?
- What do you think social media platforms know about us, in terms of who we are and how we are feeling? How do algorithms predict what we might want to watch or follow?
- How do you see the platform's algorithms at work? Have you noticed when it's working to keep you on the app, and how it does that?
- What are some ways to be "in the driver's seat" while using your phone, other than timers that don't always work? Are there ways to be conscious of the need to not use your phone at certain times of day? Are there places that you could keep your phone, some apps that you could remove, or "do not disturb" settings that could help you feel more in control?

NSFK? What we found about participants using apps intended for older audiences

App stores have age ratings that recommend how old the users of specific apps should be, but these are not routinely enforced. Age-restricting "gates" on apps and app stores, such as entering a birth date, have always been easy to get through. This means that it is easy for young smartphone users to wade (or intentionally jump) into territory that was not intended for them. Therefore, we explored whether our participants appeared to be accessing age-inappropriate apps on their smartphones.

Under-13s regularly use social media and age-inappropriate apps

Of 85 participants who were younger than 13, 68% used social media apps, and they all used at least one app rated "Teen" or higher. Among 11- to 12-year-olds, the most popular social platforms were:





Almost half of our participants used apps with mature/adult age ratings

Use of mature (17+) or adult only (18+) apps was relatively common, occurring in 45% of participants. These included Pornhub, fantasy sports/betting apps (Yahoo Fantasy Sports & Daily, Sleeper Fantasy Football), Telegram, Reddit, Parler, 4chan, casino games, or violent games such as Call of Duty.

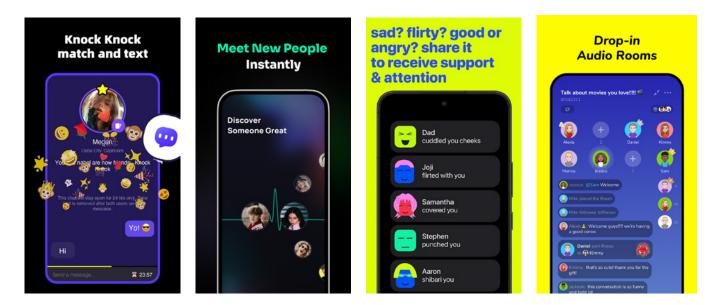
Sexy themes show up in some apps, mostly video games

Of all the apps used by participants in this study, 47 had content flags about sexual themes, nudity, or suggestive themes, 34 of which were video games.

Use of risky anonymous social platforms

In addition, 14 participants used social media apps with risky features, like being able to connect with strangers for messaging, sending photos, or video chat. These included Obimy (allows random contacts between users), Monkey (allows users to chat with "new people all over the world"), TIYA (allows chats with "strangers and friends"), and LMK (allows instant talking and dropping into audio rooms with strangers). These apps potentially open child and adolescent users to unsafe or exploitative interactions with others.

SCREENSHOTS from app store descriptions of social media apps that provide anonymous connections (L to R: Monkey, TIYA, Obimy, LMK)



How many smartphone notifications are young people receiving per day, and from what apps?

Notifications from apps on our smartphones—whether seen, heard, felt or silent—are a frequent occurrence for many teen and adult smartphone users. Compared to smartphone pickups (see Main Findings section 1), which indicate how often a user engages with their phone (regardless of whether they are responding to a notification), notifications signify how often the phone itself is pinging for attention. These notifications can helpfully direct us to an important message, but can also serve as a potent distraction from other activities and draw the user back to their device. Notifications are also one of the main smartphone design features that users have control over, which means they can be modified with the goal of improving focus, family time, or sleep.

Notifications on our participants' smartphones registered in two ways: notifications delivered and notifications seen by the user (indicating that they looked at the notification or had their phone screen on when they received the notification). On a typical day, participants had a median of 237 notifications delivered to their smartphone, and they saw or engaged with 46 of these. This varied considerably between participants, likely because of the different apps they use, how they manage notifications, and whether they use "do not disturb" settings at certain times of day. Notifications were most numerous from apps young people use to chat with their friends, such asSnapchat, Instagram, and Discord (see Table 3), which is consistent with how youth advisors said they prioritized their notifications from people they know, rather than from random platforms, brands, or channels. I know that TikTok, whenever it sends you notifications, it combines all of them into one. So if you have a bunch of likes on a post, it won't send you a notification for each individual one. It will compile it and it'll be like, 'You have 16 new notifications,' whereas Snapchat, every time you get a Snapchat from somebody, it'll give you an individual message, or every time someone's typing, you'll get an individual message for that, and then on top of that, their chat. So those compile very quickly. --11th grader

I get most excited over Snapchat notifications, and it doesn't really matter who it's from. I think that's solely because you get the little Bitmoji, you get to see who it's from and it's a person every time, whereas with TikTok or Instagram, the platform sends you so many just random notifications that aren't really relevant, there aren't people interacting with you, that they're kind of uninteresting. --11th grader

When I had Discord, it was really, really annoying with every single message 'cause it wasn't relevant to me at all, and I just wanted messages from my friends that I've personally DMed ... there's multiple channels, and if you don't, I guess, mute certain channels, you will get every single notification. --11th grader When plotted over the 24 hours in a day (midnight to midnight), seen notifications appeared to jump in the morning hours (possibly when overnight "do not disturb" settings were disabled or participants first picked up their phones in the morning) and then peak in the late afternoon/evening. (See Figures 16 and 17).

Similar to patterns seen with pickups and duration, younger users (11-12 years) tended to receive and view fewer notifications than older users (13-15 and 16-17 years).

Youth advisors explained that it is essential to turn off notifications to reduce the feeling of overload and interruption:

I think notifications are very annoying. I have mine off or always on 'do not disturb,' especially during school, 'cause I feel like after a while, they just compile and then it's just notification after notification, and then I can't even see previous notifications. And then it's just a lot of information with just picking up my phone, and it's almost like the app is trying to get you to get more involved and go back to the database. —10th grader They described needing to not just manage the volume of notifications, but also the proliferation of types of notifications from different platforms, to keep things in check and make space for communication with friends.

Another thing with notifications, one thing I've noticed with Instagram is, over time, they keep adding new, different types of notifications. Like when they rolled out reels, they had a notification like, 'Check out the most watched reels for today.' So over time, you have to keep turning off those specific notifications because I still wanna receive messages from my friends through DMs. I don't wanna receive those kind of unimportant messages. --11th grader

I think it's seen as a way to just re-instill interest in their app after long periods of time of not being on it, and it's just a way to keep you engaged with it, because by sending you so many random things, it's bound to hit your interest eventually. But generally, I do think it's annoying [chuckle] because so many of them are just irrelevant, and I think that if they sent less of them, it would be a better way of going about that. --11th grader

App name	N (%)** who received notifications	Median [IQR]* notifications delivered per day	Range*	N (%)** who viewed notifications	Median [IQR]* notifications seen per day	Range*
Snapchat	78 (39.2%)	19.6 [5.0 - 67.3]	0.1 - 1026.2	75 (37.7%)	8.3 [2.9 - 27.0]	0.2 - 363.6
Discord	59 (29.6%)	11.8 [3.4 - 42.3]	0.1 - 763.7	57 (28.6%)	4.7 [1.6 - 17.9]	0.1 - 491.6
Instagram	70 (35.2%)	8.9 [3.3 - 27.7]	0.2 - 808.6	69 (34.7%)	5.6 [2.0 - 14.6]	0.1 - 121.0
Facebook	37 (18.6%)	4.0 [1.4 - 5.8]	0.1 - 15.4	36 (18.1%)	3.2 [0.8 - 5.0]	0.1 - 7.8
TikTok	79 (39.7%)	2.9 [1.4 - 5.1]	0.1 - 16.1	76 (38.2%)	1.7 [1.0 - 4.3]	0.1 - 13.2
YouTube	141 (70.9%)	2.4 [1.0 - 6.4]	0.1 - 122.2	127 (63.8%)	1.8 [0.7 - 4.3]	0.1 - 90.6
Pinterest	37 (18.6%)	1.9[1.1-2.2]	0.2 - 17.4	36 (18.1%)	1.6 [1.1 - 2.1]	0.1 - 6.1
Roblox	7 (3.5%)	0.2 [0.1 - 1.0]	0.1 - 8.3	5 (2.5%)	0.2 [0.2 - 0.3]	0.1 - 0.3

TABLE 3. Notifications delivered and seen by the most popular apps

*Calculated only among participants who received or viewed notifications from that app, respectively.

**Percentage of 199 participants with notification data.

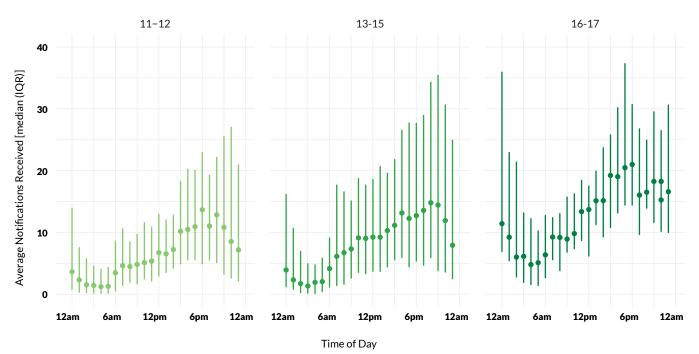


FIGURE 16. Hour-by-hour plots of average notifications* delivered to participants' smartphones, by age

*Median is the value that 50% of the users are under and 50% are over. IQR is the Interquartile Range, which is the middle 50% of users, with 25% of users under the first value and 25% of users over the second value. Dot shows the median value; line shows IQR.

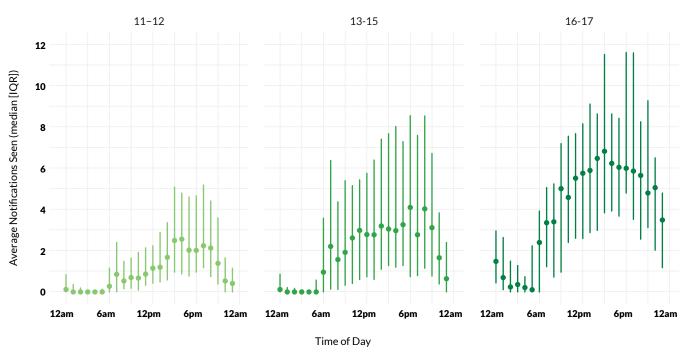


FIGURE 17. Hour-by-hour plots of average notifications* seen or interacted with by participants, by age

*Median is the value that 50% of the users are under and 50% are over. IQR is the Interquartile Range, which is the middle 50% of users, with 25% of users under the first value and 25% of users over the second value. Dot shows the median value; line shows IQR.

TAKEAWAYS

Notifications are plentiful, sometimes fun, sometimes annoying, and they are one of the main things young people can control in their smartphones. Notifications from marketers were the least essential and most irritating to the adolescents we talked to, who were also wary of platforms trying to get their attention in inauthentic ways (e.g., by telling them when a distant acquaintance had posted but didn't tag them). One of the main things caregivers and teachers can do is help young people reflect on how smartphone notifications affect their emotions, concentration, and habits of checking their device—and then empower young users to manage their notifications and set "do not disturb" times that align with their needs.

TALKING POINTS

What adults can say and do:

- Try looking at settings for screen time and digital wellness on your phone, and on your child's phone, to talk about which apps send you the most notifications.
- Then discuss how to intentionally update the settings (both within apps and in phone notification settings) to cut out all of the extra disruptions that young people mention as their biggest annoyance.
- Although it takes time to do it, stopping to reflect on how your phone tries to get your attention can lead to great discussions in families and classrooms, and it can give users a feeling of control over how much they use their smartphone.

How much does smartphone use occur during school hours, and why?

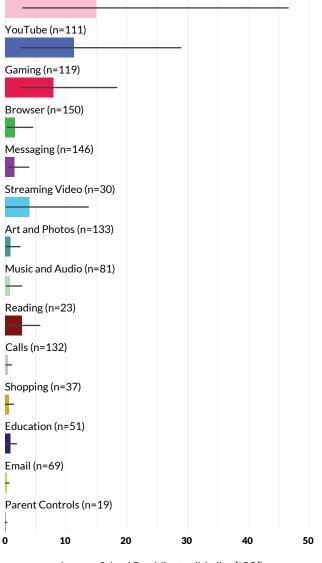
Phone use in school has been a subject of intense public debate, but for many young people it is a necessity, as their phones may contain school schedules and allow coordination with family and friends. It is also a potential source of distraction or avoidance when school feels stressful.

Among the participants in our study, some degree of smartphone usage during school hours (Monday through Friday 8 a.m. to 3 p.m.) was nearly universal, and median use was about 43 minutes/day. Young people handled their phones quite a bit during the school day with a median of 13 pickups (turning the screen on) during school hours, ranging from <1 to 229. Smartphone usage visualizations shown in Figures 10, 11, 12, and 13 illustrate the variety of patterns of smartphone usage during school hours. Although messaging and browser app categories were most frequently used during school hours, this averaged only a few minutes, while social media (32% of smartphone usage during school hours), YouTube (26%), and mobile games (17%) took up the largest proportion of time during school hours, among participants who used those types of apps.

Surprisingly, parental control apps sent the highest number of notifications during school hours, sending a median of nearly 30 notifications to young people, with 70 notifications/school day at the top end. Other app categories sending the most notifications during school hours were social media (median 5.6, max 759), messaging (median 3.4, max 158), and browser (median 4.0, max 403). Notifications seen during school hours were mostly social media (median 2.7, max 205), messaging (median 2.0, max 92), and browser (median 1.3, max 159), which is consistent with the ways youth advisors said they used their phones during school hours.

FIGURE 18. Median and IQR* of duration of use of different smartphone app categories during school hours**

Social Media (n=126)



Average School Day Minutes (Median [IQR])

*Median is the value that 50% of the users are under and 50% are over. IQR is the Interquartile Range, which is the middle 50% of users, with 25% of users under the first value and 25% of users over the second value. Bar shows the median value; black line shows IQR.

**Includes only participants who used that category of apps during specified time frame (Aug. 29 onward; holiday dates removed from analysis).

Youth advisors provided insight into why they would use phones in school, when, and what effect it has on them. Many described using the phone to take small breaks during lunch or class, but also noted it could be challenging to keep the phone use to their preset goals or a minimum:

Sometimes I use my phone just to scroll during lunch. If I have a free period, like on the rare occasion that I do have a free period, sometimes I'll use my phone ... but I generally try to avoid touching my phone during school because I don't want it to throw me off ... the reason why I try not to touch it at all, 'cause even if I set the boundary of, 'OK, maybe I'll only be on my phone for a cumulative of 30 minutes of the school day,' it's hard to know whether I can actually stick to that boundary, so I'd rather just not pick it up in the first place to prevent going over that boundary. --11th grader

Yeah, it's the same for me, but sometimes if it's a Friday and it's last period and I'm so drained, sometimes I go on TikTok for the last 15 minutes just to get me through it, just 'cause when you're on TikTok, you lose track of time. So if I'm scrolling on TikTok for what it feels like five minutes, it's actually been like 13 minutes, and I'm like, 'Nice. Now the school day is over.' --11th grader

School policies and smartphones

School phone policies varied widely among the adolescents we talked to. For example, some youth advisors described having a total ban on smartphones in their high schools, with detentions resulting if students used their phone. In other schools, youth advisors described having policies that ranged from no restrictions or class-specific rules, including teachers encouraging use during class (e.g., to look something up or participate in class discussions), allowing students to use phones once they completed in-class assignments, and generally allowing smartphone access between periods. Some youth advisors' teachers used strategies such as having students put their phone in a bag at the front of class, to avoid it being a distraction. School policies also varied by the age of students, with the high school age youth advisors reflecting back on stricter rules in middle school.

It's just like, 'Don't use it during class.' —11th grader

It's supposed to be no phone until passing times, that's like four minutes long, but the reality, students just use it if they wanna use it. And teachers will start off saying, 'Don't use it,' but if students want to use it, who's really gonna stop them? ... Teachers definitely say, 'Put your phones away,' but students get clever. And also just because of the phone problem, there's a new rule where you trade in your phone for the pass to go to the restroom. 'Cause you spend more time probably in the bathroom with your phone there. --12th grader

Definitely at lunch, I could see people using their phone a lot. But in class, it depends on the school, but if your school has everyone with computers, then I think computers. If you're gonna get distracted doing something, it would be on computers. --11th grader The inconsistency between different teachers and classroom expectations can be frustrating to some adolescents, but stricter rules are sometimes appreciated in retrospect:

Well, generally my school is pretty relaxed. It's just some teachers that really do not like phones in their classrooms. And I feel with those teachers that are really strict on it, I feel like if anything, it just causes kids to wanna act out even more. Because now it's not like, 'Oh, I have my phone out and she's telling me respectfully, like, hey, could you put this away?' Now it's like this whole big deal where the kid's like, 'Oh, but it's not fair that I never get to use my phone.' When I was in middle school, we had super, super strict [rules about] phone use, and at the moment I was like, 'Yeah, this is so annoying,' but now, looking back on it, it actually was a really good thing. —11th grader

We have a no-phone rule, and if it's out, the deans and our teachers are pretty harsh about giving us detentions. So I think that mostly keeps our phones away, but I would definitely say in class if we're just ... If I'm done with an assignment, my phone will be in my backpack and I'll tap the screen to see if there's any notifications. And obviously it's kind of pointless because it's like, OK, well, you can't actually open those notifications, but it's just like seeing what's there, and I think that's kind of the addicting part of it ... But yeah, I would say I think the rules kind of help us, and I personally am OK with it, yeah. And I think most of my friends would agree too. -9th grader Use during school hours was predominantly social media apps, which youth advisors said is consistent with their experience of enjoying checking in with friends, coordinating meeting up, and getting small doses of fun. However, they also recognized when phone use becomes too distracting, is an avoidance strategy, or serves the purpose of relieving boredom.

In my school, we tend to have longer passing periods, or at least they're close enough together that lots of students will arrive at class and then check their email on their phone or check Snapchat in the remaining time they have before class starts. -10th grader

I think for school, using it just for communication, like just texting friends to meet up sometime during lunch or something, that's definitely useful. But then when it becomes distracting, getting a lot of notifications in class and stuff, it can become a problem. -11th grader

I played spring sports, so being able to check my phone and make sure if we weren't sure about the weather and knowing whether or not the game is happening or where we were meeting, that was really helpful. It's harder to check on my computer than it is on a phone. Not me personally, but there's definitely kids who listen to music during class or during lunch instead of interacting with other kids. So I think that would be an area in which it's not helpful ... [this is driven by] I think either stress or boredom, generally boredom. —10th grader I really don't find having my phone next to me in class a distraction. If anything, it's just like, oh, I have my phone there in case I need it. But when I do use my phone in school, I find that it's either to look something up because I don't really understand something, or just after I've finished all my work, just to be able to relax for a little bit ... I will say that I'm at least tapping my phone to see if I got a notification or just opening it really quickly to maybe scroll on Instagram while I'm waiting for the teacher's directions or something like that. --11th grader

Currently, my school is really lenient about phone rules and our teachers are OK with us using laptops or iPads to help us learn, to take down notes. And we also, at any moment, can just access our phone, just not doing tests or quizzes or anything that it's like an assessment ... And even if, sometimes let's say you get bored in class, if it's just for a few seconds our teachers allow us to just quickly check our phones, and then reset and then come back with a better sense of concentration. -12th grader

TAKEAWAYS

Smartphone use in schools is not driven only by young people's interests and behaviors; it is also largely shaped by school phone policies and how they are enforced. Phone policies vary by child age. For example, middle schoolers often have stricter rules about not using phones in class, while some high schools allow students more phone use (Tandon et al., 2020). This is an opportunity for students to learn selfregulation and intentional (in other words, not habit-driven) smartphone usage. Since school is one of the main environments where adolescents interact with their peers, it makes sense that phones are being used for that purpose.

TALKING POINTS

What adults can say and do:

- Ask: What are your school's policies for tech use? How well are those rules enforced by teachers, and do students follow them? What do you think are the positive and negative effects of these policies?
- Adults can help children and adolescents reflect on how using smartphones in school makes your brain feel (in terms of emotions, attention, and thinking), and when it's an avoidance strategy.
- If they don't want to talk about their own phone use during school, ask about peers' use: When does your child think that other kids are using their phones too much, and why?

How much smartphone use occurs during school night hours, and why?

Sleep is critical for the health and development of children and adolescents. Concerns and debate over the role of phones and apps on the sleep habits of teens and tweens have been ongoing, but studies have rarely looked at the patterns of smartphone use that occur overnight. We focused specifically on school nights because insufficient sleep before school can contribute to feeling unfocused, sleepy, and irritable.

Almost 60% of participants used their smartphone during school night hours (Monday through Friday, midnight until 5 a.m.) at least once during the study period. Overnight usage on school nights was shorter (median 19.8, range less than one minute to 300 minutes) than non-school nights (median 30.3, range less than one minute to 299 minutes)—typically 20 vs. 30 minutes, respectively. As is illustrated in Figures 9, 10, 11, 12, and 13, social media, gaming, and YouTube were the most commonly and longest-used app categories during school night hours. Specific apps seemed particularly engaging overnight, including mobile games like Nikke, Klondike, Random Dice, WWE Super Card, or Cat Game. The longest-running social media app overnight was TikTok.

On a typical school night, the median number of times a teen or preteen picked up their smartphone was 1.0, ranging up to 18 times in a night. Both notifications delivered and notifications seen on school nights were relatively sparse, with a median of less than one per night for most app categories.

Interestingly, the category with one of the highest rates of notifications overnight was parental control apps (median 15.3 delivered, 0.4 seen, ranging up to 38 delivered and 15 seen per night). This might reflect parental controls pinging users to tell them they've exceeded bedtime limits.

FIGURE 19. Median and IQR* of duration of use of different smartphone app categories during school nights**

Social Media (n=60)

YouTube (n=	=54)		
Gaming (n=3	32)		
			-
Browser (n=	49)		
Messaging (n=27)		
ı Streaming V	'ideo (n=14)		
	-		
Art and Pho	tos (n=24)		
	1. (40)		
Music and A 	udio (n=18)		
Reading (n=	6)		
Call (n=9)			
-			
Shopping (n	=11)		
Education (r	1=5)		
l Email (n=11			
- III.	,		
Parent Cont	rols (n=3)		
0	10	20	3

Average School Night Minutes (Median [IQR])

*Median is the value that 50% of the users are under and 50% are over. IQR is the Interquartile Range, which is the middle 50% of users, with 25% of users under the first value and 25% of users over the second value. Bar shows the median value; black line shows IQR.

**Includes only participants who used that category of apps during specified time frame (Aug, 29 onward; holiday dates removed from analysis).

Youth advisors thought it was unsurprising that participants showed this pattern of smartphone use into the overnight hours, focusing on apps that let them relax and have fun during what may be their main "downtime." The low frequency of notifications seen is also consistent with the fact that many young people put "do not disturb" settings on overnight.

I know that, at least for me, a lot of people would be still on their phone like at 12 or 1 a.m. —11th grader

Youth advisors described that time with their phone before bed might be the only free downtime *—their time*—that they have in the day, so they want to use it on something pleasurable, like social media or videos/movies.

Realistically when you're in school, you can't really use your phone. When you get home, especially if you're in middle school or high school, you're spending hours doing homework, and maybe afterschool stuff. And then when you get home, you're spending hours doing homework. So I know a lot of people, especially my age, they will stay up late because they feel like that's really the only time that they can be on their phones or that they can really do anything outside of school. So it's really not that surprising when you actually think about it. But initially it is like, 'Oh, yeah, they should be sleeping,' but it actually does make sense. —11th grader However, youth advisors endorsed that smartphone use at night is a mixture of procrastination (because falling asleep means they have to wake up for the next day, which is school), losing track of time, and wanting to calm down.

For me, going on TikTok or something before I go to sleep, it's like a way for me to procrastinate actually going to sleep. So now when I go to sleep, I wake up and then I'm going back to school and it's back to the stresses of life. But when I'm in bed is the one time where I really don't have to do anything, so I'm kind of happy to put off sleeping if I can just chill for like another hour or something. --11th grader

And then, also I think definitely before bed, the times that show in the night, I think that especially right before bed, if you're not feeling extremely tired 'cause you just did a ton of homework, so you're ready to go, you're feeling productive, I feel sometimes when you get into bed, you don't necessarily feel ready to go to sleep. So one of the things you'll do is just pull out your phone. And I definitely don't think that's healthy at all, which is why my parents make me keep my phone downstairs when I go to bed. But yeah, I would say that that kind of explains the really late times of using it. -9th grader Youth advisors also recognized the way different apps' design affordances influence their ability to fall asleep, although this might vary between adolescents:

I definitely would stay up very late most nights if I was on YouTube or Instagram. I've caught myself like, 'Oh, it's already an hour past when I was planning to go to bed, and I'm just there on my phone on Instagram.' ... Reading or entertainment or calls...would probably go a lot less late because I feel like that's not keeping you glued to the screen. —10th grader

I think that's the case with social media, but not with YouTube. I often watch YouTube right before I fall asleep and it doesn't cause any problems for me. It helps me fall asleep, actually. So that's one way it could be helpful. TikTok, I think for everybody at least, is just a bunch of videos over and over again, so a lot of information coming in at once, as well as a variety of colors and flashing lights in a sense. And then what I like to do on YouTube is listen or watch long video essays that are a couple of hours long and I'll just put that on and I'll fall asleep to it and I won't even look at the screen. So I think that helps, in a sense, not keep me up. --10th grader

TAKEAWAYS

Phone use at night serves several purposes for young people, primarily to try to unwind at the end of the day (something parents use it for too!). However, our youth advisors felt that social media and video content is both relaxing and sleep-displacing, and can become a procrastination strategy. The adolescents we talked to who reported putting their phone in another room, using "do not disturb," or other strategies to limit phone use overnight had less complicated narratives about phone use at night. In addition to using strategies to keep phones quiet at night, it's also important to understand how much pressure young people feel during the day, and give them time to decompress with or without technology, so they are not packing this into the end of the day.

TALKING POINTS

What adults can do and say:

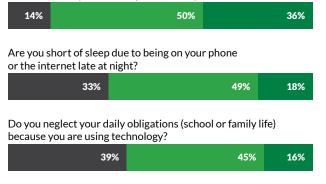
- If your child is using their phone a lot at the end of the day, talk with them about what the rest of their day looks like: Are they getting enough time to relax and unwind? Are they overscheduled or having difficulty finishing homework? Strategize on how to help de-stress the other parts of their day first.
- If your child finds it hard to separate from their phone at night, talk about what types of apps or content "wake their brain up" versus help them let go and calm down, and try to only use the calmer apps before bed.
- Our youth advisors told us that timers and limits aren't always effective, but they can remind you that you've spent more time on an app than you intended, so they're worth a try for kids who feel like they're wasting time watching videos or reading other people's posts.
- Experiment with a few nights of using the "do not disturb" settings, or putting the phone in another room overnight (for parents, too). Reflect with your child the next day about how it felt.

How much tension or frustration are preadolescents and adolescents experiencing about their smartphones? How do they manage this, and what does it mean for how phones could be designed better?

Prior research shows that young people have complicated relationships with their phones, and often need to put in effort to feel positive and balanced with the rest of their lives. Based on responses of our 203 participants to the Technology Impairment Scale in the survey portion of our study, we found that the majority endorsed "sometimes" or "often" using technology in ways that interfered with socializing in person, getting enough sleep, disengaging from media when they wanted to, or following through on chores (Figure 20).

FIGURE 20. Self-reported technology management challenges of 203 11- to 17-year-olds

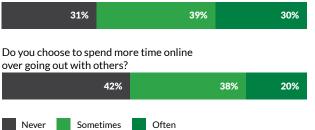
Do you find it difficult to stop using technology such as the internet or your mobile phone, once you start?



Do you feel restless, frustrated, or irritated when you cannot access the internet or check your mobile phone?

30%	53%	18%
-----	-----	-----

Do you use technology to escape from your sorrow or get relief from negative feelings?



Surprisingly, about one-fifth to one-third of participants endorsed feeling like technology was getting in the way of other things "often." Thirty-six percent of participants reported they often find it difficult to stop using technology once they have started; 30% reported often using it to escape from sorrow or get relief from negative feelings; 18% reported often being short of sleep due to being on their phone or the internet late at night; 18% reported often feeling restless, frustrated, or irritated when they could not access the internet or check their phone; 20% reported often choosing to spend more time online rather than going out with others; and 16% often neglected daily obligations such as school or family life due to using technology. These technology impairment reports increased as participants got older.

Youth advisors told us that their relationship with their smartphone evolved with age, based on experience, trial and error, spending more time on their phone, and their growing reflection and self-awareness:

Because you're with 10- to 12-year-olds who maybe just got their first phone and that's all that they wanna do, that's all they wanna use, and they don't really have as much self-control. Because it does ... Your relationship with your phone changes. As you grow older, you realize like, hey, there's a time and a place, and right now isn't that place. So I feel like now that I'm in high school and they kind of ... It's your decision. If you wanna be on your phone while they're teaching a lesson, that reflects on you. You know what I mean? And so I feel like it's also something that comes with age.

-11th grader

They also describe needing strategies to feel like they are in control of their phone use, and not vice versa. These primarily focused on curation of what apps they use and send them notifications:

I also have 'do not disturb' on, occasionally, but for the most part I just manually go into settings and turn off any apps that I think don't really require notifications. Like what [another Youth Advisory] Council member] said, Spotify or any fitness apps. I don't work out often so I don't really need it. For social media apps and just texting and stuff, my phone is always on vibrate. And I don't really text people much besides like immediate family and a few close friends. So besides that, I get maybe just a hundred notifications per day, which I think is a healthy amount. For apps, like gaming apps on my phone, I don't really play games on my phone, it's just too small for me. And I feel like that really helps me just concentrate and focus on just talking to a few friends and family rather than playing around and receiving like a thousand notifications per day.

—12th grader

I think if you're an active user of your phone, there's so many notifications you're gonna get from different platforms that you're not even using, they're not even just for communication. You're just gonna get so many that if you don't curate, you're gonna be overwhelmed. —11th grader They also talked about adding friction to their phone use at times of day when they want to resist the urge to check notifications:

I always keep my phone on 'do not disturb' at night, just so that I'm not tempted to go on my phone, but I also don't keep it in my bedroom. —9th grader

Yeah, I do, sometimes when I'm asleep, I have 'do not disturb' on, and I usually also put it on airplane mode. Sometimes if I just wanna stop any sort of interaction with my phone, I'll just put on airplane mode. —10th grader

Well, one thing that I've changed this year is for text message notifications. I used to have it so that when I open my phone, it shows the actual message, but now I have it so that it just has two notifications because it makes it a little bit less tempting to click on it and a little bit easier to say, 'OK, I'll look at this later.' -10th grader Youth advisors reflected on how limits placed by outside forces, such as a screen time notification or parent rules, were less effective than students' own self-motivated strategies:

For me, my parents were concerned about my phone usage time for a while, but any time they tried to put the restriction, it didn't really work out that well. But when I put on my own restrictions, they lasted a lot or they have been lasting a lot longer and actually worked ... I think, in a sense, my parents being really into it was a little bit counteractive because it made me less willing to do it 'cause I felt like I didn't want them to take away my phone really, and I just used it more. And then when ... The further we got out from COVID, I realized how much time I was spending on my phone and that I think I could have come to a little sooner if I didn't feel the need to go against my parents. --10th grader

When I'm doing homework, what I do a lot to avoid going on my phone is I set ... I had this app, and it's like ... I don't know. It's like growing a plant, so like the time that you put your phone down and you don't touch it and you don't open up your phone, the plant grows, so it's like a little incentive.

-10th grader



Discussion

Children's smartphone use is a common source of frustration for adults. We worry that kids are spending too much time, too much attention, and are being exposed to too many negative things through these handheld computers that burst into our lives 15 years ago. However, as adults, we also need to recognize that this generation of young people haven't been given other technological options (aside from flip phones) to carry out the developmentally appropriate task of connecting with their peers, exploring their identities, and learning about the world independently. The device that's available to them is also a potent marketing vehicle that tries to keep them engaged and profile their interests.

In this study, we have explored this topic by combining insights from the usage data of 203 young people's smartphones with the narratives of youth advisors. Our goal is not to add to the debate about when children or teens should get smartphones, but instead to see the issue from the perspective of how smartphones shape the experiences of young people. Without understanding how young people build relationships with these technologies that contain their friendships, entertainment, stress relievers, and distractions—and how this depends upon design features of the phones themselves—we will not be able to support their healthy technology use.

Therefore, our takeaways and recommendations for caregivers and teachers revolve around supporting, scaffolding, and building insight around young people's smartphone use, rather than judging them. We do kids and their digital wellbeing a disservice by being overly negative and prescriptive, since this will likely only shut down conversations and make young people feel that they cannot come to us when they experience phone-related challenges—which most do, at one time or another.

In addition, our recommendations are focused on the smartphone manufacturers, operating systems, platforms, and apps that make up kids' digital ecosystems. There is clear room for improvement when apps are pinging for attention during the school day; when teens can access pornography sites, sports betting, or other apps rated as "Adult"; and given that the majority of 11- to 12-year-olds in our sample broke through social media age gates.

From a research perspective, our results are consistent with other published research in terms of the amount of time that adolescents self-report spending on social media (Rideout, 2022). App tracking also provides insights into the times of day when phones are used and notifications are delivered. The adolescents we interviewed pointed out that the most significant limitation of app tracking is that it doesn't tell researchers what type of content the participant is seeing, what they are posting, or how they are engaging with others. One focus group participant said, "Although some people can be on the same app for the same amount of time in a day, they can be on completely different sides of the apps and consuming different types of content and just utilizing the apps in different ways." Therefore, future research will need to supplement this method with either screenshots (e.g., citizen science-type sampling) or youth self-reporting about what they encountered on different platforms and how it made them feel.

Another limitation is that app usage statistics are currently available only from Android devices. However, because Android device users tend to be from lower socioeconomic strata than iPhone users (e.g., see Radesky et al., 2020), this allowed us to enroll a more diverse sample.

Recommendations for parents and caregivers

Specific talking points and conversation starters are described in the prior sections, but they all involve a few important concepts:

- It can be challenging to strike a positive balance between smartphone usage and the other parts of life that matter to tweens and teens. Rather than jump to judgment or frustration, adults should be curious about their experiences to meet them where they are.
- 2. Kids are often worried that parents will take away their phones if they reveal negative experiences. Let your child know at the outset that they can tell you about anything that happens on their phone and you'll help them through it.
- 3. Parents themselves use smartphones for several hours per day, and sometimes the same apps that kids use. Use this as a way to reflect, exchange experiences, or experiment with changes in phone use to consider how it changes your mood, concentration, and sleep.

- 4. Every child is different, and their use of phones and social media will reflect that individuality. Understanding and accepting your child's unique way of living in the world is a big part of understanding and communicating about their phone use.
- 5. Installing parental controls, filters, timers, and other device restrictions is the main option that lots of parents have for monitoring their child's phone use, but these are blunt tools that require a lot of upkeep and parent involvement. Most importantly, none of them will tell you how your child is feeling. Have regular conversations to understand how they feel about their life online.

Recommendations for industry

We conclude by listing several insights from this research that could be used to improve the smartphone user experience for young people. Children and adults are provided the same options for smartphone models, operating systems, and app stores, which means that they are subject to the same business models, content problems, and persuasive design practices. Not surprisingly, young users are putting in a lot of work to manage their relationships with smartphones. While it is important not to restrict young people's opportunities to find good content and information through their phones, device and app design could be improved to ease this process for young people and their parents. Below are some actions that companies and product designers could take to go beyond their current menu offerings of parental controls and truly bake youth-centered design into their products:

- Create user interface and onboarding processes (for example, when a young user first gets a phone or creates an account) that easily allow users to set "do not disturb" times, manage when they want to get notifications and from whom, and set goals for how much they would like to use their phone. These settings should not be buried or need a separate app to install. This sets the norm that it's important to be intentional about the time and place when smartphone use does and does not fit daily life.
- 2. Work with adolescents and families to design ways to revisit settings and goals regularly, and to adapt as young users grow, learn about their smartphone habits, and develop different daily routines and interests. Different seasons or school years present appropriate times for prompts and reflection cues that would engage young users in the process of thinking about smartphone balance.

- 3. Update operating systems so that they help notify apps, app stores, and platforms that the user is a child or adolescent. This way, apps and stores can use responsible settings that don't recommend risky content or apps.
- 4. Mobile carriers should make more affordable, intermediate device options available to families when they want to get a phone that is more than a flip phone, but not a fullaccess smartphone. Phone models are being introduced that might serve kids better at different developmental stages, but they are often expensive or not compatible with various phone plans.
- 5. Currently, digital wellness options include timers, lockouts, and "do not disturb" settings, which have variable effectiveness according to the adolescents we interviewed. Some young users have developed approaches like adding friction or avoiding certain content during evening hours, but this is far from universal. In fact, twothirds of our sample felt their phone use impinged upon important parts of their life like sleep or emotional coping. Youth-centered co-design of smartphone options with adolescents would move the burden away from individual children and onto the digital ecosystem around them. Such an approach would benefit our population as a whole (Frieden, 2010).

References

5 Rights Foundation (2021). Pathways: How Digital Design Puts Children at Risk. https://5rightsfoundation.com/uploads/ Pathways-how-digital-design-puts-children-at-risk.pdf

- Burnell, K., & Odgers, C. L. (2023). Trajectories of Perceived Technological Impairment and Psychological Distress in Adolescents. *Journal of Youth and Adolescence*, 52(2), 258-272. https://doi.org/10.1007%2Fs10964-022-01679-1
- Francis, Kathleen, et al. Insights about screen-use conflict from discussions between mothers and pre-adolescents: A thematic analysis. International Journal of Environmental Research and Public Health 18.9(2021): 4686. https://doi.org/10.3390/ ijerph18094686

Frieden, T. R. (2010). A framework for public health action: The health impact pyramid. American Journal of Public Health, 100(4), 590-595. https://doi. org/10.2105%2FAJPH.2009.185652

- Hiniker, A., Schoenebeck, S. Y., & Kientz, J. A. (2016, February). Not at the dinner table: Parents' and children's perspectives on family technology rules. In Proceedings of the 19th ACM conference on computer-supported cooperative work & social computing (pp. 1376-1389). https://doi. org/10.1145/2818048.2819940
- Matthes, J., et al. Fighting over smartphones? Parents' excessive smartphone use, lack of control over children's use, and conflict. *Computers in Human Behavior* 116(2021): 106618. https://doi.org/10.1016/j.chb.2020.106618
- Meerkerk, G. J., Van Den Eijnden, R. J., Vermulst, A. A., & Garretsen, H. F. (2009). The compulsive internet use scale (CIUS): Some psychometric properties. *Cyberpsychology* & *Behavior*, 12(1), 1-6. https://doi.org/10.1089/cpb.2008.0181
- Moreno, M. A., Kerr, B. R., Jenkins, M., Lam, E., & Malik, F. S. (2019). Perspectives on smartphone ownership and use by early adolescents. *Journal of Adolescent Health*, 64(4), 437-442. https://doi.org/10.1016/j.jadohealth.2018.08.017
- Pew Research Center, (2021): Mobile Fact Sheet: Demographics of Mobile Device Ownership and Adoption in the United States, Washington, DC.
- Popat, A., & Tarrant, C. (2023). Exploring adolescents' perspectives on social media and mental health and well-being–A qualitative literature review. *Clinical Child Psychology and Psychiatry*, 28(1), 323-337. https://doi. org/10.1177/13591045221092884

- Radesky, J. S., Weeks, H. M., Ball, R., Schaller, A., Yeo, S., Durnez, J., ... & Barr, R. (2020). Young children's use of smartphones and tablets. *Pediatrics*, 146(1). https://doi.org/10.1542/ peds.2019-3518
- Radesky, J., Hiniker, A., McLaren, C., Akgun, E., Schaller, A., Weeks, H. M., ... & Gearhardt, A. N. (2022). Prevalence and characteristics of manipulative design in mobile applications used by children. JAMA Network Open, 5(6), e2217641-e2217641.
- Rideout, V., Peebles, A., Mann, S., & Robb, M. B. (2022). Common Sense census: Media use by tweens and teens, 2021. San Francisco, CA: Common Sense.
- Tandon, P. S., Zhou, C., Hogan, C. M., & Christakis, D. A. (2020). Cell phone use policies in U.S. middle and high schools. JAMA Network Open, 3(5), e205183-e205183.
- Vogels, E.A., Gelles-Watnick, R., and Massart, N. (2022) Teens, Social Media and Technology 2022, Washington, DC: Pew Research Center.
- Weinstein, E., & James, C. (2022). Behind their screens: What teens are facing (and adults are missing). MIT Press.



Supplemental Tables

SUPPLEMENTAL TABLE 1. Select app categories: Average daily duration and percentage of daily use*

App Category	N (%) users	Average Daily Minutes (Median [IQR]**)	Range	Percentage of Daily Use (median)***
Overall	203 (100%)	266.5 [159.5 - 406.9]	2.7 - 976.1	-
Messaging	193 (95.1%)	4.1 [1.6 - 11.5]	0.01 -102.8	1.7%
Calls	181 (89.2%)	1.7 [0.6 - 3.8]	0.004 - 49.0	0.7%
Education	75 (36.9%)	0.8 [0.1 - 2.5]	0.004 - 65.1	0.3%
Video Chat	61 (30.0%)	0.3 [0.01 - 3.6]	0.002 - 136.8	0.1%
Reading	44 (21.7%)	1.8 [0.1 - 8.8]	0.001 - 273.8	0.7%
Art and Photos	192 (94.6%)	2.5 [0.7 - 5.8]	0.002 - 43.1	0.9%
Browser	200 (98.5%)	6.8 [2.2 - 17.3]	0.01 - 611.6	2.7%
Email	146 (71.9%)	0.5 [0.1 - 1.1]	0.002 - 24.1	0.2%
Social Media	153 (75.4%)	91.6 [21.7 - 195.7]	0.01 - 806.4	41.5%
Gaming	178 (87.7%)	25.1 [5.0 - 59.4]	0.002 - 681.2	10.9%
Live Gaming	15 (7.4%)	0.1 [0.01 - 0.3]	0.002 - 5.7	0.01%
YouTube	177 (87.2%)	44.3 [5.6 - 118.1]	0.01 - 613.2	19.3%
Streaming Video	93 (45.8%)	3.9 [0.2 - 18.3]	0.002 - 452.0	1.6%
Music and Audio	144 (70.9%)	2.4 [0.8 - 7.2]	0.002 - 102.6	1.0%
Shopping	79 (38.9%)	1.1 [0.3 - 3.6]	0.01 - 55.6	0.3%
Parent Controls	48 (23.6%)	0.1 [0.1 - 0.4]	0.002 - 47.8	0.1%
News and Magazines	11 (5.4%)	3.6 [0.4 - 7.8]	0.003 - 33.4	2.9%

*Calculated only among participants who used that app category.

** Median is the value that 50% of the users are under and 50% are over. IQR is the Interquartile Range, which is the middle 50% of users, with 25% of users under the first value and 25% of users over the second value.

***Percentage of daily use is calculated among those who use the app category and as a percentage of all their smartphone use in a day.

App Category	N (%) users**	Median (IQR) duration of daily use during school hours***	Percentage of school hours use***	Notifications received school hours (median [IQR])****	Notifications seen school hours (median [IQR])****
Overall	187 (96.9%)	42.7 [19.1 - 93.4]	-	50.1 [20.2 - 100.4]	12.6 [3.9 - 33.9]
Messaging	146 (75.6%)	1.5 [0.6 - 3.9]	3.8%	3.4 [1.0 - 9.5]	2.0 [0.6 - 5.3]
Calls	132 (68.4%)	0.4 [0.1 - 1.0]	1.1%	1.1 [0.4 - 2.1]	0.5 [0.3 - 1.2]
Education	51 (26.4%)	0.8 [0.1 - 1.9]	1.4%	1.4 [0.6 - 3.2]	1.1 [0.6 - 2.8]
Reading	23 (11.9%)	2.8 [0.1 - 5.7]	3.5%	0.7 [0.4 - 1.1]	0.6 [0.3 - 1.0]
Art and Photos	133 (68.9%)	0.9 [0.2 - 2.5]	1.5%	0.8 [0.4 - 1.7]	0.4 [0.3 - 0.7]
Browser	150 (77.7%)	1.6 [0.4 - 4.5]	3.5%	4.0 [1.9 - 6.0]	1.3 [0.6 - 2.5]
Email	69 (35.8%)	0.3 [0.1 - 0.7]	0.4%	2.4 [0.7 - 7.7]	1.2 [0.5 - 2.8]
Social Media	126 (65.3%)	15.0 [2.9 - 46.6]	32.3%	5.6 [1.5 - 19.0]	2.7 [0.8 - 11.3]
Gaming	119 (61.7%)	8.0 [2.7 - 18.4]	17.3%	1.3 [0.4 - 2.9]	0.8 [0.3 - 2.3]
YouTube	111 (57.5%)	11.3 [2.6 - 28.9]	25.7%	1.0 [0.5 - 3.4]	1.0 [0.4 - 2.7]
Streaming Video	30 (15.5%)	4.0 [0.1 - 13.7]	5.4%	0.3 [0.2 - 1.0]	0.4 [0.2 - 1.0]
Music and Audio	81 (42.0%)	0.8 [0.2 - 2.8]	1.6%	0.9 [0.5 - 2.4]	0.4 [0.2 - 1.2]
Shopping	37 (19.2%)	0.6 [0.1 - 1.4]	0.6%	1.0 [0.3 - 2.1]	0.8 [0.3 - 1.8]
Parent Controls	19 (9.8%)	0.1 [0.03 - 0.3]	0.2%	29.4 [0.7 - 45.6]	2.0 [0.7 - 5.1]

*For 193 participants enrolled from Aug. 29 on; holiday dates removed from analysis.

**Number (percentage) of participants who used the app category during school hours; this differs from the number of participants who received or viewed notifications.

***Calculated only among participants who used that app category.

 ${}^{****} Calculated only among participants who received or viewed notifications from that app category, respectively.$

App Category	N (%) users**	Median (IQR) duration of daily use during school night hours***	Percentage of school night hours use***	Notifications received school night hours (median [IQR])****	Notifications seen school night hours (median [IQR])****
Overall	114 (59.1%)	19.8 [1.1 - 46.1]	-	15.9 [4.7 - 47.6]	2.5 [0.6 - 8.1]
Messaging	27 (14.0%)	0.2 [0.03 - 0.8]	0.9%	0.5 [0.2 - 1.0]	0.3 [0.1 - 0.6]
Calls	9 (4.7%)	0.2 [0.03 - 1.2]	6.0%	0.5 [0.2 - 0.8]	0.4 [0.2 - 0.6]
Education	5 (2.6%)	0.1 [0.1 - 3.3]	0.5%	0.3 [0.2 - 0.5]	0.3 [0.2 - 0.5]
Reading	6 (3.1%)	13.9 [6.4 - 21.2]	18.2%	0.3 [0.2 - 1.0]	0.5 [0.2 - 0.6]
Art and Photos	24 (12.4%)	0.2 [0.1 - 2.0]	0.8%	0.3 [0.2 - 0.6]	0.2 [0.1 - 0.4]
Browser	49 (25.4%)	0.8 [0.3 - 4.2]	4.9%	3.5 [1.6 - 5.3]	0.6 [0.2 - 1.2]
Email	11 (5.7%)	0.5 [0.1 - 1.0]	0.6%	1.2 [0.3 - 4.3]	0.6 [0.3 - 1.0]
Social Media	60 (31.1%)	7.8 [1.3 - 29.1]	38.6%	1.2 [0.4 - 4.9]	1.0 [0.3 - 3.2]
Gaming	32 (16.6%)	9.0 [2.1 - 25.6]	29.0%	0.6 [0.2 - 1.1]	0.5 [0.2 - 1.0]
YouTube	54 (28.0%)	4.3 [1.4 - 29.7]	46.9%	0.8 [0.4 - 1.3]	0.4 [0.2 - 0.9]
Streaming Video	14 (7.3%)	2.4 [0.7 - 7.6]	5.1%	0.3 [0.2 - 0.5]	0.2 [0.2 - 0.3]
Music and Audio	18 (9.3%)	0.2 [0.1 - 1.0]	1.0%	0.8 [0.5 - 2.0]	0.2 [0.1 - 0.4]
Shopping	11 (5.7%)	0.2 [0.04 - 2.7]	0.3%	0.3 [0.1 - 0.5]	0.3 [0.2 - 0.6]
Parent Controls	3 (1.6%)	0.2 [0.1 - 4.1]	9.7%	15.3 [2.3 - 17.0]	0.4 [0.3 - 1.0]

SUPPLEMENTAL TABLE 3. Select app category duration and notification frequency on school nights*

*For 193 participants enrolled from Aug. 29 onward; holiday dates removed from analysis.

**Number (percentage) of participants who used the app category during school night hours; this differs from the number of participants who received or viewed notifications.

***Calculated only among participants who used that app category.

*****Calculated only among participants who received or viewed notifications from that app category, respectively.

About Common Sense

Common Sense is the nation's leading nonprofit organization dedicated to improving the lives of all kids and families by providing the trustworthy information, education, and independent voice they need to thrive in the 21st century. Our independent research is designed to provide parents, educators, health organizations, and policymakers with reliable, independent data on children's use of media and technology and the impact it has on their physical, emotional, social, and intellectual development. For more information, visit commonsense.org/research.



commonsense.org







Dangerous by Design

How Social Media Companies Are Hurting Our Kids, National Security, and Democracy and What We Can Do About It

Council for Responsible Social Media

A multi-sectoral group of leaders who are focused on finding solutions to the harms social media is causing to our kids, national security, and democracy.

Co-chair Dick Gephardt

Fmr. Congressman (D-MO) and Majority Leader

Co-chair Kerry Healey

Fmr. Lieutenant Governor (R) of Massachusetts

Imran Ahmed

Founder and CEO of the Center for Countering Digital Hate

Danielle Allen

Professor at Harvard University and Director of the Democracy Renovation Lab

Nora Benavidez

Senior Counsel and Director, Digital Justice and Civil Rights at Free Press

Sophie Beren Founder and CEO of The Conversationalist

Joel Bervell

TikTok disinformation specialist, member of White House Healthcare Leaders in Social Media Roundtable

Kristin Bride Social media reform advocate

John Bridgeland

Co-chair and CEO of More Perfect and fmr. Director of the White House Domestic Policy Council

Cheri Bustos

Fmr. U.S. Congresswoman (D-IL)

Susan Coppedge

Fmr. U.S. Ambassador-at-Large for the Office to Monitor and Combat Trafficking in Persons and Executive Director of the Georgia Legal Services Program

Jiore Craig

Head of Digital Integrity at the Institute for Strategic Dialogue

Timothy Dalrymple President and CEO of Christianity Today

Renée DiResta

Technical Research Manager at Stanford Internet Observatory

Linda Douglass

Fmr. Global Head of Communications for Bloomberg, Senior Vice President at Atlantic Media, and Communications Director in the White House's Office of Health Reform

R.P. Eddy

CEO of Ergo and fmr. Director of the White House National Security Council

Laura Edelson

Assistant Professor of Computer Science at Northeastern University, Co-director of Cybersecurity for Democracy, and fmr. chief technologist at the Department of Justice's Antitrust Division

Yaël Eisenstat

Vice President of the Center for Technology & Society at the Anti-Defamation League

Craig Forman

Fmr. CEO and President of McClatchy, Executive Chairman of the Center for News, Technology & Innovation

Mary Anne Franks

Professor of Intellectual Property, Technology, and Civil Rights Law at the GW Law School; President and Policy Director of the Cyber Civil Rights Initiative

Dan Glickman

Fmr. Secretary of Agriculture and Congressman (D-KS)

Nancy Gibbs

Fmr. Editor of TIME and Director of the Harvard Shorenstein Center on Media, Politics and Public Policy

Josh Golin

Executive Director of Fairplay

Porter Goss

Fmr. Director of the CIA and Congressman (R-FL)

Jonathan Haidt

Professor of Ethical Leadership at New York University Stern School of Business, social psychologist, and best-selling author

Chuck Hagel

Fmr. Secretary of Defense and U.S. Senator (R-NE)

Tristan Harris Co-founder and Executive Director of the Center for Humane Technology

Frances Haugen Facebook whistleblower and tech expert; Founder of Beyond the Screen

Steve Israel Fmr. Congressman (D-NY), Director of the Institute of Politics and Global Affairs at Cornell University

Emma Lembke Founder of LOGOFF and Co-founder of Design It For Us

Herb Lin Senior research scholar for cyber policy and security at Stanford University

Nathaniel Lubin Fmr. Director of the Office of Digital Strategy at the White House

Mary Mazzio Documentary filmmaker

Claire McCaskill Fmr. U.S. Senator (D-MO)

Sean McGarvey President of North America's Building Trades Unions

Manu Meel CEO of BridgeUSA

Bill Owens Fmr. Vice Chairman of the Joint Chiefs of Staff and U.S. Navy Admiral

Farah Pandith

Fmr. Member of the Homeland Security Advisory Council, State Department Special Representative to Muslim Communities

Leon Panetta Fmr. Secretary of Defense, Director of the CIA, White House Chief of Staff, and Congressman (D-CA)

Zamaan Qureshi Head of Digital Strategy at the Real Facebook Oversight Board and Co-founder of Design It For Us

Anjana Rajan Fmr. Chief Technology Officer of Polaris

Maria Ressa Recipient of the Nobel Peace Prize, Founder and CEO of Rappler **Reid Ribble**

Fmr. Congressman (R-WI)

Denver Riggleman

Fmr. Congressman (R-VA) and Senior Technical Advisor to the U.S House Select Committee on the January 6 Attack on the U.S. Capitol

Michael Rogers

Fmr. Director of the NSA and U.S. Navy Admiral

Vivian Schiller

Executive Director of Aspen Digital, fmr. President and CEO of NPR, Global Chair of News at Twitter, and General Manager of NYTimes.com

Chris Shays

Fmr. U.S. Congressman (R-CT)

Craig Spencer

Associate Professor of the Practice of Health Services, Policy, and Practice at Brown University

Jamie Susskind

Best-selling author and barrister

Jason Thacker

Chair of Research in Technology Ethics at the Southern Baptist Convention's Ethics and Religious Liberty Commission

Tommy Thompson

Fmr. Governor of Wisconsin (R) and Secretary of Health and Human Services

Nicole Tisdale

Fmr. Director for the National Security Council

Danny Weiss

Chief Advocacy Officer at Common Sense Media

Tom Wheeler

Fmr. Chair of the Federal Communications Commission

Isabelle Frances Wright

Head of Technology and Society at the Institute for Strategic Dialogue and fmr. Global Election Integrity Policy Lead at TikTok

Layla Zaidane

President and CEO of Future Caucus

Contents

Executive Summary	5
Broken Promises	6
The Addiction Playbook	9
We Will Be Doomed if We Do Nothing	
A Tipping Point	13
Congress Must Act	17
PART I How Social Media Works Against Us	20
Social Media Platforms Are Engineered to Be Addictive	21
The Data Harvested Is Abundant — and Lucrative	
How Paid Ads — and Targeting Children — Make Social Media Platforms Money	23
Social Media Amplifies Outrage	
Social Media Boosts Extremism	
Social Media Platforms Operate Without Any Accountability	
The Threat of Artificial Intelligence	27
PART II Threats to Kids	
Social Media Is Addictive and Rewires Children's Brains	
Social Media Is Damaging Kids' Health	
Social Media Amplifies Bullying	
Social Media Promotes Deadly Challenges	
Social Media Links Kids to Predators	35
Social Media Erodes Support for Democracy	
Among the Next Generation of Citizens	
PART III Threats to National Security	
Adversaries Want to Take Down Democracy	
Social Media Is a Tool for Bad Actors	
Social Media Increases Radicalization	41
Why Dictators and Autocrats Are Drawn to Social Media	
How Russia Uses Its Social Media Manipulation Playbook Around the World	
Social Media and Russia's Invasion of Ukraine	
Russia and Other Foreign Adversaries Attempt to Influence U.S. Elections	
The Problem With TikTok	
Not Doing Enough This Cannot Be Left Unchecked	
This Cannot Be Left Unchecked	
PART IV Threats to Democracy	54
Social Media Fosters Disengagement	
Social Media Creates Toxic Wedges in Society	
Social Media Enables Threats Against Public Servants	
Social Media Weakens Our Institutions	
Social Media Threatens Democracy Worldwide	
Social Media-Fueled Atrocities in Myanmar and Ethiopia: Case Studies	
Social Media Threats Can Be Tackled	
A Call to Action: It's Time to Create a Healthier	

Online Ecosystem by Default and by Design	.64



Executive Summary

Americans of all political persuasions are right to be concerned about unchecked social media. Manipulative social media products are robbing children of their social skills, human relationships, and childhood innocence, and our children's mental health is at a crisis point. Our adversaries are using the online information environment to fundamentally undermine U.S. national security and attempt to weaken our bedrock principles of freedom and self-determination. Our private data is pervasively monitored, sold, and used to suck us in, keeping our attention fixed on social media platforms for profit. Social media platforms push us deeper and deeper into information silos that are not reflective of reality and divide us — at dinner tables, in the workplace, and on Capitol Hill - making political compromise a near impossibility. No democracy can survive such an assault.

As an industry, social media is largely unregulated, and social media companies are free of any liability for the harms they cause. Moreover, the rise of next generation artificial intelligence (AI) will make everything that's bad about social media worse, offering targeted opportunities for tech companies to profit from our addiction while leaving behind swaths of destruction.

This isn't a future technology crisis. It's happening now. It's clear the initial promises of social media are now outweighed by the harms. But this crisis can be averted. It's time for Congress to act with legislation to tip the scale toward citizens by creating commonsense safeguards for social media companies. As a nation, we need a more responsible social media environment that supports and enhances a healthy democracy and civil society. With responsible design and operations, social media technologies can nourish, rather than erode, our society, our well-being, and our democracy.

Broken Promises

Since Facebook (now Meta) was launched in 2004, it has promised to serve as a new platform to "give people the power to build community and bring the world closer."¹ Within a decade of its creation, Facebook attracted more than a billion users around the world. YouTube, Twitter (now known as X), Instagram (now owned by Meta), TikTok, and others followed, rewarding their investors with trillions of dollars, while promising to unite, inspire, and inform. Today, Meta's market capitalization is valued at \$840 billion, and the market capitalization of Alphabet, the parent company of Google and YouTube, is \$1.7 trillion. Combined, these amounts are larger than the gross domestic product (GDP) of nations such as Australia, Canada, and Russia.

Today, it is clear that social media has reneged on its

promise. Driven by opaque algorithm-based delivery, social media has unleashed systems that are designed to reward division and outrage and undermine our trust in others and views of ourselves. In the absence of responsible safeguards, social media companies have consistently made decisions that maximize profits at all costs, leaving users with broken children, divided communities, and weakened democracies.

Today, it is clear that social media has reneged on its promise.

Our Democracy Is At Risk

Democracy is being undermined by foreign interference and the spread of false information.

Democracy in the United States — and around the world - is being undermined by foreign interference and the spread of false information, including deepfakes generated by bad actors, some of whom use artificial intelligence. Democracy only works with a high degree of trust in shared facts and good intentions across the aisle. Social media profits by attacking both of those. Today's unchecked social media accelerates polarization, amplifies extremism, and challenges the rule of law. In 2016, social media was exploited and weaponized by Russia to influence our elections, fomenting widespread distrust in election results. In the 2020 elections, social media was again used to exacerbate existing tensions within our society. Those who deny the results of free and fair elections continue to cast a long shadow across our political system. Falsehoods about our electoral system have contributed to threats to poll workers and legislation that has politicized, criminalized, and interfered with elections.² For public servants, harassment and threats have become commonplace. Their workplaces are increasingly dangerous. Content designed to divide and enrage creates toxic wedges within communities, weakening our civic bonds and leading to a generation being raised in a "post-truth" environment. Beyond the United States, social media platforms have fueled conflict resulting in atrocities, including genocide and ethnic cleansing, in Myanmar, Ethiopia, and other corners of the globe. Across the world, democracy is on the decline. Since 2012, when Facebook announced it had reached one billion users, the number of "free" countries that have registered overall declines in political rights and civil liberties has increased, according to the nonprofit research organization Freedom House.³ Social media is lauded for promoting freedom of expression, a hallmark of democracy. But it fails to protect privacy, doesn't give equal weight to all voices, amplifies the most extreme content, and empowers intimidation and harassment. This cycle can fuel violence, as we saw in the United States on January 6, 2021, when insurrectionists attacked the country and overran the Capitol trying to stop the counting of Electoral College votes. Generative artificial intelligence will exacerbate these harms. Earlier this year, for instance, a deepfake of an explosion at the Pentagon went viral and caused the stock market to dip.4



"We are in the middle of a national youth mental health crisis, and I am concerned that social media is an important driver of that."

U.S. Surgeon General Vivek H. Murthy

Our national security is under attack. Social media platforms are porous, making it easier for bad actors to access private information, track users, and spread lies. Russia has expanded its ability to unleash propaganda around the world, promoting its anti-West views on a global stage.⁵ Its invasion of Ukraine marked an escalation in Russia's longstanding information operations against open democracies. TikTok, under the influence of the Chinese Communist Party, has access to a vast amount of private data, which can be used in information wars against its adversaries.⁶ Both internal and external bad actors continue to weaponize social media today to weaken democracy in the United States. Some social media companies continue to generate pages for terrorist groups like ISIS to use, while others direct casual social media users to the pages of extremists through their algorithms.7 Social media companies' approach to mitigating these problems is ad hoc, at best.

We face a crisis among our young people. Children and teens, addicted to their phones and social media, are experiencing dramatically higher rates of anxiety, depression, and suicidal ideation. Girls are particularly vulnerable to this phenomenon, triggered by content that celebrates unhealthy social comparisons and eating disorders — content which is served up by social media companies' profit-driven algorithms. The Centers for Disease Control and Prevention's 2023 youth risk behavior survey found that nearly three in five teen girls (57%) said they felt "persistently sad or hopeless" — the highest rate in a decade.⁸ And 30% said they had seriously considered suicide, a percentage that's risen by nearly 60% over the past 10 years.⁹ Today, even one Fortune 500 company, Unilever, the parent company of Dove, is running advertising campaigns to raise awareness of the need for federal legislation to protect children's mental health.¹⁰ Young peoples' sense of self and reality, their attention spans, and their social lives are all being hijacked before their brains are fully formed. An overwhelming 91% of young people say they get their news from social media.¹¹ Yet relying on social media for news leaves young people vulnerable to lies, extremist voices, and ideologies that are counter to democracy, most notably state-controlled propaganda. We face the risk that young people will simply burn out and give up on democratic processes, fully embrace extremism, and never learn how to effectively seek compromise —

a necessary skill in governing any community. Further, overexposure to social media has made children vulnerable to cyberbullying, dangerous viral challenges, and predation, all of which have extinguished young lives. Worst of all, these platforms know the harm they are causing. According to leaked materials, Meta has internal research showing that Instagram's business model and algorithmic feed create "a perfect storm" of eating disorders, body dissatisfaction, and depression in teenage girls.¹² According to a poll conducted for Issue One by Luntz Global, one in three Americans know someone who has been mentally or physically harmed by social media — including nearly two in three Americans between the ages of 18 and 29.¹³

The Addiction Playbook

We didn't get here by accident. Social media companies' business models are about maximizing ad revenue at all costs. The technology is modern, but the playbook is not. Social media is following the same track as Big Tobacco and opioid manufacturers. The strategy: Design an addictive product, market it as safe and healthy for everyone (especially children), and turbocharge profits. Use the earnings to fund biased research showing how healthy the product is and suppress the internal research that shows otherwise.¹⁴ When the truth starts to emerge and the public begins to speak up about the damage done, point the finger elsewhere. While opioid manufacturers blamed users,¹⁵ Big Tech companies have said the onus is on parents to protect children from their addictive products.¹⁶ And when all else fails, hire an army of lobbyists and flood the campaign process with money to quash any action.¹⁷

Tech companies have spent tens of millions of dollars funding academic research related to regulatory and ethical issues with their products. Google alone has funded more than 300 research papers on tech regulation.¹⁸ Big Tech is working behind closed doors to influence the rhetoric, tone, and ultimate outcomes of tech research to benefit their financial goals. And in Washington, Facebook's parent company Meta and Google's parent company Alphabet spent \$32 million on lobbying last year alone and combined to employ 171 lobbyists — or about one lobbyist for every three members of Congress.¹⁹ Social media can help make our children, communities, and democracy healthier, or it can lead us toward a bleak, fundamentally divided future. The reality today is that social media does not answer to anyone. The Federal Trade Commission must monitor and enforce consumer protection and antitrust violations across nearly every commercial sector, leaving it overburdened, understaffed, and outgunned relative to Big Tech. Shareholders in the tech companies are increasingly disempowered by dual-class share structures that weaken accountability and give executives the ability to overrule large swaths of shareholders.²⁰ And Section 230, a federal regulation created almost three decades ago, shields social media companies from any liability for damages caused by content.

With virtually no external accountability or oversight and virtually no transparency about internal machinations (including increasingly addictive design features and what content they push to which users), social media companies are free to amplify the addictive aspects of their product, no matter how destructive. All the while, those who have been harmed are left with little recourse, and individuals, families, states and the federal government are left to clean up after the damage is done.

With both the tobacco and opioid industries, decades of hidden research and failures to disclose and manage known risks led to generations of addicts, disease, enormous health care costs, and death. Ultimately, multibillion-dollar settlements, many led by states' attorneys general, led to reform. Social media and artificial intelligence, meanwhile, are far more pervasive and a greater existential threat to our national fabric than any industry we've faced before. We don't have decades to fix this problem.

We are at a tipping point. Social media can help make our children, communities, and democracy healthier, our future brighter, and our national security stronger — or it can lead us toward a bleak, fundamentally divided future, where the values we share have been corroded, citizens have given up on the democratic process, and lies are indistinguishable from the truth online.



Here's how society will look if we don't take action against manipulative social media companies.

We Will Be Doomed if We Do Nothing

History has shown that industries like tobacco and opioids — and now, social media companies — are unwilling to do the right thing, despite rising evidence that their lucrative business models are catastrophic, until they are forced to do so. In the case of social media companies, failure to act will contribute to a system that amplifies destruction — of people, of social fabrics, and of democracy itself.

Let's look into the future, which is not far off, to see how society may look if we continue without taking on unchecked, manipulative social media companies.

Imagine our nation's youth unable to escape this crucible of a hyper-polarized information environment, never learning how to effectively seek compromise with those who have differing beliefs and opinions and being confronted daily with artificial intelligence content so sophisticated it's impossible to tell the difference between truth and lies. Without corrective actions, our children will grow up entwined with their devices, as tech companies extract their data for profit, and young lives will be dictated by a blue glow of a screen — a glow that will lead many to darkness. Americans will watch in horror as cyberbullying, eating disorders, dangerous viral challenges, and suicides destroy young lives across the nation, extinguishing the talents of young leaders before they have a chance to blossom and thrive.

Imagine an entire generation, raised on angst, fear, and deepfakes, receiving all of its information from social media, civically disengaged and vulnerable to the anti-democratic agendas of China, Russia, and other adversaries. We know it will only become easier and cheaper to produce dangerous content, as social media companies continue to roll out new products with a full array of artificial intelligence tools that will make everything that's bad about social media worse.

Picture a system so weakened by distrust that Americans simply disengage from civic participation, or worse, actively reject the results of fundamental democratic processes like elections. We're not far off from a reality rife with radicalization and plagued with polarization, where extremism flourishes in our domestic discourse and where Americans fail to recognize any shared values between themselves and their neighbors who do not share a common ancestry, ethnicity, race, religion, or political identity.

Envision global instability, with shifting borders and unstable geopolitical balances, driven by falsehoods, conspiracy theories, and violence. Picture every shred of users' private online lives being accessed by foreign adversaries, with large chunks of supposedly private data being traded away and shared with terrorists and anti-West propagandists to divide countries, communities, and neighbors against each other. And think about fledgling democracies around the world watching, while the nation that has been a shining beacon of freedom and democracy for more than two centuries falters.

Scores of democracies around the world, including the United States, will be holding critical elections in 2024. Within each election, there are risks of interference by bad actors and authoritarian regimes who are trying to use social media to sow discord and division. If the United States and other democracies let their guard down, these

Imagine an entire generation civically disengaged and vulnerable to the anti-democratic agendas of our adversaries.



"It should not take grieving parents filing lawsuits on behalf of their dead children to hold this industry accountable for their dangerous and addictive product designs."

Kristin Bride Member of the Council for Responsible Social Media bad actors will see their influence expand in both the shortterm and possibly for generations to come. As autocratic leaders around the globe weaponize our own companies and values — against us, countries such as China, Russia, Iran, and other adversaries will continue to build their influence around the world in places like Africa, Asia, and Latin America. The American experiment of democracy could eventually be viewed by much of the world as a failure, rather than an aspirational goal, and more nations will fall to authoritarian models.

This is our future if we do nothing. This will be our reality if we allow unbridled private companies to determine the future of humanity based on their narrow self-interests rather than governments taking the lead by establishing responsible safeguards. Without reform, the youth mental health crisis will continue to embed itself in our society, and democracy. With kids losing hope in themselves, and their future, they will turn away from democracy. No election will be considered legitimate, which will make governing nearly impossible. The concept of "truth" will be an arbitrary definition, resulting in widespread distrust and a lack of common facts. Public service will be avoided because it will simply be too dangerous. And further generations of children will also grow up addicted to their high-tech devices and all the harms that go along with them.

As bleak as this outcome is, we can still choose another path. Social media intended to connect us and bring us closer together. It still can. But the social media industry won't reform itself. **We can protect our children, communities, and national security with commonsense, bipartisan solutions that factor in more than the profits of a handful of companies. We can't wait any longer.**

A Tipping Point

Now is the time to step back and see social media for what it is. Social media is an industry, a communications utility we've readily come to rely on. **We've allowed the social media industry to drive the narrative that its growth and unfettered role in society should not be tampered with by any laws or regulations. That narrative is wrong.** Social media cannot be allowed to continue as is. Our nation cannot let a handful of tech companies dictate the destiny of our democracy, our children, and our national security.

Social media cannot be allowed to continue as is.

As Americans, we embrace innovation and free markets, and welcome new technologies that make our lives better. Yet there has always been an inflection point when the public demands laws and regulations that protect our health and safety. Planes, trains, automobiles, banking, food, drugs, and telecommunication are all regulated to ensure standards to keep people from harm. If harm occurs, there is legal recourse. Social media also must be regulated to protect our children and our society. It's not too late for lawmakers to implement commonsense safeguards for social media.

Americans want social media reform. A recent national poll conducted by Citizen Data for Issue One and the Council for Responsible Social Media found that an overwhelming majority of Americans support creating guardrails for social media platforms.²¹ Eight out of 10 surveyed — including 84% of Republicans and 83% of Democrats — want to hold social media companies accountable for the harm they are doing, and strongly support federal legislation that increases transparency, ensures privacy, and protects children.

Issue One's poll is not an outlier. Last year, a Pew Research Center survey showed that 64% of Americans believe that social media has been more of a bad thing for democracy.²² 79% say that the internet and social media has made people more divided in their political opinions.²³ 69% feel that that instant connection we found on our screens made people less civil in the way they talk about politics.²⁴ Parents have testified before Congress that social media has devastating effects on their children.²⁵ At least 34 states have introduced legislation to crack down on social media in an effort to protect citizen's privacy and safety.²⁶ Even teens are organizing to fight back against social media, which is becoming an existential threat to their lives.²⁷

Emma Lembke, college student, founder of Design It For Us, and a member of the Council for Responsible Social Media, has called for a more robust strategy to protect kids online: "Social media is designed to get young people hooked and keep them hooked," she told Issue One. "It's robbing us of our time and energy to be kids. While there are many benefits to



Emma Lembke Member of the Council for Responsible Social Media and founder of Design It For Us

an interconnected, online world, the harms are also very real and cannot be ignored. We need social media companies to adopt commonsense safeguards for the designs of their products, and we need those safeguards now."

Likewise, Council for Responsible Social Media Co-chair Dick Gephardt, a former majority leader in the House of Representatives, told Issue One: "In all my years in Congress, I never saw as much energy and bipartisan agreement as we're seeing with the push to reduce the harms of unchecked social media to our kids and our communities. Parents across the nation are worried about their kids, and every single member of Congress is seeing social media tear our country apart. Enough! There are solutions with strong bipartisan support. Now is the time for Congress to get a meaningful bill across the finish line to rein in social media."

Parents across the country are ready for meaningful action against social media companies. As Brittany, a North Carolina mother who participated in a focus group conducted earlier this year by Issue One, said, "They are destroying the next generation for profit, or maybe for more nefarious purposes, but they know what their technology does to children's brains... Most of the Silicon Valley executives and CEOs know how bad social media is for their kids, so they don't let their kids use it. But they want all of our kids addicted to it."²⁸

This fall, 41 states sued Meta, claiming that Instagram and Facebook are addictive and harmful to children. The complaint alleges that Meta engaged in a "scheme to exploit young users for profit" by misleading them about the prevalence of harmful content and safety features, all while violating federal privacy laws.²⁹

This lawsuit is the clearest sign yet that action from Congress to enact responsible safeguards is long overdue. Litigation is no substitute for legislation. Congress also needs to step up with solutions that hold social media companies accountable. It's time to put our children, our democracy, and our national security before Big Tech profits.

By the Numbers: Why It's Time for Social Media Reform

"Most of the Silicon Valley executives and CEOs know how bad social media is for their kids, so they don't let their kids use it. But they want all of our kids addicted to it."

Brittany Mom from North Carolina

80%	of Americans hold social media responsible for bullying, childhood mental health struggles, and the spreading of false information and conspiracy theories.
80%	of Americans are concerned that unchecked advanced AI will make social media more harmful for children.
76%	of Americans agree that social media companies have a responsibility to design their platforms in a way that protects the mental health of children, even if these practices limit corporate profits.
71%	of Americans see social media's impact on children as more negative than positive.
68%	of Americans would support legislation requiring social media platforms to make their products and algorithms available for independent review.
67%	of Americans would support legislation requiring social media platforms to make their products and algorithms available for independent review.
66%	of Americans agree that Congress isn't doing enough to hold Big Tech accountable for the harms caused by their social media platforms.
64%	of Americans between the ages of 18 and 29 have been or know someone who has been harmed by social media, as do 33% of all Americans.
58%	of Americans would be more likely to support their elected officials in a reelection if they supported laws to increase requirements on the way that social media platforms collect and use data. ³⁰

Congress Must Act

Now is the time to focus on bipartisan federal solutions. Legislation already exists and is advancing to take on this challenge. Lawmakers on both sides of the aisle agree that commonsense safeguards for social media are needed. Their constituents tell them every day that this is a problem that begs to be solved. It's time for action.

State lawmakers have been responding to public demand for change and are demonstrating resolve and leadership to take on social media. But efforts must be at the federal level as well.

We need sweeping legislation guided by these core principles:

- > Our children, our communities, and our national security must come first. No longer can Big Tech be allowed to design addictive products, harvest user data, and manipulate users to maximize their profits with no regard to the consequences.
- Americans have a fundamental right to privacy. Congress must stop social media platforms from collecting our information without permission, and collect only the data they need to operate effectively and in the interest of consumers.
- Social media products must protect the mental, physical, and developmental health of American children by design and by default. This includes ending addictive practices like the endless scroll and targeted advertising to minors.
- We have a right to know how social media technology is controlling the content we see and to understand the impact on our health and well-being. Parents, policymakers, researchers, and all Americans should be able to easily understand how these platforms are designed and operated.
- Social media platforms must adopt safeguards to prioritize fact-based information to stop foreign and domestic adversaries from spreading false or misleading information.
- Social media companies must be open and transparent. Social media's secretive nature makes it nearly impossible to design effective, fact-based policies. Laws that require that social media companies make information available to researchers and the public including statistics about content moderation, data about viral content, and descriptions of recommendation algorithms would be

an obvious starting point. That would mean regular and complete disclosure of key design, content, and data-collection decisions. This transparency must also include information relating to online advertising and content pushing, including microtargeting, in order to prevent the amplification of harmful content.

- Social media platforms must no longer be used as tools by foreign and domestic adversaries. Congress must mitigate the ability for bad actors to use social media to sow distrust in American institutions, recruit and radicalize, and threaten our national security.
- Social media companies' core business model must be fundamentally changed away from the pervasive monitoring, tracking, and sale of user data. Comprehensive privacy protections are crucial to restore user ownership of their own data and end social media's extractive, manipulative practices.
- Social media companies must reverse the tide of self-perpetuating echo chambers on their platforms. For social media companies to live up to their own missions to "bring the world closer," they must rethink systems that send users to their extreme corners.
- Social media companies must stop using algorithms to elevate the most extreme content. Algorithms that amplify inflammatory content, filter users into rabbit holes of questionable content, and recommend joining hate groups must be redesigned.
- Social media platforms should adopt measures that slow down the speed at which things are shared and cause people to pause and think before sharing harmful or untrue content. Creating "friction," or pauses, in the system to slow down the spread of material can and should be built into the platforms.
- Social media companies must build better capacity to ensure veracity. If a social media company provides its services anywhere, its value of sharing accuracy and facts must be included and built into the platforms, including overseas.

These principles are strong, and represent a significant departure from the current operating procedures of Big Tech. There are clear actions lawmakers can take based on these principles.

Some recommendations are already moving forward. The United Kingdom's Age Appropriate Design Code establishes a powerful legal responsibility for online platforms to design their products and services in the "best interests" of users under the age of 18.³¹ The European Union's Digital Services Act package builds on the EU's world-leading data privacy standards by adding new risk mitigation standards, transparency practices, and oversight regimes, as well as requiring social media platforms to proactively create healthier online spaces for the 450 million citizens of the European Union.³²

Americans have far fewer digital rights and safeguards, and American tech companies are actively working to prevent the same standards here in the United States. However, U.S. lawmakers are advancing a number of strong proposals that would make social media safer and healthier.

The bipartisan Kids Online Safety Act (KOSA) follows a similar "safety by design" format and requires social media platforms to affirmatively mitigate key, defined harms, including anxiety, depression, eating disorders, addiction, bullying, sexual exploitation, and the sale of illicit drugs to minors. KOSA would also mandate the strongest safety settings by default and give kids tools to disable addictive product features and opt out of manipulative algorithmic recommendations.³³ These are excellent steps forward.

Another promising legislative solution is last year's American Data Privacy and Protection Act.³⁴ This would establish requirements for how companies handle personal data, which includes information that identifies or is reasonably linked to a person. As is, social media platforms can easily track data to individual behavior and location. This must end.

Now is the time for Congress to step up and step in. We need the political will to acknowledge that this is the tipping point for our society, between healthy and unhealthy, safe and unsafe, productive and destructive — and move forward on the side of social media that supports and enhances a healthy democracy and civil society.

To quote Council for Responsible Social Media member Frances Haugen, the former lead product manager on Facebook's civic misinformation team who ultimately decided to blow the whistle on her employer, "We can have social media we enjoy, that connects us, without tearing apart our democracy, putting our children in danger and sowing ethnic violence across the world. We can do better."³⁵



PARTI How Social Media Works Against Us

Social media platforms run on the pervasive and largely imperceptible extraction, manipulation, and sale of users' behavioral data. Every moment online is aggregated into a profile that is used not just to sell us shoes, but to maximize the efficiency of the model itself — keeping our attention longer with inflammatory content and steering us into information silos. All of this is done to maximize profit. Today, Meta's market capitalization is valued at \$840 billion, and Alphabet's is \$1.7 trillion. Combined, these amounts are larger than the GDP of nations such as Australia, Canada, and Russia. Anyone who downloads a social media app today and creates an account forfeits any right to privacy for any data they provide. Social media companies, meanwhile, offer almost no transparency as to how they use the data, and they have no liability to address damages caused by content posted on their platforms. To reform social media, it's important to understand how it works — what drives the industry that has changed our lives and is shaping the next generation of American citizens from their earliest years.

Social Media Platforms Are Engineered to Be Addictive

The content we receive on our social media "feeds" is by design, driven by algorithms that filter and organize every social media application. Each of these algorithms are unique and based on each social media company's direction, and can evolve and change. Algorithms are largely developed by humans, but once they're completed, automation takes over, and increasingly, this automation is governed by artificial intelligence. They are engineered for engagement, connectivity, virality, and, most importantly, profit.

One major problem is that algorithms are secret and not shared with users or researchers. Social media companies are in the driver's seat, but they haven't shared the destination, route, or speed. Users are just along for the ride. That ride often leads users into informational bubbles and down rabbit holes of content that is not factual. Yet across every product, **the No. 1 goal is to keep users engaged on addictive platforms, which allows social media companies to serve ad after ad to maximize their profits.**

The Data Harvested Is Abundant — and Lucrative

The data that social media companies collect from users is extremely valuable.

How pervasive is this data collection? Let's use TikTok as an example. TikTok collects data that includes information about the device being used, its location, IP address, search history, the content of messages, what was viewed, and for how long.³⁶ It also collects device identifiers to track

Addictive platforms allow social media companies to maximize profits. interactions with advertisers. In the United States, TikTok can collect biometric information including face and voiceprints.³⁷ Then, using a combination of other collected behavioral data, TikTok "infers" factors such as the user's age range, gender, and interests.

TikTok is not unique. Twitter,³⁸ YouTube,³⁹ Snapchat,⁴⁰ and Meta⁴¹ — which owns both Facebook and Instagram — all collect similar data. Users provide more information by posting about where they work, life events, surveys, "likes," and searches. This data is continuously harvested, even when users aren't using their apps, with tracking cookies.

How social media platforms create their algorithms remains stunningly opaque. All the while, how social media platforms create their algorithms or share and use their data remains stunningly opaque. Efforts to collect data to study or analyze information tightly held by the social media companies are often thwarted or skirted, while internal transparency efforts are underfunded or marginalized. Even congressional testimony and reports from companies to their own boards of directors have proven to be vague, incomplete, and outdated.

Testifying before Congress, Facebook whistleblower Frances Haugen said the company's leadership "keeps vital information from the public, the U.S. government, its shareholders, and governments around the world."⁴² Similarly, Twitter whistleblower Peiter "Mudge" Zatko told Congress that the company's executives "misled its board of directors, regulators, and the public," adding that "Twitter's security failures threaten national security [and] compromise the privacy and security of users."⁴³

The data and its use by the algorithm-driven industry is what separates social media from any other mass media. Social media can efficiently deliver content, even if it's false, dangerous, or inciteful, at lightning speed to millions, with incredibly calibrated microtargeting to reach specific demographics. No other media can do that as swiftly, precisely, or potentially catastrophically as social media. Ad spending on social media platforms is projected to reach \$207 billion in 2023.

About one-third of parents of kids aged 7 to 9 say their children use social media.

How Paid Ads — and Targeting Children — Make Social Media Platforms Money

Paid advertising is where the money is for social media platforms. **In 2023, ad spending globally on social media platforms is projected to reach \$207 billion.**⁴⁴ For Meta, advertising accounted for 97% of the company's overall revenue in the fourth quarter of 2022.⁴⁵ Advertising is really the business of social media; everything else is a sideshow.

Effective microtargeting and enormous reach are what drives social media advertising sales. Those capabilities are possible because of the persistent and extensive harvesting and analysis of users' behavioral data and the addictive pull of social media.

To keep this money train running, social media companies think long term. That's why attracting and addicting children to social media is a top priority. As Chris Griswold, policy director at American Compass, has said: "When it comes to social media's economic imperatives, nothing could be a more vital strategic priority than recruiting and retaining the youngest users."⁴⁶

Social media's effort to design products that are addictive to kids is paying off. **In 2021, about 50% of parents of children aged 10 to 12 reported that their children used social media, as did about 32% of parents of children aged 7 to 9.**⁴⁷ These kids are providing data about themselves to profit-driven companies while being exposed to a world of dangerous and manipulative content. Meanwhile, cracking down on hazardous content geared toward kids has consistently been too little too late, or not at all, by social media companies. As Facebook whistleblower Frances Haugen has said: "I saw that Facebook repeatedly encountered conflicts between its own profits and our safety. Facebook consistently resolved those conflicts in favor of its own profits."⁴⁸ The most powerful emotion social media uses to boost content is outrage.

Social Media Amplifies Outrage

To maximize their profits, social media platforms need to increase the number of people who see and react to the content. **Emotions are at the heart of this engagement model. They drive why some posts prompt greater likes, retweets, shares, or views than others. And the most powerful emotion social media uses to boost content is outrage.**

Researchers have found that social media posts on polarizing issues (such as gun control, marriage equality, and climate change) that used "moral-emotional language" spread more quickly to more users.⁴⁹ Adding a word of moral outrage to a tweet increased the rate of retweets by 17%.⁵⁰

Further, posts about the "out-group" were shared or retweeted about twice as often as posts about the "ingroup," researchers have found. **Every term referring to "the others" increased the odds of a social media post being shared by 67%.**⁵¹

Outrage also boosts information that is simply false. MIT researchers found that **falsehoods are 70% more likely to be retweeted on Twitter than the truth and reach an audience six times faster.**⁵² Research at Yale University showed that on Twitter, "moral outrage expressions" are "significantly associated with increased engagement with misinformation." Yale Assistant Professor Molly Crockett summarized the findings this way: "If moral outrage is a fire, social media is like gasoline."⁵³

There's a substantial overlap between outrage and hate speech, meaning that **engagement-based algorithms may** facilitate the spread of hate speech online.⁵⁴

"There's a market for reasoned debate out there, but there seems to be a bigger market for really outrageous or extreme claims," said Jonathan Nagler, a co-director of New York University's Center for Social Media and Politics.⁵⁵

According to a *Wall Street Journal* report, an internal Facebook research team told the company in 2018 that "algorithms exploit the human brain's attraction to divisiveness." Left unchecked, Facebook would show users "more and more divisive content in an effort to gain user attention and increase time on the platform."⁵⁶ When this team brought proposed changes to Facebook CEO Mark Zuckerberg, he reportedly rejected them because he was worried they would hurt what he saw as the most important priority: engagement. This is a quintessential example of a social media executive not caring about any of the harmful consequences of their products. And this entire process happened behind closed doors.

Social Media Boosts Extremism

That outrage-driven social dynamic also fuels extremism. While social media companies have moved away from their original mission to connect users to their friends and family, these platforms still have an immense ability to steer users to other like-minded users and build coalitions on a global scale.

Facebook has long been aware of its platform's aggravated polarization and "tribal behavior," and it initially explored ways to address this problem.⁵⁷ In 2016, an internal Facebook investigation found that **"64% of all extremist group joins are due to [Facebook] recommendation tools"** meaning that Facebook's own recommendation system was fueling the recruiting efforts of extremist groups.⁵⁸ But the company abandoned its own efforts to curb polarization and extremism, with Facebook CEO Mark Zuckerberg, in 2019, saying, "You can't impose tolerance top-down."⁵⁹

In the United States, the rising number of mass shootings has been linked time and time again to the social media platforms on indirect and direct levels. Platforms have been used by perpetrators of mass shootings and hate crimes on more than one occasion to ideate violence, communicate with like-minded individuals, and, in the case of the Buffalo grocery store shooter in 2022, even streaming the shooting live.⁶⁰

As Global Leadership Institute President Anthony Silard once told *Forbes*: "Social media has compounded a growing racial, cultural, and gender divide in America and the world."⁶¹

While social media platforms may prefer not to "impose tolerance," they can turn down the volume on inflammatory content and modify their algorithms to steer users away from extremist groups, rather than towards them. Often, they choose not to.

64% of all extremist group joins on Facebook are due to Facebook's own recommendation tools. Social media companies face no consequences for dangerous design features of their products.

Social Media Platforms Operate Without Any Accountability

Social media companies face no consequences for dangerous design features of their products — like the boosting of toxic content and addicting children. In short, there are no accountability or responsible safeguards for the entire industry.

In May, the U.S. Supreme Court handed social media companies a major victory in *Twitter, Inc. v. Taamneh,* a case in which the family of an American victim of a terrorist attack unsuccessfully tried to hold Twitter accountable for failing to act against pro-terrorist content on its platform.⁶²

Section 230 of the Communications Decency Act, passed in 1996, essentially passes on the liability of harmful speech from a social media platform to the original author of an online post.

All the while, no government agency has been established to oversee social media platforms, and no major federal legislation has passed to regulate their behavior since 1998, when the internet was in its infancy. Artificial intelligence has the potential to make everything bad about social media worse.







The Threat of Artificial Intelligence

Fast-spreading fake or inflammatory information being amplified by social media platforms is bad enough. **Artificial intelligence has the potential to make everything bad about social media worse.**

Al is not new. It's used to drive customer-service chat boxes and suggest new music or news items to users of certain apps. But "generative AI" or "advanced AI" is different. Using machine-learning techniques, generative AI can generate new, original content that mimics actual people's faces, bodies, or voices quickly and easily. This latest generation of AI will make it easy and inexpensive to create and disseminate completely fake — yet credible — content that looks or sounds like anyone. It's already being used to deceive and manipulate people across the globe.

Earlier this year, the mayor of a city in Australia threatened a defamation lawsuit against ChatGPT, a chatbot that uses advanced AI, after it falsely asserted that he was imprisoned for bribery while working for a subsidiary of Australia's national bank.⁶³ And in June, a mother in Arizona testified before Congress describing a terrifying call from what sounded like her daughter, begging for help.⁶⁴ Another man joined the call and threatened the mother: "Listen here. I have your daughter. You call anybody, you call the police... You'll never see your daughter again."⁶⁵ He demanded \$1 million in ransom. It turned out that the call was a kidnapping spoof using AI.⁶⁶ Imagine what China, Russia, or some other adversary could do with this technology.

As AI becomes more sophisticated and accessible — which is happening now — it will become nearly impossible to tell the difference between what digital content is fake and what's real.

Tech companies are betting on AI as the next best thing, rushing to beat each other to market without any regard to the consequences of these tools.

The images to the left were created within seconds online for free.



PART II Threats to Kids

Children are the future of our society and our democracy. Yet social media is hijacking their sense of self, ability to think critically, attention spans, and social lives before their brains are even fully formed. Kids today get most of their news and information from social media and are bombarded daily by content that tells them they aren't good enough, polarizes them, and makes them feel isolated from their friends and families. Untruths, bullying, harassment, and violence are microtargeted to them, shaping their views of the world — and the biochemistry of their minds.

The next generations are digital natives. They've been surrounded by smart phones, computers, and the internet their entire lives. Tech companies promised that this exposure to "the world" through screens would provide kids with an enormous advantage. Kids would be able to communicate with their peers and far-away family members, boost social interactions, and feel connected, and learn more from a universe of content. Yet, according to experts like psychologist Jean Twenge, **"there is compelling evidence that the devices we've placed in young people's hands are having profound effects on their lives — and making them seriously unhappy."**⁶⁷

Our kids' mental health and well-being are under attack. A majority feel "addicted" to social media platforms. Children are being plunged into content far before they're able to handle it. Thanks to social media, where "engagement" is more valuable than veracity, **we're raising a generation that is mentally broken and ill-equipped for governance and the challenges of democracy.**

Social Media Is Addictive and Rewires Children's Brains

Social media is used by up to 95% of young people aged

13 to 17.⁶⁸ Roughly 67% of America's teenagers use TikTok, 62% use Instagram, 59% use Snapchat, 32% use Facebook, and 46% report being online "almost constantly" — nearly double the amount who said the same thing seven years ago.⁶⁹

Studies have shown that social media has a powerful, addicting effect on the brain and that **more than 50% of teens who use social media report at least one symptom of addiction.**⁷⁰ As Nancy DeAngelis, director of behavioral health at Philadelphia's Jefferson Health - Abington has said: "Social media platforms drive surges of dopamine to the brain to keep consumers coming back over and over again. The shares, likes, and comments on these platforms trigger the brain's reward center, resulting in a high similar to the one people feel when gambling or using drugs."⁷¹

For kids, the addictive nature of social media is particularly problematic. According to the American Psychological Association, neuroscientists see two critical periods in a child's brain development. The first is in the first year of life. The second begins at puberty and lasts to early adulthood.⁷² During this second period is when children begin accessing electronic devices and using social media.

"They're so distracted. They can't keep focused. It's like everyone has ADHD now."

Carol Mom from Colorado In puberty, children crave visibility, attention, and positive feedback from their peers. Their brains have not fully developed the ability to resist temptation. That happens later in life. As Dr. Mitch Prinstein, chief science officer of the American Psychological Association, has said: "When it comes to youths' cravings for social attention, they are 'all gas pedal and no brakes."⁷³

Social Media Is Damaging Kids' Health

"A National Youth Mental Health Breakdown"

"We are in the middle of a national youth mental health crisis, and I am concerned that social media is an important driver of that crisis — one that we must urgently address," U.S. Surgeon General Vivek H. Murthy has warned.⁷⁴

Studies and datasets have shown surges in rates of anxiety, depression, and self-harm among American teens that started in the early 2010s.⁷⁵ According to Dr. Jonathan Haidt, an author, professor of ethical leadership at New York University's Stern School of Business, and member of the Council for Responsible Social Media, "there is now a great deal of evidence that social media is a substantial cause, not just a tiny correlate, of depression and anxiety, and therefore of behaviors related to depression and anxiety, including self-harm and suicide."⁷⁶

Facebook's own research showed that a group of teenagers who'd experienced mental or emotional health challenges felt that their problem started when they were "on Instagram." After using the app and participating in Facebook's research, 42% of U.S. teens reported their feelings of "not having enough money." 41% felt "not being attractive." 39% felt pressure to "have to create a perfect image." 24% felt "not being good enough." 10% linked their depression to Instagram, while 9% felt the desire to harm themselves, and 6% expressed the desire to kill themselves.⁷⁷

Studies have shown surges in rates of anxiety, depression, and self-harm among American teens. Both mental and physical health is at risk from sleep deprivation, which is often traced to social media use.

The Link Between Social Media and Physical Health

Using social media not only affects children's mental health. It also affects their physical health.

Both mental and physical health is at risk from sleep deprivation, which is often traced to social media use. Sleep deprivation is linked to compromised thinking and reasoning as well as increased susceptibility to illness, weight gain, and high blood pressure.⁷⁸ Those who don't sleep enough are also more prone to depression and anxiety.⁷⁹ Research also suggests that a lack of sleep is associated with poor performance in school, difficulties with attention and stress regulation, and an increased risk for car accidents.⁸⁰

Parents know their kids' physical health is taking a toll because of social media addictions.

Raina, a mother from Illinois who participated in the Issue One focus group earlier this year, said her child has a tendency, when he's sitting around on his phone, to be "snacking," "partaking in unhealthy beverages," and "not moving around."⁸¹

Another mother in Issue One's focus group reported that her son, at a recent physical checkup, "actually had an undetectable vitamin D level because he was never seeing sunshine," adding that he "would just go to school" and then go "to his room or to the dark basement" when he got home.⁸²

Rather than addressing the addictive design of their products, removing underage users, or refraining from illegally serving advertisements to teens, companies like Meta put the onus on parents like Raina and Carol through insufficient parental controls.⁸³ At the same time, the social media platforms are fighting tooth and nail against the systemic and design-level changes that would give parents the help they need to protect their children. This is why parents cannot confront this problem alone and need help from lawmakers in Washington. 32% of American girls felt that Instagram made them feel worse about their bodies.



Social Media Is Particularly Harmful for Girls

For teen girls, the magnetic draw to social media appears to be even more dangerous, a threat that social media companies themselves enable every time they recommend harmful content to teenage girls.

The death of Molly Russell in 2017, according to a London coroner, was linked directly to "an act of self-harm while suffering from depression and 'the negative effects of online content."⁸⁴ An inquest after her death showed 2,100 Instagram posts related to suicide, self-harm, and depression were saved, liked, or shared from her account during the six months prior to her death.⁸⁵

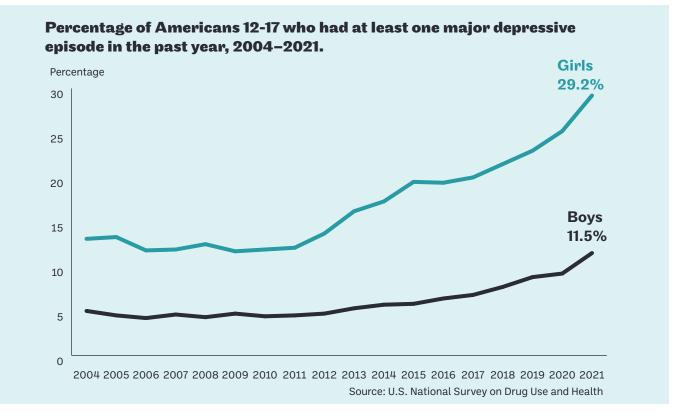
In 2021, leaked Meta documents revealed that **21% of American girls felt that Instagram made them feel worse about themselves, and 32% said the platform made them feel worse about their bodies.**⁸⁶

Moreover, according to a CDC report released earlier this year, **57% of teen girls "felt consistently sad or hopeless" in 2021, a 60% increase and the highest level reported in the past decade. And nearly 30% of teen girls in 2021 were "seriously considering attempting suicide."**⁸⁷

"The toxicity comes from the very nature of a platform that girls use to post photographs of themselves and await the public judgment of others," Dr. Jonathan Haidt, the author and NYU professor, has said.⁸⁸ Nearly 30% of teen girls in 2021 said they were "seriously considering attempting suicide." As leaked internal Meta documents put it: Instagram's monetization of teens' faces and bodies, the pressure to look a certain way, and an algorithmic feed that encourages constant engagement "exacerbate each other to create a perfect storm."⁸⁹

Social media is also a strong contributing factor to eating disorders.⁹⁰ Online communities exist on virtually all social media platforms that discuss eating disorders and varied approaches to lose weight or appear thinner, including YouTube videos sharing low-calorie diets and Instagram posts of emaciated models. While the social media platforms have attempted to quash obvious pro-eating disorder content, users and influencers can avoid having their content taken down by using hashtags to attract attention. At least one website provides hashtags to "grow your Instagram using the most popular anorexia hashtags."⁹¹

None of this is a secret. Dove, a subsidiary of Fortune 500 company Unilever, launched a comprehensive campaign that started in 2004 to battle the unrealistic beauty standards that damage girls as a counteroffensive against the most pervasive, damaging messages delivered daily by social media.⁹² Earlier this year, these ads also began calling for federal legislation to protect children's mental health.⁹³



Social Media Amplifies Bullying

Social media platforms, texts, messaging, online forums, and email are common places where cyberbullying occurs.⁹⁴ **The Pew Research Center found that 46% of U.S. teens aged 13-17 had experienced cyberbullying.**⁹⁵ **And research suggests that children who have been cyberbullied are three times more likely to contemplate suicide than their peers.**⁹⁶

Children who have been cyberbullied are three times more likely to contemplate suicide than their peers. Among those cyberbullied was Carson Bride.⁹⁷ Carson did not have his first cell phone until he was in the 8th grade; his parents did not allow him on social media platforms until he was a freshman in high school. In June 2020, just after starting his first job, Carson committed suicide. His parents soon discovered that Carson had been cyberbullied extensively for months by anonymous users on Snapchat. His attempts to learn who was sending him negative, harassing, sexually explicit, and humiliating messages failed.

Kristin Bride, Carson's mother and a member of the Council for Responsible Social Media, sued Snapchat and other messaging apps for being negligent in safeguarding against cyberbullying. In February 2023, she appeared before the Senate Judiciary Committee, along with other parentsurvivors who had lost their children to social media harms. "It should not take grieving parents filing lawsuits on behalf of their dead children to hold this industry accountable for their dangerous and addictive product designs," Bride told the committee.⁹⁸

Social Media Promotes Deadly Challenges

The "blackout challenge" went viral on TikTok starting in 2021. In it, users — usually children — are challenged to restrict breathing for a set duration of time. Choking games are not new, but with social media, the game was delivered with swift efficiency to kids too young to realize the danger of the challenge.⁹⁹

By the end of 2022, **at least 15 deaths of children under the age of 12 were linked to the blackout challenge.**¹⁰⁰ While TikTok requires its users to be at least 13 years old, experts agree there are no effective mechanisms to block underage users from using the social media platform.¹⁰¹ In At least 15 deaths of children under the age of 12 were linked to the "blackout challenge."



Nearly one in three teen girls have been approached by adults asking for nude photographs. fact, internal documents from TikTok showed that a third of TikTok users in the United States in 2020 may have been 14 or younger.¹⁰²

The blackout challenge isn't the only dangerous "game." A Benadryl challenge that started in 2020 killed a 13-yearold boy in Ohio and a 15-year-old girl in Oklahoma.¹⁰³ Challenges to swallow spoonfuls of cinnamon, eat Tide PODS, and walk blindfolded into traffic (all captured on video and posted) have also gone viral on social media platforms.¹⁰⁴

Social Media Links Kids to Predators

Social media has become a playground for abusers who share child pornography. Predators use social media platforms to stalk, harass, and trade images of underage children. They prey on vulnerable children to commercialize sexual exploitation, or child sex trafficking. This can include soliciting images, sexual acts, or "relationships" from the most vulnerable.¹⁰⁵

According to Thorn, a nonprofit dedicated to battling online child sexual abuse, research shows that **one in four children surveyed have had online sexual encounters with adults via social media.** Nearly one in three teen girls have been approached by adults asking for nude photographs, while one in six girls aged 9-12 years have interacted sexually with an adult on these platforms.¹⁰⁶

Social media platforms help connect and promote a vast network of accounts openly devoted to the commission and purchase of under-age sexual content.

For instance, as the *Wall Street Journal* reported, Instagram enabled users to search explicit hashtags like #preteensex and connected them to accounts that used the terms to advertise child-sex material for sale.¹⁰⁷ Researchers were able to get recommendations quickly and easily from the platform that were "enough to flood a test account with content that sexualizes children."¹⁰⁸

Meanwhile, message boards like Snapchat and Discord offer "closed group" features that have been used "for grooming and even selling or advertising people for sex trafficking," according to Haley McNamara, director of the International Centre on Sexual Exploitation.¹⁰⁹

Current and former Meta employees who have worked on Instagram child-safety initiatives estimate that **the number** of accounts that exist primarily to follow child-sex content is in the high hundreds of thousands, if not millions, the *Wall Street Journal* reported earlier this year.¹¹⁰

Social Media Erodes Support for Democracy Among the Next Generation of Citizens

Social media has become young people's primary resource for information — and that information can be deeply flawed. Aside from potentially damaging young social media users as individuals, this endless barrage of algorithmdriven content has led the next generation to mistrust most information sources — something that threatens the future of our democratic society.

77% of American teenagers get their news from social

media, according to a survey in 2020 of more than 800 teens by the nonprofit Common Sense. Yet only 28% trust local news organizations — and even fewer trust traditional newspapers, traditional TV news networks, and news aggregators. Rather, about 39% get their news from celebrities, influencers, and personalities.¹¹¹

In the past, the nightly news and printed newspapers were largely considered credible sources, and there were humans in the publishing process who would decide what to report, what was important enough to lead the news, and what was true. With social media, that editorial voice is gone, replaced with algorithms and amplification. If the most important value is engagement, then veracity, credibility, and facts are out the window — with that, goes trust.

Earlier this year, the Center for Countering Digital Hate found that nearly 5 in 10 Americans (49%) — and nearly 7 in 10 American teenagers who use social media for at least four hours a day (69%) — agreed with at least four conspiracy theories that were polled.¹¹² The researchers concluded that

Young people have markedly less trust in our democratic values than previous generations. social media is exposing people — including teenagers — to higher levels of propaganda, including antisemitic and white supremacist propaganda.

"Conspiracy theories have real traction among American teenagers, particularly those who use any single social media platform for four or more hours per day," warns Center for Countering Digital Hate CEO Imran Ahmed, a member of the Council for Responsible Social Media. "This is a crisis of conspiracism that is infecting our children with potentially dangerous lies and nonsense."

Young people also have markedly less trust in our democratic values than previous generations. They are less likely to believe that the American people will do what they can to help those in need; less likely to have confidence that we can work together to solve community problems; and less likely to be willing to accept election results no matter who wins.¹¹³

Our democracy requires a certain amount of trust — in institutions, in individuals, and in each other. It also requires participation in elections and the civic process, whether it's voting or running for office. We can all agree to disagree on any topic, or like or dislike any candidate. But we need to agree that we can sort our differences out in a non-violent way.

What happens if the next generation trusts no information and are incapable of distinguishing what's real and what's fake? Will they be capable of self-governing, or supporting democratic principles that have upheld our nation for nearly 250 years?

There are larger issues at stake here. Russia is actively seeking to destabilize America. China believes the United States is in decline and is chipping away at the existing international order. Both of these countries, as well as other adversaries, see social media as a powerful tool to advance their agendas. In these psychological operations, our kids are on the frontline.

"This is a crisis of conspiracism that is infecting our children with potentially dangerous lies and nonsense."

Imran Ahmed CEO of Center for Countering Digital Hate



PART III Threats to National Security

Social media is the tool of choice for our adversaries to influence minds and ultimately shift geopolitical power, in part because of the speed at which false information can travel and become perceived as the truth. A 2018 MIT study found that on Twitter, "it took the truth about six times as long as falsehood to reach 1,500 people."¹¹⁴ While social media companies rapidly advance new products — most notably artificial intelligence tools — they are plowing forward with virtually no guardrails to incorporate these national security concerns into the system. At the same time, by relying on outrage and division as tools of engagement, which drives profitability, social media platforms divide Americans and destroy our trust in each other and our institutions. This division is making us less capable of addressing collective challenges, which ultimately undermines U.S. national security.

Social media is used by nearly five billion people around the world and is expected to increase by another billion by 2027.¹¹⁵ Social media provides quick access to information and other people, and it serves as the primary source of information for many. Facebook alone has nearly three billion users and fast-growing TikTok claims about 1.6 billion users.¹¹⁶ While social media is benefiting billions of users, it's also serving as a tool to do harm. **Attracting and connecting bad actors, spreading untruths, and sharing highly sensitive data with astonishing speed and extraordinary reach is part and parcel of the design built into social media.**

Adversaries Want to Take Down Democracy

When a nation meddles with America's national security, they're really aiming at democracy.

Our adversaries fundamentally disagree with America's founding principle of freedom, our tradition of open and fair elections, and our support for democracy around the world. They do this for the oldest reason of all: Power. China, Russia, and authoritarian states see democracy — and its global reach — as a direct threat to their own power. And these autocrats are deeply concerned about any semblance of democracy forming within their own borders.

Right now, Russia, China, and other adversaries are seeking to reshape the geopolitical map. They're using social media to flood our feeds with propaganda and gathering copious amounts of data about us. They take advantage and exploit our tradition of free speech and openness by highlighting and amplifying tensions within our own country.

By magnifying every disagreement in the United States by every digital means possible — from troll farms to "news" items that are not true to the weaponization of artificial intelligence — our adversaries are chipping away at our unity. By collecting and analyzing our data, they're learning

Authoriarian states see democracy as a direct threat to their own power.



Facebook says it bans U.S.designated terrorist groups, but as recently as February 2023, it would "autogenerate" landing pages for them. all about us and what makes us vulnerable, from where we live to how we react to the content that arrives in our social media feeds. They are capable of manipulating an entire generation that receives almost all their information from social media.

Social Media Is a Tool for Bad Actors

Facebook says it bans U.S.-designated terrorist groups, but as recently as February 2023, it would "auto-generate" landing pages for terrorist groups, including ISIS and al-Qaida. These pages were automatically created by Facebook when a user listed a terrorist group in their profile, according to an investigation by the Tech Transparency Project. The pages allowed users to network, tag friends, and send messages to one another. Similarly, Vice News was able to replicate the Tech Transparency Project's results by creating a profile that was quickly able to link to ISIS as an employer in Raqqa, Syria.^{117, 118}

"Despite repeated warnings and questioning from multiple lawmakers, Facebook has continued to create business pages for designated terrorist groups that thrive on digital propaganda — and it's been knowingly doing so since 2019," said Katie Paul, the researcher and author of the investigation.¹¹⁹

While this could be shrugged off as a "quirk" in the system, the fact is that social media platforms can — and are — being used as weapons by state-sponsored bad actors.

In an especially horrific development this fall, Hamas terrorists hijacked the social media accounts of Israeli hostages to livestream attacks and issue death threats. Thomas Rid, a professor of strategic studies at Johns Hopkins University, told *The New York Times* that this "weaponizes social media in a way I don't think we've seen before," adding "we are not psychologically prepared for this."¹²⁰

Social Media Increases Radicalization

All media — including newspapers, radio, and television — can be used to encourage radicalization, the process of causing a person to adopt extreme positions on political or social issues. Yet the internet, and social media especially, is a particularly strong accelerant of radicalization at home and abroad.

Radicalization can result in violent actions, including terrorism. Radicalization was at the heart of the September 11, 2001, attack on the United States as well as the January 6, 2021, attack on the Capitol — meaning social media companies' own algorithms and content amplification processes are a national security problem that cannot be ignored.

UNESCO, in a 2017 research report on the role of the internet and social media in the development of radicalization among youth, identified social media as a "facilitating environment" for violent radicalization.¹²¹ And according to PIRUS, a detailed database of people in the United States who have been radicalized, **social media played a role in the radicalization process of only 27% of those radicalized between 2005 and 2010. But, predictably and unfortunately, between 2011 and 2016, that increased to 73%.**¹²²

Radicalization also extends beyond just the youth. Another vein of citizens that has been targeted for radicalization is our military. Of the hundreds of people who have been charged for their role in the January 6 attack on the Capitol, dozens were veterans and at least half a dozen were active duty members of the military.¹²³

Likewise, just seven months earlier, Ethan Melzer, a U.S. Army private, was arrested for plotting an attack against his own unit. He was a white supremacist who allegedly released classified troop movements to a neo-Nazi group, hoping to help facilitate an al-Qaida attack on his unit.¹²⁴

Cases like Melzer's emphasize the clear counterintelligence and national security threats of radicalized current and former members of the military. With extremist propaganda proliferating on social media, the threat of far-right extremism in the military only continues to grow.

UNESCO has identified social media as a "facilitating environment" for violent radicalization.

Why Dictators and Autocrats Are Drawn to Social Media

Across the globe, dictators are using social media to clamp down on dissent. At home, they aren't letting their own people access any of the benefits of openness and connectivity promised by social media. Instead, they use social media as a weapon against their own populations.¹²⁵

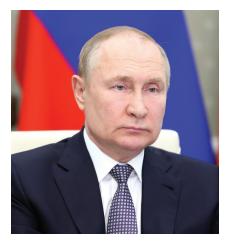
Russia, in particular, uses social media to spread false information wherever it seeks to cause trouble. And China is increasingly deploying these tactics as well, while steadily gathering private data using TikTok that can be used to weaken the United States.



Why are dictators and autocrats drawn to social media? Social media can break down democracies in a way that is far more subversive and inexpensive than actual military action. Social media can disrupt and foment anger and violence by exploiting weaknesses within societies and amplifying them. Conflict can start locally and spread rapidly to surrounding regions. It can help to reshape not only values, but borders.

Let's examine further how Russia has fully embraced the use of social media to advance its anti-West narrative around the world.

Social media can break down democracies in a way that is far more subversive and inexpensive than actual military action.



Under President Vladimir Putin, Russia has added cyberwarfare on social media to its disinformation playbook.

How Russia Uses Its Social Media Manipulation Playbook Around the World

Russia has always been adept at influence campaigns to sow division and confusion in its adversaries. **Under President Vladimir Putin, Russia has "revived the Cold War dezinformatsia (disinformation) playbook with a modern twist: extensive cyber domain and modern technological influences,"** according to researchers at Georgetown University.¹²⁶ When Putin rose to power in 2000, he promptly took control of Russian television networks and sought to synthesize "Soviet control with Western entertainment." Russian television became its internal propaganda machine.¹²⁷ From there, Russia extended its efforts to social media as the industry grew.

Tactics and enablers of Russian propaganda are numerous, including state-funded global messaging, proxies, and front groups, advertisements on social media, artificial grassroots campaigns, bot networks, deep fakes, malware, and memes.¹²⁸ And Russia is using this playbook around the world.

For instance, when Russia invaded Crimea in 2014, it used a state-owned network of paid internet trolls and fake personas that appeared to be locals disillusioned with Ukrainian opposition to Russia to spread false information.¹²⁹ Russia applied its anti-truth approach prior to its invasion of Georgia in 2008 by justifying its slow military build-up in the region as an effort to "protect" Georgians.¹³⁰ Social media has also been a tool for Russia to amplify dictators in Africa, including in Sudan in 2019.¹³¹

In the United States, Russian trolls tried to influence our domestic debate over NFL players kneeling during the singing of the national anthem at professional football games,¹³² and according to federal prosecutors, a leading advocate for the secession movement in California got funding and direction from Russian intelligence agents.¹³³

And Russia's 2022 invasion of Ukraine marked "an escalation in Russia's longstanding information operations against Ukraine and open democracies."¹³⁴



Social Media and Russia's Invasion of Ukraine

Russia's narrative leading up to its 2022 invasion of Ukraine was that Russia was a victim of ongoing provocation by the West and was entering Ukraine on a peacekeeping mission.

On the day of the invasion, Putin addressed the Russian people and falsely claimed that Ukraine was being governed by Nazis, which required Russia to launch military action with a goal to "denazify" Ukraine. This narrative — which came to be denoted by the "Z" symbol — was amplified around the world through social media, and became "the rallying symbol of the Russian war machine and an effective weapon in the information war," according to Ben Scott, a former State Department official who is now the executive director of Reset, which focuses on tackling digital threats to democracy.¹³⁵ At the same time, the Russian government clamped down on independent media outlets within Russia and forbade the use of the word "war" in the context of Ukraine.¹³⁶



Facebook has failed to remove or label 91% of posts containing content from Russian state media outlets. Social media helps spread false information rapidly among Russian troops, Ukrainians, and its global audience. As Scott has noted, the Russian "Z" campaign could be found throughout social media during the outset of the war, from schoolchildren posing on Instagram with colored Z drawings to Kremlin-aligned accounts posting highly produced Z propaganda.¹³⁷ These lies expand false narratives that can weaken critical support for Ukraine among its allies. They also contribute to chaos and confusion among Russian troops, who have been told they would be welcomed as heroes for liberating Ukraine from Nazi and Western backers. In fact, recordings show that Russian soldiers were shocked at the violence of war and orders from their commanders. to kill civilians.¹³⁸ Said one Russian officer, referring to his military superiors: "Frankly speaking, they tricked us. Everything we were told was a fake."139

Prior to Russia's invasion of Ukraine in 2022, Meta successfully identified and disabled one of Russia's propaganda networks of more than a thousand fake social media accounts before they could gain large audiences.140 As the war has raged on, Meta has claimed to continue to take down overt Russian state-controlled media on its platforms. Yet Meta admits that covert activity has risen sharply, and the company reports that efforts are "aggressive and persistent, constantly probing for weak spots across the internet, including setting up hundreds of new spoof news organization domains."141 In fact, research by the Center for Countering Digital Hate found that Facebook has failed to remove or label 91% of posts containing content from Russian state media outlets identified by the U.S. State Department as "Kremlin-funded media" and Russia's propaganda "ecosystem."¹⁴² Without external verification and transparency, we can't fully understand the scope of the problem, which could be much worse than Meta, and other platforms, say it is.

Against all odds, Ukraine has stunned the world by its resilience and military strength on the ground. It depends heavily on the United States and its allies for support. Should public support wane, support in the way of arms, training, and humanitarian aid could recede — which is why Russia has not ceased in promoting propaganda campaigns on social media. Should Ukraine fall to Russia, democracies throughout Eastern Europe will be more vulnerable to Russian interference. In every national U.S. election since 2016, Russia, China, and Iran have weighed in about candidates and the credibility of the American election system.

Russia and Other Foreign Adversaries Attempt to Influence U.S. Elections

By 2016, 62% of adults were getting their news from social media¹⁴³ and rapidly spreading content that would arrive on their Facebook feeds — the more inflammatory, the better. That summer, both political parties were nominating their presidential candidates. On the second day of the Democratic National Convention in Philadelphia, WikiLeaks began to publish thousands of emails stolen from the Democratic National Committee that exposed divisions within the party. The leaks continued into the fall.¹⁴⁴

While the founder of WikiLeaks Julian Assange took credit for the leaks, American intelligence agencies found that the Russian government was actually behind the theft. An intelligence assessment stated: "We assess Russian President Vladimir Putin ordered an influence campaign in 2016 aimed at the U.S. presidential election. Russia's goals were to undermine public faith in the U.S. democratic process." This finding was affirmed by the 2019 Mueller Report and a bipartisan Senate Intelligence Committee investigation.¹⁴⁵

Russia had used email leaks, propaganda, and social media to stoke societal divisions and in an attempt to undermine the integrity of democratic elections in the United States.¹⁴⁶

Foreign interference didn't stop there. **Indeed, every national election in the United States since 2016 has been pummeled from the outside.** Russia, China, and Iran have weighed in about candidates, ideological divisions of American citizens, the credibility of the American election system, and democracy itself with tweets, videos, memes, and fake news.

In 2020, Russia again sought to influence the U.S. presidential election. An intelligence report stated that again, Putin authorized an influence operation designed to undermine public confidence in the electoral process and exacerbated "sociopolitical divisions in the United States."¹⁴⁷ Similarly, Iran, in 2020, undertook a "multi-pronged covert influence campaign" designed to "undermine public confidence in the electoral process and U.S. institutions and sow division and exacerbate societal tensions in the United States," according to an analysis released in 2021 by the U.S. Office of the Director of National Intelligence.¹⁴⁸

And in 2022, Chinese government-affiliated cyberactors sought to discourage Americans from voting, discredit the election process, and sow further divisions among voters.¹⁴⁹ At the same time, TikTok accounts associated with the Chinese Communist Party (CCP) accumulated millions of followers and tens of millions of views while editorializing about U.S. politics in the lead-up to the 2022 midterms. The accounts were run by MediaLinks TV, a D.C.-based, registered foreign agent of the Chinese Communist Party's television outlet. In 60 days in 2022, MediaLinks videos gained 8.3 million views, while fewer than 58,000 users bothered to check the profiles to see where the videos originated.¹⁵⁰



The Problem With TikTok

TikTok is wildly popular. The free app, originally created in China under the name A.me, announced, in 2021, that it had one billion users globally.¹⁵¹ **Introduced in the United States in 2017, TikTok claims that 150 million Americans use the app.**¹⁵² **59% of TikTok users in the United States are under 24,**¹⁵³ **with 60% of Gen Z adults saying they use the app daily.**¹⁵⁴

But TikTok, it seems, is part of China's efforts to have more influence over global discourse. There are two major national security risks posed by TikTok that are distinct

TikTok, it seems, is part of China's efforts to have more influence over social discourse. from other social media platforms: The mass collection of American user data, which the Chinese Communist Party could have access to and exploit, and the ability of the CCP to force ByteDance (TikTok's owner) to use the app to move public opinion in the United States in a way that is counter to U.S. interests and favors China.

TikTok is a subsidiary of a Chinese company, ByteDance, which can be legally required by the Chinese Communist government to demand data from its companies about users for intelligence-gathering operations. **TikTok's data can be weaponized in a number of ways, from prosecuting political enemies to sharing sensitive information.**

Gen. Paul Nakasone, the head of the National Security Agency, told the Senate Armed Services Committee this year that he worried TikTok could censor videos to shape public opinion in a way that threatens U.S. national security interests.¹⁵⁵ Additionally, FBI Director Christopher Wray warned the Senate Intelligence Committee this year that China could use TikTok to control data on millions of users to shape public opinion should China invade Taiwan.¹⁵⁶ Wray agreed with a question from a senator who asked if it was plausible that the Chinese Communist Party, ahead of a hypothetical invasion of Taiwan, could use TikTok to ensure Americans saw videos asserting that Taiwan belonged to China and why the United States should not intervene. Wray stressed that there may not be many outward signs if such a propaganda campaign was launched.

Then-President Donald Trump attempted to ban TikTok in 2020.¹⁵⁷ India has already banned the app,¹⁵⁸ and more than two-thirds of U.S. states have prohibited people from downloading TikTok on government devices,¹⁵⁹ as has the Canadian federal government and a majority of Canadian provinces.¹⁶⁰ And earlier this year, the Biden administration called for TikTok's Chinese ownership to sell the app or face a possible ban to address growing national security concerns.¹⁶¹

At a five-hour hearing before the House Energy and Commerce Committee in March, lawmakers on both sides of the aisle expressed deep concern over TikTok's links to China and the Chinese Communist Party.¹⁶² TikTok's CEO Shou Chew insisted that ByteDance was a private company that was "not owned or controlled by the Chinese government."

TikTok's data can be weaponized in a number of ways, from prosecuting political enemies to sharing sensitive information. TikTok provides another platform for Chinese propaganda to reach Western audiences, all while collecting sensitive information about TikTok users. Yet within hours, his comments were quickly overshadowed by statements from China's Commerce Ministry that said a sale or divestiture of TikTok would involve exporting technology and had to be approved by the Chinese government. "If the news is true, China will firmly oppose it," said a ministry spokesperson.¹⁶³

In the past five years, China has increased its use of propaganda campaigns in the United States with an effort to build a greater mainstream audience. Those campaigns include thousands of fake accounts on Twitter, Facebook, and YouTube, and the manipulation of events within China, such as pro-democracy protests in Hong Kong, U.S. relations with Taiwan, and the COVID pandemic.¹⁶⁴ Staterun media publishers in China have a long track record of using social media advertising to promote pro-China narratives in the West,165 and pro-China narratives continue to be promulgated through online advertising, according to examinations of the Meta and Google ad libraries.¹⁶⁶ TikTok provides yet another platform for Chinese propaganda to reach Western audiences, all while also collecting sensitive information about TikTok users in the United States and other democratic countries.

Deepfakes

The next weapons in the arsenal of propaganda operations are deepfakes. Video and picture editing software on social media platforms can guickly alter the audio or text on a picture to dramatically change the context. The next evolution — advanced or generative artificial intelligence - makes it easy to produce convincing fake audio files and videos that look and sound like a person or an event. A proliferation of fake videos, images, and audio clips are poised to reshape our view of reality and alter our trust in all of the digital content that we see.

> A false report of an explosion at the Pentagon, accompanied by an apparently AI-generated image, spread on Twitter this year, sparking a brief dip in the stock market.¹⁶⁷ The fake image to the left circulating on Twitter showed a black cloud of smoke near a building. The accounts posting it claimed it depicted the Pentagon.

The screenshot to the right shows a deepfake of Russian **President Vladimir Putin** declaring martial law following false reports of an invasion of Russia by Ukraine. The deepfake was broadcasted on Russian TV and radio. According to the Kremlin, this was the work of hackers.¹⁶⁸

468 Retweets 140 Quotes 791 Likes 39 Bookmarks

Initial Reports of a Large Explosion near The

09:04 · 5/22/23 · **104K** Views

Pentagon Complex in Washington D.C.



Talk Obama To Me i'll say what you type

Artificial intelligence can create audio deepfakes. This one allows users to create fake audio files of former President Barack Obama.¹⁶⁹

"Fake posts purporting to come from real figures are an increasing risk in an AI-influenced world... They can be very convincing."¹⁷⁰

Col. Philip Ingram Former British military intelligence officer and NATO planner



Imagine a deepfake of an autocrat announcing a nuclear attack on the United States, broadcast on every social media platform. Right now, there is nothing to stop this scenario from happening.



ISSUE ONE COUNCIL FOR RESPONSIBLE SOCIAL MEDIA

Today, there are no requirements that social media platforms uphold the national security of the United States.

Not Doing Enough

What is social media doing to mitigate the threat of adversarial actors? The short answer is it depends.

Today, there are no requirements that social media platforms uphold the national security of the United States, or any nation. Social media companies can make their own decisions as to how they manage their data and content, regardless of how damaging their actions may be. In this vacuum, social media companies make their own decisions based on their own goals.

For instance, Meta publishes a quarterly report describing its efforts to disrupt what it calls "coordinated inauthentic behavior" to crack down on "covert influence operations." At the end of 2022, Meta reported that it had disrupted about 200 global networks originating in 68 countries since 2017, with the United States being the most targeted country.¹⁷¹

Other social media platforms also disrupt suspicious activity, but there is no requirement for them to publicly share their enforcement actions. In 2019, Twitter reported that it found and removed 418 accounts linked to Russia in a two-month period in 2018, and that it had previously removed nearly 4,000 accounts linked to the Russiangovernment-associated troll farm called the Internet Research Agency.¹⁷² But when Elon Musk took over Twitter in 2022, the company loosened its enforcement policies.¹⁷³

Voluntary efforts certainly sound good, but without any meaningful transparency, policymakers and the American public are left to take social media companies at their word. Twitter's removal of 4,000 Russian-linked accounts is ultimately empty without any sense of the reach or engagement with those accounts, and any analysis of the content they promoted. If left unchecked, social media could lead to fundamental changes in geopolitics and a reshaping of the post-World War II global order.



This Cannot Be Left Unchecked

It's clear that we need some guardrails when it comes to the weaponization of data and online psychological operations that threaten our national security.

Our democratic system — the ability to vote for leaders to represent us and resolve our differences within a framework of shared norms and traditions — is under attack. If left unchecked, social media could lead to fundamental changes in geopolitics and a reshaping of the post-World War II global order, tilting the scales in favor of China.

If the United States and other democracies become more divided and average citizens lose their grips on what is real and what is a lie, it will be harder to stay united in the face of Chinese aggression towards Taiwan or other allies. It will be more difficult to maintain a coherent bipartisan national security strategy. And over time, American power will wane. China or another adversary could take our place and drive global politics and economics in a way that is counter to U.S. interests, and undermines democracy around the globe.



PART IV Threats to Democracy

According to its original intent, social media was supposed to bring people together. But what was meant to be a hightech public square has evolved into a free-for-all filled with false information and algorithms that boost extremist content. Social media's design makes it easy to manipulate users and polarize both the right and the left, while the platforms profit.

Lies about the 2020 presidential election, spread by social media, led to insurrectionists overrunning the Capitol on January 6, 2021, in an effort to disrupt the peaceful transfer of power. Our constitutional structure was designed to avoid mob rule; yet social media elevates it. An existential battle pitting neighbor against neighbor is playing out every day in communities nationwide. Public meetings are disrupted, public servants are threatened, and the next generation of Americans are becoming disengaged from our civic systems. **Fledgling democracies around the world are watching** as the American experiment falters, threatening support for the principles of democracy beyond our borders. **Now is the time to reform social media to do what it was supposed to do in the first place: Bring us together.**

Social Media Fosters Disengagement

In a focus group earlier this year, Renee told Issue One about a time her eighth-grade son was riding home on the school bus and watching TikTok, as he always did. On this day, he was watching videos about voting.

"What's the sense in us voting anyhow?" he told his mom when he arrived home. "It doesn't matter." His view was that as soon as one side was losing, the other side could "cheat" and "change the votes."¹⁷⁴

It's difficult to know exactly what Renee's son was watching on TikTok, but it's clear that the 14-year-old suspected our electoral system is corrupt and participation might not be worth his time when he gains the ability to vote.

Renee's son isn't the only child whose views have been influenced by content on social media.

Social media platforms were not designed to tell the truth or bring people together. They were designed to provide engaging content that keeps you coming back, even when it makes you unhappy and unhealthy. These platforms have a built-in financial incentive to keep the cultural and political battles going. Those battles are pushing us away from each other, fracturing every aspect of our civic lives.

Americans are aware that this is a problem. Pew Research Center's Spring 2022 Global Attitudes Survey showed that **64% of Americans believe that social media has been more of a bad thing for democracy. 69% feel that instant connection we found on our screens made people less civil**

64% of Americans believe that social media has been more of a bad thing for democracy. in the way they talk about politics. And 79% say that the internet and social media has made people more divided in their political opinions — the highest percentage among all 19 countries polled by Pew.¹⁷⁵

Social Media Creates Toxic Wedges in Society

Few times in American history have we been as polarized as we are now. The information silos driven by social media algorithms keep us from hearing the other side of any topic. Content on social media continually demonizes the other side and helps create an us-versus-them mentality.



Social media has fueled the flame of distrust by rewarding polarization. As author and NYU professor Dr. Jonathan Haidt has noted, "When citizens lose trust in elected leaders, health authorities, the courts, the police, universities, and the integrity of elections, then every decision becomes contested; every election becomes a life-and-death struggle to save the country from the other side."¹⁷⁶

Thanks in large part to social media, hostility and cruel behavior are polluting our civil interactions. The ability to post lies, share half-baked conspiracies, and threaten one another fuels anger and violence. More importantly, these posts spread at a disproportionate rate because the algorithms created by the platforms are geared towards engagement and boosting extreme content.

Sorting out our disagreements requires hearing one another, debating, and reaching compromises. Now, social media is turning civil interactions into an invitation to fight.

Thanks in large part to social media, hostility and cruel behavior are polluting our civil interactions.



Elected officials are facing "hostile behavior and abuse intended to cause fear and/or emotional damage." As George Washington University Law School Professor and National Constitution Center President and CEO Jeffrey Rosen has said: "Twitter, Facebook, and other platforms have accelerated public discourse to warp speed, creating virtual versions of the mob. Inflammatory posts based on passion travel farther and faster than arguments based on reason. Rather than encouraging deliberation, mass media undermine by creating bubbles and echo chambers in which citizens see only those opinions they already embrace."¹⁷⁷

Social Media Enables Threats Against Public Servants

For many public servants, whose jobs are to keep our communities running, the workplace is much more dangerous. Local officials — including city council members, health officers, election officials, and school board members — are far too frequently experiencing threats and harassment.

A study by the Bridging Divides Initiative at Princeton University found that elected officials from across a broad range of locations, demographics, and ideologies are facing "hostile behavior and abuse intended to cause fear and/or emotional damage." Municipal officials interviewed for the study noted that threats and harassment were not in response to any one issue or political party, but part of an "emboldened" climate with a "new level of permission to be publicly vile." Almost all local officials attributed this hostile environment to social media and the possibility of anonymity.¹⁷⁸

In the wake of the 2020 election, false information targeting election workers have led to over a thousand reported cases of threats and violence against them.¹⁷⁹

Poll workers have faced racially charged insults, calls for their families to be killed or attacked, and sexist harassment. They've been accused of treason and threatened with prosecution. Harassers have even shown up at elected officials' homes. Doxxing, or making private information such addresses and contact information available on social media, creates an enormous vulnerability for election workers and public servants. Al Schmidt, a Republican who served as a city commissioner in Philadelphia in 2020, received death threats via email that demanded he "tell the truth, or your three kids… will be fatally shot."¹⁸⁰ The most common venue for releasing the private information of election officials and threatening their families is social media.

Since the 2020 election, at least 10 people have been charged by the Justice Department for threatening election workers, including a case in which a Texan threatened multiple election officials in Georgia and another that made a bomb threat to the Arizona Secretary of State.¹⁸¹ Ten states have increased penalties for those convicted of making threats or harassing election workers.

All of this results in fewer citizens who want to serve the public. If doing a job, from serving on a school board to being a poll worker, includes being doxxed, having an inbox overflow with hate-filled rants, or having your kid harassed, many qualified, committed people who wish to serve the public are simply saying no thanks. A survey by the Brennan Center for Justice found that 45% of election officials are concerned about their own safety and that of their colleagues in their public role — and 11% said they are very or somewhat likely to vacate their positions before the 2024 elections.¹⁸²

"My work as an election official helps ensure everyone has their voices heard," Tonya Wichman, director of elections at the Defiance County, Ohio, board of elections, told Issue One. "That's what keeps me in this job year after year. But now, I am worried about my own safety as well as the safety of everyone working in elections across the country. All it would take is one angry, unhinged person with an online account to dox, threaten, or come after any of us."

Added Ken Hamm, a part-time poll worker in Nevada: "It's like good people were convinced to go after other good people."¹⁸³

Concerningly, despite the threats election officials and election workers face on social media, the platforms have gutted their election protection teams at the very time they should be building them up.¹⁸⁴ Massive layoffs have occurred this year at Alphabet, Meta, and Twitter, leading several senators to raise concerns that these cuts will jeopardize the 2024 election.¹⁸⁵

"All it would take is one angry, unhinged person with an online account to dox, threaten, or come after any of us."

Tonya Wichman Director of Elections in Defiance County, Ohio

Social Media Weakens Our Institutions

All of this — foreign interference in our elections, a "posttruth" environment where untrue information travels fast, and the easy ability to harass or threaten anyone with a public presence — is weakening our institutions. Congress is in near-perpetual gridlock, making it virtually impossible to advance commonsense, bipartisan legislation, including social media reform proposals, measures to strengthen the penalties against those who harass election workers, and bills to protect election officials from doxxing.

Americans' confidence in all major institutions is at its lowest point in decades. The percentage of Americans expressing a "great deal" or "quite a lot" of confidence in nearly every institution in U.S. society has fallen in the past year and is at its lowest since Gallup's survey began in 1979.¹⁸⁶

% Great deal/Quite a lot			
	2012 % Time of Facebook initial public offering	2023 %	
The military	75	60	-15
The police	56	43	-13
The medical system	41	34	-12
The church or organized religion	44	32	-12
The U.S. Supreme Court	37	27	-10
Banks	21	26	-5
The public schools	29	26	-3
The presidency	37	26	-11
Newspapers	25	18	-7
The criminal justice system	29	17	-12
Television news	21	14	-7
Big business	21	14	-7
Congress	13	8	-5
		2	

Trends in Americans' Confidence in Institutions 2012-2023

Source: GALLUP

Social media is accelerating the deterioration of the health of democracy.

Social Media Threatens Democracy Worldwide

As democracy in the United States falters, the rest of the world watches. The aspiration of a government represented by the people and for the people is the north star for prodemocracy nations around the world. Now, they see that many Americans don't have faith in their own electoral systems and clash with one another as racial and social tensions boil over. The speculation is that democracy is failing.

Nobel Peace Prize winner and Council for Responsible Social Media member Maria Ressa sees social media as a systemic threat to democracy. "Social media prioritizes the spread of lies over facts," she told *The Atlantic* earlier this year. "Our information ecosystem, it's corrupted right now. If your information ecosystem is corrupted, then that leads to the corruption of your institutions. And when you don't have working institutions, you don't have checks and balances. We're electing illiberal leaders democratically, and they're corrupting the institutions from within. And when the institutions are corrupted, when that happens, you lose your freedom."¹⁸⁷



The number of "free" countries that have seen declines in political rights and civil liberties has trended upward over the past decade, according to the nonprofit research organization Freedom House. This year alone, Freedom House found a decline in the democracy score of 11 out of the 29 countries it surveyed in its 2023 report.¹⁸⁸ Deterioration of indicators of the health of democracy most notably, national and local governance and electoral processes — are accelerated by social media.

Spend an hour on Chinese-owned TikTok (or any social media platform, really) and it won't take long to see a video about the many things that are wrong with America. Just as our Founding Fathers tried to design governance mechanisms to cool down the passions of the mob, social media platforms have been designed to ramp them up, with new tools developed regularly that add gasoline onto an already blazing fire.

Social Media-Fueled Atrocities in Myanmar and Ethiopia: Case Studies

Providing billions of people with a free product that was designed to connect people should be a good thing for democracy around the world. Yet, it hasn't turned out that way. Social media executives came to realize that conflict fueled by fiery extremism and measured by engagement would lead them to the largest profits.

Two examples of such decision-making gone disastrously wrong include Myanmar, in southeast Asia, and Ethiopia, in eastern Africa.

The Myanmar military was trained by Russia in spreading propaganda and used Facebook to incite violence against the mostly Muslim Rohingya minority group. The result: A genocide that killed more 25,000 people and displaced more than 700,000 Rohingya from Myanmar.¹⁸⁹

Facebook provided Myanmar citizens with free internet service as part of the company's efforts to grow.¹⁹⁰ More than half of Myanmar's population used Facebook, and for many, it was their only connection to the internet as well as their primary source of news.¹⁹¹ Facebook wasn't making money from Myanmar and chose not to invest in moderators or monitors on the ground.¹⁹²

In 2021, Myanmar's military seized power in a coup. That February, Facebook banned the armed forces from its platforms. Nonetheless, a month later, **"as soldiers massacred hundreds of unarmed civilians in the streets... Facebook's own page recommendation algorithm was amplifying content that violated many of its own policies,"** Global Witness reported.¹⁹³



That failure of self-regulation was replayed in Ethiopia earlier this decade.

In Ethiopia's Tigray region, both sides of the violence fought online through inflammatory information campaigns to dispute the other's narrative of events while promoting their own. Allegations of propaganda, false information, hate speech, "platform manipulation," and more against both parties followed, which exacerbated tensions further and ultimately drew attention away from the violence on the ground. Rather than spreading awareness, social media was used as a weapon of information warfare in a battle over what both parties argued was the "truth," leading to heightened tensions, an opaque information environment, and increased violence.¹⁹⁴

"As soldiers massacred hundreds of unarmed civilians in the streets... Facebook's own page recommendation algorithm was amplifying content that violated many of its own policies."



We can protect our children, communities, and national security with commonsense, bipartisan solutions.

Social Media Threats Can Be Tackled

Today, social media platforms push us deeper and deeper into information silos that are not reflective of reality and divide us. Our national security is under attack, and social media platforms make it far too easy for bad actors to spread lies and access our private information. Our democracy is challenged, the mental health of our children is deteriorating, and foreign nations are influencing our elections and civil discourse. We face the risk that young people will simply burn out and give up on democratic processes, or fully embrace extremism and never learn how to govern their own communities effectively. **If the American experiment of democracy becomes viewed as a failure, rather than an aspirational goal, more nations will fall to authoritarian models. We cannot let this happen.**

It's not too late to take another direction. Social media intended to connect us and bring us closer together. It still can. But the social media industry won't reform itself; history has proven that again and again. **We can protect our children, communities, and national security with commonsense, bipartisan solutions that factor in more than the profits of a handful of companies. We can't wait any longer.**

A Call to Action:

It's Time to Create a Healthier Online Ecosystem by Default and by Design

Social media promised to build a more interconnected, informed world. But more than a decade after the proliferation of Facebook, Twitter, and Instagram, we can see clearly that the harms of social media have overwhelmed its promise. **We have reached a tipping point** — from a nationwide crisis among our children to the end of our privacy online, from conspiracy theories going mainstream to communities torn apart by polarization. We need to act now.

Members of Congress across both parties have woken up to the challenges posed by Big Tech. Dozens of hearings have examined these threats and hundreds of bills have been introduced that offer solutions. But for all the talk, Congress has not passed meaningful tech reform legislation since 1998, when the internet was in its infancy. Deep divisions remain over key priorities, technical approaches, and the right order of operations. **This issue is too urgent for lawmakers to be divided by which solution should come first, and too urgent for a piecemeal approach to be sufficient.**

The Council for Responsible Social Media, a project of Issue One, is the most comprehensive, bipartisan initiative created to advance reform of the largest online platforms. We unite policymakers, technologists, and impacted communities in this shared effort. Now, **we call on members of Congress to come together to pass a comprehensive legislation package that will finally bring accountability, transparency, and responsibility to social media companies and their powerful technologies**, in a way that protects the well-being of all users.

Creating a safer, healthier, and more responsible online world, for both children and adults, will require a dramatic shift away from the current attention-for-profit model. There are several principles that policymakers should seek to apply in order to help their favored solutions be most impactful and stand up to scrutiny and legal challenges.

Social media reform legislation must be guided by these principles:

- 1. Our children, our communities, and our national security must come first. No longer can Big Tech be allowed to design addictive products, harvest user data, and manipulate users to maximize their profits, with no regard to the consequences.
- 2. Americans have a fundamental right to privacy. Congress must stop social media platforms from collecting our information without permission, and collect only the data they need to operate effectively and in the interest of consumers.

- **3.** Social media products must protect the mental, physical, and developmental health of American children by design and by default. This includes ending addictive practices like the endless scroll and targeted advertising to minors.
- **4.** We have a right to know how social media technology is controlling the content we see and to understand the impact on our health and well-being. Parents, policymakers, researchers, and all Americans should be able to easily understand how these platforms are designed and operated.
- 5. Social media platforms must adopt safeguards to prioritize fact-based information to stop foreign and domestic adversaries from spreading false or misleading information.

Moreover, legislation to create commonsense safeguards for social media companies must achieve the following:

- Social media platforms must protect the mental, physical, and developmental health of American children. This includes reducing and restricting material that is detrimental to a minor's health and well-being, limiting or restricting the use of a minor's personal data, and enhancing default privacy and user settings for minors.
- Social media companies must be legally required to be open and transparent. The public should have a better sense of how social media platforms operate, including how their data is shared and used from origination to delivery.
- Social media platforms must be better protected from foreign and domestic bad actors. National security vulnerabilities, including the sharing of data with adversaries and open platforms for terrorists to recruit and radicalize, both abroad and domestic, must be mitigated.
- Social media companies must change their core business model away from the pervasive monitoring, tracking, and sale of user data. Comprehensive privacy protections are crucial to restore user ownership of their own data and end social media's extractive, manipulative practices.
- Social media companies must stop using algorithms to elevate the most extreme content. Algorithms that amplify inflammatory content and filters users into rabbit holes or questionable content or opportunities to join radical groups must be redesigned.

Social media platforms must adopt measures that slow down the speed at which things are shared and cause people to pause and think before sharing harmful content, propaganda, or lies. Creating "friction," or pauses, in the system to slow down the spread of certain material can and should be built into the platforms. Social media companies must build better capacity to ensure veracity. If a social media company provides its services anywhere, its value of sharing accuracy and facts must be included and built into the platforms, including overseas and in languages other than English.

Too often, the conversation about social media reform focuses solely on content — what types of content are harmful, how should these posts be taken down, and who gets to make these decisions. This is a politically charged debate, one that implicates both Section 230 and the First Amendment. This framing is also a distraction.

As discussed in this report, many of social media's harms stem from the design of these platforms — algorithmically engineered feeds and endless scroll features designed to addict users, recommendation models that send users down extremist rabbit holes, dark patterns intended to point you toward certain features. Recalibrating these features will alter the content that users see automatically on their feed and how they engage with this content, but these changes don't prevent any user from searching for or posting content, and therefore doesn't limit any user's freedom of expression. **Ensuring safety and privacy by design is both the most impactful and the most politically feasible path forward for social media reform.**

Additionally, Big Tech companies should implement, or be required to implement, the strongest possible safety and privacy changes by default. Too often, the social media platforms respond to criticism by creating a new "tool," that can be used to protect your privacy, limit your exposure to harmful content, or mitigate an addictive feature of the website. But these tools are often hard to find, difficult to implement, and require a threshold of tech expertise. When this happens, the implicit message remains the same: It is always someone else's job to prevent a user of social media from becoming addicted to or harmed by their addictive and harmful products — a parent, an educator, a user themself, rather than the social media company. Defaulting to the strongest possible safety and privacy settings would change this calculus.

We have to move toward a system where users must opt out, rather than opt in, of the strongest safety and privacy settings. This approach still gives users the freedom to modify or curate their experiences on social media, but it also ensures that the onus is not on users to pull themselves out of an addictive or harmful spiral created by Big Tech. When it comes to protecting minors, features like targeted advertisements, endless scrolling, and curated feeds should be off by default.

And when it comes to privacy, social media platforms must limit data collection, processing, and transfers to what is strictly necessary to provide the service requested by users, and that settings like geo-tracking and public sharing of content are turned off automatically.

Lastly, it is crucial that policymakers take a holistic view of social media reform. Because Congress has not passed any major tech reform laws in nearly three decades, it is tempting to see new legislation as a one-shot proposition. But this approach pits important reform priorities against each other. Ensuring a safer and healthier version of social media will require a series of reforms — comprehensive privacy protections for all Americans, additional safeguards for minors, and a transparency regime to ensure greater oversight of these platforms. These priorities aren't mutually exclusive or in opposition. They work in tandem, forming three pillars that will lift up a better online ecosystem for our kids, our communities, and our democracy.

We cannot wait any longer. The social media crisis is here, and it is only getting worse. For our children, for our communities, and for our democracy, we need a national solution now. The Council for Responsible Social Media is committed to ensuring a safe and healthy online ecosystem. We hope Congress will join us in this fight.

Endnotes

- 1 Meta, Company Information, Culture, and Principles | About Meta, 2023.
- 2 Evan Ottenfeld, Issue One, Faces of Democracy: How Our Elections Work and the Challenges Ahead, September 2022.
- **3** Yana Gorokhovskaia, Adrian Shahbaz, and Amy Slipowitz, Freedom House, **Freedom in the World 2023**, March 2023.
- 4 Shannon Bond, NPR, Fake viral images of an explosion at the Pentagon were probably created by AI, May 22, 2023.
- 5 Massimo Calabresi, Time, Inside Russia's Social Media War on America, May 18, 2017.
- 6 Brian Fung, CNN, TikTok collects a lot of data. But that's not the main reason officials say it's a security risk, March 24, 2023.
- 7 Tech Transparency Project. Meta Creates Pages for ISIS, Undermining Anti-Terrorism Efforts, February 16, 2023.
- 8 Centers for Disease Control and Prevention, Youth Risk Behavior Survey: Data Summary and Trends Report, February 13, 2023.
- 9 Ibid.
- **10** Chris Kelly, Marketing Dive, **Dove pushes for legislation to protect kids' self-esteem from social media**, April 12, 2023.
- **11** Samar Marwan, Fast Company, **Gen Z and millennials get their news from the paper**, **and Nextdoor**, August 31, 2022.
- **12** Wall Street Journal, Facebook internal document, Teen Mental Health Deep Dive, September 29, 2021.
- **13** Cory Combs, Issue One, **Issue One and Frank Luntz partner to conduct public opinion research on the impact of social media and AI**, July 25, 2023.
- 14 Matthew Frank, Stanford Politics, **Big Tech, Big Checks: The Role of Tech Giant in** Shaping Academic Research, October 26, 2020.
- **15** Patrick Radden Keefe, **Empire of Pain: The Secret History of the Sackler Dynasty**, April 13, 2021.
- **16** Barbara Ortutay, Associated Press, **Instagram and Facebook are adding more parental controls. Critics say they aren't enough**, June 27, 2023.
- 17 Steven Pearlstein, The Washington Post, Here's the inside story of how Congress failed to rein in Big Tech, July 6, 2023.
- **18** Daniel Stevens, Campaign for Accountability, **New Report Reveals Google's Extensive Financial Support for Academia**, July 11, 2017.
- **19** OpenSecrets.org, **Client Profile: Alphabet Inc., 2022**; OpenSecrets.org, Client Profile: **Meta, 2022**.
- **20** Marcus Lu, Visual Capitalist, **More U.S. Tech Companies are Adopting Unequal Dual-Class Voting Structures**, April 15, 2023.

- 21 Cory Combs, Issue One, New poll from Issue One's Council for Responsible Social Media shows overwhelming bipartisan support for social media reforms, April 13, 2023.
- 22 Richard Wike, Laura Silver, Janell Fetterolf, Christine Huang, Sarah Austin, Laura Clancy, and Sneha Gubbala, Pew Research Center, Social Media Seen as Mostly Good for Democracy Across Many Nations, But U.S. is a Major Outlier, December 6, 2022.
- **23** Ibid.
- 24 Ibid.
- **25** Senate Judiciary Committee, **Time Change: Protecting Our Children Online**, February 14, 2023.
- **26** Rebecca Kern, Politico, **Push to rein in social media sweeps the states**, July 1, 2022.
- 27 Emma Lembke, Founder and Executive Director of the LOG OFF Movement, Testimony before the United States Senate Judiciary Committee, February 14, 2023.
- **28** Issue One Focus Group, April 28. 2023.
- 29 Cristiano Lima and Naomi Nix, The Washington Post, 41 states sue Meta, claiming Instagram, Facebook are addictive, harm kids, October 24, 2023.
- 30 Polls commissioned by Issue One and conducted in 2023 by Citizen Data and FIL, Inc.
- **31** Information Commissioner's Office, **Age appropriate design: a code of practice for online services**.
- 32 European Commission, The Digital Services Act: ensuring a safe and accountable online environment.
- **33** Marsha Blackburn, U.S. Senate, Blackburn, **Blumenthal Introduce Bipartisan Kids Online Safety Act**, May 2, 2023.
- **34** Congressional Research Service, **Overview of the American Data Privacy and Protection Act, H.R. 8152**, August 31, 2022.
- **35** Frances Haugen, Testimony before the United States Senate Committee on Commerce, Science and Transportation Subcommittee on Consumer Protection, Product Safety, and Data Security, Protecting Kids Online: **Testimony from a Facebook Whistleblower**, October 5, 2021.
- **36** TikTok, **Privacy Policy**, May 22, 2023.
- **37** Kate O'Flaherty, Wired, **All the ways TikTok tracks you and how to stop it**, October 23, 2021.
- **38** X, Additional information about data processing, 2023.
- **39** Youtube, Understanding the basics of privacy on YouTube apps, 2023.
- 40 Snap Inc. Privacy Policy, August 15, 2023.
- 41 Meta, Privacy Policy: What is the Privacy Policy and what does it cover?, June 15, 2023.
- **42** Frances Haugen, **Testimony before the United States Senate Committee on Commerce,** Science and Transportation Subcommittee on Consumer Protection, Product Safety, and Data Security, October 4, 2021.
- **43** Peiter "Mudge" Zatko, **Testimony before the United States Senate Committee on Judiciary**, September 13, 2022.

- **44** Statista Research Department, Statista, **Social Media Advertising Worldwide, March 2023**.
- **45** Nicole Farley, Search Engine Land, **Meta blames weak advertising demand, rivals for Q4 2022 revenue decline**, February 2, 2023.
- **46** Chris Griswold, National Affairs, **Protecting Children from Social Media**, Spring 2022, referring to Monica Anderson and Jingjing Jiang, Pew Research Center, Teens, Social Media and Technology 2018, May 31, 2018.
- **47** Kristen Rogers, CNN, **Children under 10 are using social media. Parents can help them stay safe online**, October 18, 2021.
- **48** Frances Haugen, **Testimony before the United States Senate committee on Commerce, Science and Transportation Subcommittee on Consumer Protection, Product Safety, and Data Security,** October 4, 2021.
- **49** New York University, **Messages with Moral-Emotional Words Are More Likely to go Viral on Social Media**, June 26, 2017.
- **50** William J. Brady, Julian A. Wills, John T. Jost, Joshua A. Tucker, Jay J. Van Bavel, Proceedings of the National Academy of Sciences (PNAS), **Emotion shapes the diffusion of moralized content in social networks**, June 26, 2017.
- **51** Steve Rathje, Jay J. Van Bavel, Sander van der Linden, PNAS, **Out-group animosity drives engagement on social media**, June 23, 2021.
- **52** Soroush Vosoughi, Deb Roy, and Sinan Aral, Science, **The spread of true and false news online**, March 9, 2018.
- **53** Molly Crockett, YouTube, Emory Center for Mind, Brain and Culture (CMBC) Lecture, **"Digital Outrage: Mechanisms and Consequences,"** April 12, 2022.
- **54** Zachary Laub, Council on Foreign Relations, **Hate Speech on Social Media: Global Comparisons**, June 7, 2019.
- **55** Charlotte Hu, **Social media really is making us more morally outraged**, Popular Science, August 13, 2021.
- **56** Jeff Horwitz and Deepa Seetharaman, Wall Street Journal, Facebook Executives Shut Down Efforts to Make the Site Less Divisive, May 26, 2020.
- **57** Ibid.
- 58 Ibid.
- 59 Ibid.
- **60** Peter Suciu, Forbes, **Social Media Increasingly Linked With Mass Shootings**, May 25, 2022.
- **61** Ibid.
- 62 United States Supreme Court, Twitter Inc. v. Taamneh, May 18, 2023.
- **63** Tom Gerken, BBC News. **ChatGPT: Mayor starts legal bid over false bribery claim**, April 6, 2023.
- 64 Jennifer DeStefano, Testimony of Jennifer DeStefano Abuses of Artificial Intelligence before the United States Senate, June 13, 2023.
- **65** Ibid.

- **66** Justin Lum, Fox 10 Phoenix, **AI kidnapping scam targets Arizona mother: 'You'll never see your daughter again'**, June 13, 2023.
- **67** Jean M. Twenge, The Atlantic, **Have Smartphones Destroyed a Generation?**, September 2017.
- 68 U.S. Department of Health and Human Services, Surgeon General Issues New Advisory About Effects Social Media Use has on Youth Mental Health, May 23, 2023.
- 69 Emily A. Vogels, Risa Glles-Watnick, and Navid Massarat, Pew Research Center, Teens, Social Media and Technology 2022, August 10, 2022.
- **70** Dr. Mitch Prinstein, American Psychological Association Chief Science Officer, **Testimony before the Senate Judiciary Committee**, February 14, 2023.
- 71 Sarah Miller, Jefferson Health, The Addictiveness of Social Media: How Teens Get Hooked, June 2, 2022.
- 72 Dr. Mitch Prinstein, American Psychological Association Chief Science Officer, Testimony before the Senate Judiciary Committee, February 14, 2023.
- **73** Ibid.
- 74 U.S. Department of Health and Human Services, Surgeon General Issues New Advisory About Effects Social Media Use Has on Youth Mental Health, May 23, 2023.
- 75 Jean M. Twenge, Psychiatric Research and Clinical Practice, Increases in Depression, Self-Harm, and Suicide Among U.S. Adolescents After 2012 and Links to Technology Use: Possible Mechanisms, September 2020.
- 76 Jonathan Haidt, After Babel, Social Media is a Major Cause of the Mental Illness Epidemic in Teen Girls. Here's the Evidence, February 22, 2023.
- 77 Georgia Wells, Jeff Horwitz, and Deepa Seetharaman, Wall Street Journal, Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show, September 14, 2021.
- **78** National Heart, Lung, and Blood Institute, National Institute of Health, **What Are Sleep Deprivation and Deficiency?**, March 24, 2022.
- 79 Jean M. Twenge, Psychiatric Research and Clinical Practice, Increases in Depression, Self-Harm, and Suicide Among U.S. Adolescents After 2012 and Links to Technology Use: Possible Mechanisms, September 2020.
- **80** National Heart, Lung, and Blood Institute, National Institute of Health, **What Are Sleep Deprivation and Deficiency?**, March 24, 2022.
- 81 Issue One, Focus Group, April 28, 2023.
- 82 Ibid.
- **83** Ibid.
- 85 Natasha Singer, The New York Times, TikTok Is Fined \$15.9 Million Over Misusing Kids' Data in Britain, April 4, 2023; Natasha Lomas, Tech Crunch, Instagram fined €405M in EU over children's privacy, September 5, 2022; Meta, Family Center: Support for teens. Peace of mind for you; Adam Satariano, The New York Times, Meta's Ad Practices Ruled Illegal Under E.U. Law, January 4, 2023.
- 85 Dan Milmo, The Guardian, 'The bleakest of worlds': how Molly Russell fell into a vortex of despair on social media, September 30, 2022.

- **86** Wall Street Journal, Facebook internal document, **Teen Mental Health Deep Dive**, September 29, 2021; Georgia Wells, Jeff Horwitz, and Deepa Seetharaman, Wall Street Journal, **Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show**, September 14, 2021.
- **87** Centers for Disease Control and Prevention, **U.S. Teen Girls Experiencing Increased Sadness and Violence**, February 13, 2023.
- **88** Jonathan Haidt, The Atlantic, **The Dangerous Experiment on Teen Girls**, November 21, 2021.
- **89** Damien Gayle, The Guardian, Facebook aware of Instagram's harmful effect on teenage girls, leak reveals, September 14, 2021.
- **90** Kate Conger, Kellen Browning, and Erin Woo, The New York Times, **Eating Disorders and Social Media Prove Difficult to Untangle**, Oct. 22, 2021.
- **91** Damien Gayle, The Guardian, Facebook aware of Instagram's harmful effects on teenage girls, leak reveals, September 14, 2021.
- 92 Unilever, Announcing the Dove Real Beauty Pledge, March 6, 2017.
- **93** Chris Kelly, Marketing Dive, **Dove pushes for legislation to protect kids' self-esteem from social media**, April 12, 2023.
- 94 Stopbullying.gov, What is Cyberbullying, November 5, 2021.
- **95** Emily A. Vogels, Pew Research Center, **Teens and Cyberbullying 2022**, December 15, 2022.
- **96** Mitch van Geel, Paul Vedder, Jenny Tanilon, JAMA Pediatrics, **Relationship Between Peer Victimization, Cyberbullying, and Suicide in Children and Adolescents**, May 2014.
- **97** Kristin Bride, survivor parent and social media reform advocate, **Testimony before the Senate Judiciary Committee**, February 14, 2023.
- 98 Ibid.
- **99** Olivia Carville, Bloomberg, **TikTok's Viral Challenges Keep Luring Young Kids to Their Deaths**, November 30, 2022.
- 100 Ibid.
- 101 Ibid.
- 102 Raymond Zhong and Sheera Frenkel, The New York Times, A Third of TikTok's U.S. Users May be 14 or Under, Raising Safety Concerns, August 14, 2020.
- **103** Alyana Gomez, ABC7 Eyewitness News, **Experts warn parents, children of lethal "Benadryl Challenge" on TikTok that killed Ohio teen**, April 19, 2023.
- **104** Brett Cruz and Gabe Turner, Security.org, **Top 10 Most Dangerous Online Challenges**, August 22, 2023.
- **105** Thorn, Child sex trafficking is a cycle of abuse, 2023.
- **106** Thorn in partnership with Benenson Strategy Group, **Responding to Online Threats: Minors' Perspectives on Disclosing, Reporting, and Blocking**, 2021.
- **107** Jeff Horwitz and Katherine Blunt, Wall Street Journal, Instagram Connects Vast Pedophile Network, June 7, 2023.
- 108 Ibid.

- **109** Alexandra S. Levine, Forbes, **These TikTok Accounts Are Hiding Child Sexual Abuse Material In Plain Sight**, Forbes, November 14, 2022.
- **110** Jeff Horwitz and Katherine Blunt, Wall Street Journal, Instagram Connects Vast Pedophile Network, June 7, 2023.
- 111 Common Sense, Teens and the News, 2020: The Influencers, Celebrities, and Platforms They Say Matter Most, 2020.
- **112** Center for Countering Digital Hate, **Public Support for Social Media Reform**, August 16, 2023.
- **113** John Gramlich, Pew Research Center, **Young Americans are less trusting of other people – and key institutions – than their elders**, August 6, 2019.
- **114** Soroush Vosoughi, Deb Roy, and Sinan Aral, Science, **The spread of true and false news online**, March 9, 2018.
- **115** Belle Wong, Forbes Advisor, **Top Social Media Statistics and Trends of 2023**, May 18, 2023.
- **116** Rohit Shewale, DemandSage, **Social Media Users 2023 (Global Demographics)**, September 12, 2023.
- **117** Tech Transparency Project, **Meta Creates Pages for ISIS, Undermining Anti-Terrorism Efforts**, February 16, 2023.
- **118** Ben Makuch, Vice News, Facebook Auto-Created Pages for ISIS and Al-Qaeda: Study, February 16, 2023.
- 119 Ibid.
- **120** Sheera Frenkel and Talya Minsberg, Hamas Hijacked Victims' Social Media Accounts to Spread Terror, Oct. 17, 2023.
- 121 Seraphin Alava, Divina Frau-Meigs, and Ghayda Hassan, UNESCO, Youth and Violent Extremism Social Media: Mapping the Research, 2017.
- **122** John Letzing and Andrew Berkley, World Economic Forum, **Is the internet really more effective at radicalizing people than older media?**, July 13, 2021.
- 123 George Washington University, Capitol Hill Siege, 2023.
- **124** U.S. Department of Justice, **U.S. Army Soldier Charged with Terrorism Offenses for Planning Deadly Ambush on Service Members in His Unit**, June 22, 2020.
- **125** Eda Keremoğlu and Nils B. Weidmann, Comparative Political Studies, Vol 53, Issue 10-11, **How Dictators Control the Internet: A Review Essay**, March 23, 2020.
- **126** Georgetown Security Studies Review, **On Russian Disinformation: The Answers Are Already in Front of Us**, February 3, 2021.
- **127** Peter Pomerantsev, Nothing is True and Everything is Possible: The Surreal Heart of the New Russia, PublicAffairs, November 11, 2014.
- **128** Georgetown Security Studies Review, **On Russian Disinformation: The Answers Are Already in Front of Us**, February 3, 2021.
- **129** Ellen Nakashima, The Washington Post, **Inside a Russian disinformation campaign in Ukraine in 2014**, December 25, 2017.

- **130** Cameron Fraser, Institute for Development of Freedom of Information, **How Russia disinformation tactics were utilized in the context of the 2008 5-day war**, November 3, 2022.
- **131** Cayley Clifford, South African Institute of International Affairs, **Russia's media playbook** in Ukraine and Africa – let the great world spin, March 25, 2022.
- **132** Scott Simon, NPR Weekend Edition, Russian Trolls Tried To Influence Debate Over NFL Players Kneeling During Anthem, October 27, 2018.
- **133** Charles R. Davis, Insider, A leading California secession advocate got funding and direction from Russian intelligence agents, US government alleges, August 2, 2022.
- **134** Organization for Economic Co-operation and Development, **Disinformation and Russia's war of aggression against Ukraine**, November 3, 2022.
- **135** Ben Scott, The Washington Post, **Big Tech needs to pull the plug on Russia's biggest propaganda campaign**, March 24, 2022.
- **136** Hensoldt Analytics, Russian Propaganda Narratives about Ukraine: Russian Sacrifices, Western Lies, and Heavy Censorship of the Russian Media, September 16, 2022.
- **137** МБОУ "Ш-И поселка Эгвекинот" (@schoolozerny), Instagram profile, accessed August 24, 2023; CNN, How the letter 'Z' became Russia's pro-war symbol, March 8, 2022.
- **138** Erika Kinetz, Associated Press, **'Never saw such hell': Russian soldiers in Ukraine call home**, February 24, 2023.
- **139** Luke Harding, The Guardian, **Demoralised Russian soldiers tell of anger at being 'duped' into war**, March 4, 2022.
- **140** David Klepper, Associated Press, **Meta disables Russian propaganda network targeting Europe**, September 27, 2022.
- 141 Nick Clegg, Meta, Protecting Public Debate During the War in Ukraine and Protests in Iran, February 23, 2023.
- **142** Press release, Center for Countering Digital Hate, Facebook failing to label 91% of posts containing Russian propaganda about Ukraine, February 26, 2022.
- 143 Jeffrey Gottfried and Elisa Shearer, Pew Research Center, News Use Across Social Media Platforms 2016, May 26, 2016.
- 144 Alana Abramson and Shushannah Walshe, ABC News, The 4 Most Damaging Emails From the DNC WikiLeaks Dump, July 25, 2016.
- **145** Glenn Kessler, The Washington Post, **The truth about Russia, Trump and the 2016** election, May 17, 2023.
- **146** Special Counsel Robert S. Mueller, III, U.S. Department of Justice, **Report on the Investigation Into Russian Interference In The 2016 Presidential Election**, March 2019.
- **147** National Intelligence Council Intelligence Community Assessment, Foreign Threats to the 2020 U.S. Federal Elections, March 10, 2021.
- **148** Brian Bennett, Time, Exclusive: Iran Steps Up Efforts to Sow Discord Inside the U.S., June 9, 2021.
- **149** Craig Singleton, Foreign Policy, Chinese Election Meddling Hits the Midterms, November 4, 2022.

- **150** Emily Baker-White and Iain Martin, Forbes, **On TikTok, Chinese State Media Pushes Divisive Videos About U.S. Politicians**, December 1, 2022.
- 151 TikTok, Press release, Thanks a billion!, September 27, 2021.
- **152** Ivan Mehta, TechCrunch, **TikTok CEO takes to the app to announce company's more than 150M active users in the US**, March 21, 2023.
- **153** Tanya Dua, Insider, Never-before-seen TikTok stats from leaked sales presentations show how it's trying to lure advertisers to the platform, April 13, 2021.
- **154** Grace Mayer, Insider, **The average TikTok user in the US is an adult 'well past college age,' CEO says**, March 22, 2023.
- **155** Sean Lyngaas, CNN, NSA chief warns TikTok could censor videos as part of Chinese influence operations, March 7, 2023.
- **156** Reuters, **FBI chief says TikTok 'screams' of US national security concerns**, March 9, 2023.
- **157** Bobby Allyn, NPR, **U.S. Judge Halts Trump's TikTok Ban, The 2nd Court To Fully Block The Action**, December 7, 2020.
- **158** Alexandra S. Levine, Forbes, India Banned TikTok In 2020. TikTok Still Has Access To Years Of Indians' Data, March 21, 2023.
- **159** Mike Allen, ABC News, Nevada bans TikTok on government devices, March 29, 2023; Kanishka Singh, Reuters, New York City bans TikTok on government-owned devices over security concerns, August 17, 2023.
- 160 Michael Woods, CTV News, 'This may be a 1st step': Canada bans TikTok from federal government devices, February 28, 2023; Emily Blake, The Canadian Press, Territories join Ottawa, most provinces in banning TikTok on government devices, March 8, 2023.
- **161** David E. Sanger, David McCabe, and Sapna Maheshwari, The New York Times, **Pulling the Plug on TikTok Will Be Harder Than It Looks**, March 21, 2023.
- **162** Lauren Feiner, CNBC, **TikTok CEO got grilled by lawmakers from both parties on whether the Chinese-owned app can protect American privacy**, March 23, 2023.
- **163** Raffaele Huang, Wall Street Journal, China Says It Opposes Forced Sale of TikTok, March 23, 2023.
- 164 Freedom House, Beijing's Global Media Influence 2022, 2022.
- **165** Emily Baker-White and Iain Martin, Forbes, **On TikTok, Chinese State Media Pushes Divisive Videos About U.S. Politicians**, December 1, 2022.
- 166 Meta, Meta Ad Library, August 2023; Google, Google Ads Transparency Center.
- **167** Shannon Bond, NPR, Fake viral images of an explosion at the Pentagon were probably created by AI, May 22, 2023.
- **168** Gabriel Gavin, Politico, **'Fake Putin' announces Russia under attack as Ukraine goes on offensive**, June 5, 2023.
- 169 Talk Obama to Me.
- **170** Gabriel Gavin, Politico, 'Fake Putin' announces Russia under attack as Ukraine foes on offensive, June 5, 2023.

- **171** Ben Nimmo and David Agranovich, Meta, **Recapping Our 2022 Coordinated Inauthentic Behavior Enforcements**, December 15, 2022.
- 172 Sheera Frenkel, Kate Conger, and Kevin Roose, The New York Times, Russia's Playbook for Social Media Disinformation Has Gone Global, January 31, 2019.
- **173** Ivan Mehta, TechCrunch, **Twitter is now resurfacing official Russian accounts in search results**, April 10, 2023.
- 174 Issue One, Focus Group, April 28, 2023.
- 175 Richard Wike, Laura Silver, Janell Fetterolf, Christine Huang, Sarah Austin, Laura Clancy, and Sneha Gubbala, Pew Research Center, Social Media Seen as Mostly Good for Democracy Across Many Nations, But U.S. is a Major Outlier, December 6, 2022.
- **176** Jonathan Haidt, The Atlantic, **Why the Past 10 Years of American Life Have Been Uniquely Stupid**, April 11, 2022.
- **177** Jeffrey Rosen, The Atlantic, **America is Living James Madison's Nightmare**, October 2018.
- **178** Bridging Divides Initiative, **Understanding Threats and Harassment to Local Officials**, May 2023.
- **179** Shawnza Mizelle, CNN, Election workers reported more than 1,000 'hostile' contacts in past year, August 1, 2022.
- **180** Evan Ottenfield, Issue One, Faces of Democracy: How Our Elections Work and the Challenges Ahead, September 2022.
- 181 Rich Holder, New York Post, Texas man pleads not guilty to threatening George election officials, February 5, 2022, and Department of Justice Office of Public Affairs, Massachusetts Man Arrested for Making Bomb Threat to Arizona State Election Official, July 29, 2022.
- **182** Ruby Edlin and Lawrence Norden, Brennan Center for Justice, Poll of Election Officials Shows High Turnover Amid Safety Threats and Political Interference, April 25, 2023.
- **183** Evan Ottenfeld, Issue One, Faces of Democracy: How Our Elections Work and the Challenges Ahead, September 2022.
- **184** Sevana Wenn, Politifact, How Meta, TikTok, Twitter and YouTube plan to address 2024 election misinformation, July 6, 2023.
- **185** Brian Fund, CNN, First on CNN: Senators press Google, Meta and Twitter on whether their layoffs could imperil 2024 election, June 22, 2023.
- **186** Lydia Saad, Gallup, Historically Low Faith in U.S. Institutions Continues, July 6, 2022.
- **187** Adrienne LaFrance, The Atlantic, **The Energizer Bunny of Nobel Laureates**, January 19, 2023.
- **188** Mike Smeltzer and Alexandra Karppi, Freedom House, **Nations in Transit 2023**, 2023; Freedom House, **Nations in Transit Methodology**, 2023.
- 189 Hannah Ellis-Petersen, The Guardian, Myanmar's military accused of genocide in damning UN report, August 27, 2018; Paul Mozur, The New York Times, A Genocide Incited on Facebook, With Posts from Myanmar's Military, October 15, 2018.

- **190** Taylor Hatmaker, Tech Crunch, Facebook's Free Basics program ended quietly in Myanmar last year, May 1, 2018.
- **191** Emmanuel Akinwotu, The Guardian, Facebook's role in Myanmar and Ethiopia under new scrutiny, Oct. 7, 2021.
- **192** The X-Ray with Fernando Espuelas, March 30, 2023.
- **193** Global Witness, Algorithm of harm: Facebook amplified Myanmar military propaganda following coup, June 23, 2021.
- **194** Liam Scott, Voice of America, **How Social Media Became a Battleground in the Tigray Conflict**, October 17, 2021.

IMAGE CREDITS:

Cover, pages 5, 11, 20, 28, 32, 35, 38, 47, 53, 56, 57, 63: Adobe Stock; p. 8: Vice Admiral Vivek H. Murthy, U.S. Surgeon General, U.S. Department of Health and Human Resources; p. 13: Kristin Bride, LinkedIn; p. 15: Emma Lembke Statement on Harmful Effects of Social Media on Young People, C-SPAN; p. 40: "Strike [Their] Necks - Wilayat al Iraq", Extracted from an ISIS video message, Wilson Center; p. 42: Vladimir Putin with Kim Jong II, Creative Commons; p. 43: President of Russia, www.kremlin.ru; p. 44: Devastation in Bucha, Ukraine, Rawpixel; p. 54: DC Capitol Storming IMG 7939, TapTheForwardAssist, Wikimedia Commons; p. 62: SOPA Images.





Acknowledgments

This report was written and designed by Joelle Jordan of Jordan Dresden Communications LLC. Issue One Research Director Michael Beckel, Council for Responsible Social Media Director Alix Fraser, and Legislative Manager Jamie Neikrie co-authored this report. Willa Blake, Amelia Minkin, Kathryn Thomas, and Adrien Van Voorhis contributed to this report. The report was edited by Nicole Lagace and Ethan Rome. Special thanks to Council for Responsible Social Media members and partners R.P. Eddy, Richard Gephardt, Kerry Healey, Steve Israel, Laurie Moskowitz, and Isabelle Frances Wright.

About Issue One

Issue One is the leading crosspartisan political reform group in Washington, D.C. We unite Republicans, Democrats, and independents in the movement to fix our broken political system and build a democracy that works for everyone. We educate the public and work to pass legislation on Capitol Hill to increase transparency, strengthen ethics and accountability, reduce the corrosive influence of big money in politics, and bolster U.S. elections.

About the Council for Responsible Social Media

The Council for Responsible Social Media brings together a multi-sectoral group of leaders who are focused on finding solutions to the technological harms to our kids, communities, and national security. This initiative connects Republicans and Democrats, policymakers, impacted communities, national security leaders, and key stakeholders to elevate a bipartisan conversation and advance meaningful, achievable solutions.

issueone.org | 🛅 | 🗙 | 😚 | 🞯 | 🔼 |

Media Contact

Cory Combs ccombs@issueone.org | (202) 204-8553





issueone.org | 🛅 | 💥 | 👩 | 💿 | 🔼 |



Designing for Disorder: Instagram's Pro-eating Disorder Bubble

APRIL 2022



Designing for Disorder: Instagram's Pro-eating Disorder Bubble



To adequately highlight the problems of eating disorder content on Instagram, this report includes images and text that may be triggering. An image/text free version of this paper is available on request at info@fairplayforkids.org. We use real life stories and examples in this report but these have been anonymized as necessary.

Executive Summary

This report documents how Instagram grows and promotes an extensive pro-eating disorder 'bubble', and how they turn a small but steady profit from this bubble. It finds:

- The pro-eating disorder bubble on Instagram includes 90,000 unique accounts and reaches **20 million unique followers on the platform**. This could be one in 75 Instagram users who follow someone in this bubble.
- The bubble is young. This research found children as young as 9 and 10 following three or more eating disorder accounts, with a median age of 19. **One third of Instagram's pro-eating disorder bubble is underage**, and they have over half a million followers.
- Meta derives an estimated \$2 million revenue a year from this bubble and \$227.9 million from all those who follow this bubble. This revenue includes that derived from underage users Meta directly makes \$0.5 million a year from the underage pro-eating disorder bubble and \$62 million in revenue from the people who follow these underage pro-eating disorder accounts.

In addition to being profitable, this bubble is also undeniably harmful. Algorithms are profiling children and teens to serve them images, memes and videos encouraging restrictive diets and extreme weight loss. And in turn, Instagram is promoting and recommending children and teen's eating disorder content to half a million people globally. The promotion and reach of this content is clearly not in the best interests of children and teenagers.

Meta's pro-eating disorder bubble is not an isolated incident nor an awful accident. Rather it is an example of how, without appropriate checks and balances, Meta systematically puts profit ahead of young people's safety and wellbeing. Meta's decisions around hosting and recommending eating disorder content may deliver small but steady profits to shareholders, but it has significant real life consequences for children and young people.

Documents revealed in the Facebook Files suggest Meta have been aware of this problem since at least 2019 and have failed to act. It is time that lawmakers and regulators around the world demand action.

Proposals in front of the California Assembly (the California Age Appropriate Design Code Act, AB 2773), and Congress (the Kids Online Safety Act, and Protecting the Information of our Vulnerable Children and Youth Act), could help ensure that platforms are designed and operate in a manner that prioritizes children's best interests. These bills do not regulate for content, rather they address the design and systems of digital services. These are long overdue, and are demonstrably necessary to incentivize action against algorithms that promote eating disorder content. This sort of regulation can introduce requirements to assess and mitigate risks posed by algorithms, and prohibit the use of children's data to train algorithms that harm.

Contents

Foreword	i
Introduction	1
Methods & Identifying the Pro-Eating Disorder Bubble	2
About Instagram's Pro-Eating Disorder Bubble	4
Instagram's revenue from the pro-eating disorder bubble	12
Conclusions	14
Appendix	15

Foreword

Professor Hany Farid, Head of School, School of Information, University of California, Berkeley, co-creator of PhotoDNA.

We can't pretend that the internet has not had a phenomenally positive impact on some aspects of our lives, societies, and economies. We also can't pretend that the internet has not led to real harm in the form of child exploitation, terrorism, the sale of deadly drugs, small- to large-scale fraud, invasions of our privacy, and the spreading of dangerous disinformation campaigns.

In part, this is because the titans of tech are built around an ad-driven business. It is said that if the product is free, then you are not the customer, you are the product. Revenue in social-media's ad-driven model is maximized by maximizing user engagement which means that, more often than not, privacy and security take a back seat in the name of engagement-based metrics.

While reasonable people can agree on what safeguards, if any, should be put in place to protect consenting adults from online harms, most reasonable people will also agree that special care should be given to children.

From the global yearly distribution of tens of millions of pieces of child sexual abuse material, to child grooming and sextortion, screen-time addiction, age-inappropriate advertising, and unhealthy body images, we must think more carefully about the impact of powerful technologies placed in the hands of children for every waking movement of their young lives.

There has been a tendency to talk separately about our online and offline lives. The boundaries between online and offline, however, have been obliterated and what happens online has real-world consequences. As such, we need to think about today's online safety the same way we have thought of yesterday's offline safety.

There are practical, measured, and reasonable safeguards that can be put in place to protect children. Many of these measures begin — but do not end — with ensuring that products are, by design, safe for children and ensuring that services do not intentionally or unintentionally market age inappropriate content to children, or connect children with adult predators.

The technology sector has proven that it is unable or unwilling to prioritize children's welfare and so the time has come for our state, federal and international regulators to step in. Modeled after the United Kingdom's Age-Appropriate Design Code, for example, the California Age-Appropriate Design Code Act (ADCA) would require businesses to "consider the privacy and protection of children in the design of any digital product or service that children in California are likely to access." Senator Blumenthal's Kids Online Safety Act (KOSA) would "require social media platforms put the interests of children first by requiring platforms to make safety the default and to give kids and parents tools to help prevent the destructive impact of social media."

These proposed legislations are a step in the right direction and are worthy of serious deliberation.

Introduction

Algorithms drive much of what we see on social media platforms. For example, in 2018, YouTube outlined that around 70% of what people viewed on that platform was a result of their recommender algorithm¹. Algorithms drive recommendations of what content to see, watch, who to follow, or who to friend. While they may sound impenetrably technical, at the end of the day algorithms are just simply pieces of code; written and developed by humans, that can be changed by humans.

Algorithms shape the creation of 'bubbles' and networks on social media platforms by recommending what and who users should follow, and they define the reach of content. This includes the creation of troubling bubbles and the reach of harmful content.

For users, including young users, this means algorithms can create 'bubbles' around them. Algorithms use all the data a platform has about a young person – including their browsing history in a platform, data tracked about them from other websites via cookies, and demographic data young people have shared with platforms among others – to profile them and decide what content to recommend to young people and who to suggest they follow.

This report documents the shape and reach of one troubling bubble – those in the pro-eating disorder bubble on Instagram. It documents the size, reach and demographics of users in this bubble, capturing a glimpse at an algorithmically amplified community that captures many young users.

The existence of this bubble should be unsurprising to those at Instagram and Meta, their parent company. In 2019, Meta (then Facebook) commissioned internal research to explore the impact of Instagram on teengers. The results were damning. Meta's own research found that Instagram made body issues worse for one third of teen girls. Again in 2020, Meta's own internal research found that Instagram could push teens toward eating disorders, an unhealthy sense of their own bodies and depression. That research noted that the Explore page, which serves users photos and videos curated by its own algorithm, often sends users deep diving into content that can be harmful².

Despite knowing these risks, Meta has not taken adequate action. They are still using all of the data they hold about young people – their browsing history, their tracking data and demographics – to fine tune algorithms that are pushing young users into harmful bubbles. This research documents one potentially harmful bubble that Instagram's algorithm has amplified, but many others exist.

¹ Ashley Rodriguez 2018 'YouTubes recommendations drive 70% of what we see' *Quartz* <u>https://qz.com/1178125/youtubes-recommendations-drive-70-of-what-we-watch/</u>

² Georgia Wells, Jeff Horowitz and Deepa Seetharaman 2021 'Instagram is toxic for teens' *Wall Street Journal* <u>https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-sho</u> <u>w-11631620739</u>

Methods & Identifying the Pro-Eating Disorder Bubble

This research involved four methodological steps:

- 1. Identifying 'seed' accounts. Researchers selected 153 popular Instagram profiles that post content that normalizes, celebrates or promotes eating disorders and extreme weight loss. Seed accounts were selected that were public, had over 1,000 followers and met two of the three criteria:
 - They posted visual content that celebrated "thinspiration" or "bonespiration", such as positive imagery of extremely underweight people or other eating disorders memes;
 - They had an underweight body mass index as indicated in their biography. Often BMI was mentioned in bio, or a user's height and current and goal weight were stated in bio allowing their BMI to be calculated;
 - Their biography, username, or description of the content or comments contained Eating Disorder community-relevant vocabulary, such as ed (eating disorder), tw(trigger warning), ana (anorexia), mia (bulimia) etc.

No accounts that appeared to be 'recovery journals' or health awareness accounts were included in the seed accounts.

- 2. Detailed analysis of the followers of these 153 seed accounts. These seed accounts had a total of almost 2.3 million followers (2,286,849 in total). However, many Instagram users followed more than one of these seed accounts. Using publicly available information from account biographies we were able to estimate that 69.96% of these followers were unique users. This means in total, an estimated 1.6 million unique users follow the 153 seed accounts we identified.
- 3. Of these 1.6 million unique users, we identified those as "within the pro-eating disorder bubble" if they followed three or more of our seed accounts. Each of these seed accounts normalizes, glamorizes or promotes eating disorders. For this research, we identified 88,655 members of the ED community. These 88,655 accounts were used for this research.
- 4. Analysis of the available data about these 88,655 users, and sub-samples of them, to better understand their ages, geographies and reach.

More details about the method can be found in the Appendix.



Figure 1: Examples of content from the three of the larger seed accounts. In this research, users that followed three or more of these seed accounts were included as in the pro-eating disorder bubble.

About Instagram's Pro-Eating Disorder Bubble

Instagram's algorithm has given the pro-eating disorder bubble huge reach: One in every 75 accounts may follow content from them.

There are 88,655 unique users in Instagram's pro-eating disorder bubble. They have a huge reach, with a total of 28,158,398 million collective followers.

Analysis indicates that 69.96% of accounts following this sort of content are unique, which means there are around 20 million individual users following and receiving content from Instagram's pro-eating disorder bubble (19,699,615 in total).

This means that 20 million Instagram users are fed content from Instagram's Pro-Eating Disorder bubble; content that often normalizes, glamorizes and promotes eating disorders and extreme weight loss in their feed. This presents a potential health risk every time 20 million users log in.

This is a problem: the latest data suggests that Instagram has 1.393 billion monthly users worldwide³. Reaching 20 million of them, the pro-eating disorder bubble could be reaching around 1.4% of Instagram's user base.

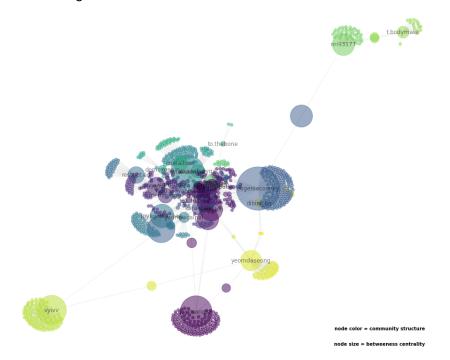


Figure 2: A network analysis showing the followers of the seed accounts on Instagram. The analysis documents the clusters of accounts that cross-follow each other, documenting multiple nodes. Nodes that are close together represent following a lot of similar accounts, while nodes that are further apart clusters are less interconnected. Larger nodes have more cross-connections than smaller nodes. Of this network, the 'bubble' analyzed is the 88,655 of the most cross connected accounts that are central to these nodes.

³ Jason Wise 2022 'How many people use Instagram in 2022'

https://earthweb.com/how-many-people-use-instagram/. Meta has not released up to date figures for a number of years now, but these are the last figures that report to have been confirmed by the company



FR it can't just be me on the third day of eating only 300 cals hits different

Figure 3: Types of available content posted within Instagram's pro-eating disorder bubble. Not all content posted within the bubble will be pro-eating disorder content, but much of the content of what researchers saw normalized, glamorized or promoted extreme weight loss and restrictive diets. For example the first image is of a calorie counting app, documenting the user's calorie intake ranging from 55 to 1378 calories per day, and the second image is a call out from a user asking if after other users find the third day of a 300 calorie a day diet harder. Fr = for real

A first hand account

My name is Kelsey and I am currently a 17 year old high school student in Southern California and I am an eating disorder-survivor-turned-activist. I've struggled with disordered eating and body image really since the start of public schooling, when I was around 6 years old. I have only recently embarked on the journey of understanding what a healthy relationship with my body and food really is supposed to look like.

Social media platforms are filled with content that seems to promote or normalize eating disorders or using unhealthy methods to lose weight. For example, on Instagram and Tik Tok there have been and continue to be viral trends that promote ingesting weight loss supplements or diet products which are supposed to "help you get your dream body". When youth see this supposed "simplistic, quick, and cheap" way to lose weight, they are enticed to capitalize on this deal, not knowing the detrimental impacts ingesting these products can potentially have on them.

To make matters worse, trends such as the "symmetry" trend or the "side profile" trend spread toxic beauty standards that are often ractist, non-inclusive, and extremely destructive to not just youth, but all users on the platform.

On top of this, there are all the beauty filters that have marketing slogans such as "This filter makes you look thin", "You're attractive if you have eight to 10 teeth showing you smile," "this filter gives you the perfect nose". All of these things and more collectivize to either promote eating disorders or even to normalize disorder eating behaviors in order to lose weight.

This sort of content used to fill my feed. I can't remember when it started, it feels like it's always been there, somehow or someway. As someone who had grown up with Instagram, it's hard not to imagine a time when the app didn't have the sort of content that promotes disordered eating behavior. I felt like my feed was always pushed towards this sort of content from the moment I opened my account.

That type of content at one point even got so normalized that prominent figures such as the Kardashians and other female and male influencers were openly promoting weight loss supplements and diet suppressors in order to help lose weight. I have never searched for these things and yet they pop up on my screen, whereas images or reminders of positive things such as body positivity influencers etc, I have to actively search for them in order for them to appear on my phone. It's telling that trends such as the A4 challenge (to see if you are thinner than a piece of a4 paper) or the jawline and symmetry trend (to see how symmetrical your jawline is) are able to go viral on Tiktok, instagram, etc, but trends that are related to the body positivity and food freedom movement have never been able to get that same attention.

Having achieved recovery of an eating disorder and currently actively working to better my relationship with me body, I can say that at this point whenever I see instagram or Tiktok recommend this kind of content, I immediately tell Instagram to not show me this kind of content and I'm able to move on. I have to take active steps to stop the algorithm recommending this content – Instagram pushes me towards this content, and I have to actively pull myself away from it.

But that wasn't possible for me 2 years ago. At the height of my eating disorder, I used social media as a fuel for my obsession with weight loss. I took the content they recommended to me of perfect toned bodies and tips for weight loss religiously, it motivated me when I was at my worst to continue down that destructive path of destroying my health. It was only when I learned to distance myself from social media could I then use my outside perspective to see just how horrible the impact was. But it was up to me to actively try and change my social media feeds, I had to do the hard work. This content was just always in my feed already, and somehow it was *my* responsibility to get it out.

Being a part of the generation that has grown up with social media I know first hand how harmful it's effects can be on teens who are just becoming accustomed to life. Because we grew up with social media, my generation has often learned to have their life evolve around it, and the effects have been largely horrible. Generation Z holds the record high amount in terms of mental heath issues and suicide rates. We feel more stressed, anxious, and lonely than any other generation. I feel that much of this truly is due to the recommendation and content of social media.

The pro-eating disorder community is alive in many of the fads and trends that are blowing up on kids phone's today. Almost 90% of the trends on Tik Tok and Instagram are in some way or form appearance related. People promote apps that help you lose weight, weight loss products, tricks and tips to have a jawline, etc, and Instagram's algorithm gives them a push. I think that action needs to be enacted immediately in order to address the issue right now. If not, this situation can and will blow out of control, legislators and lawmakers have the power to make this situation better, they just need to exercise their ability to do so.

Instagram's algorithm has promoted and grown this bubble

Instagram's algorithm is responsible for the wide reach of the pro-eating disorder bubble. Test accounts developed during an earlier phase of this research series⁴ demonstrated how Instagram recommends users follow these accounts. Researchers created experimental accounts that showed an interest in pro-eating disorder content. Using vocabulary like "Thinspo" and "TW" (Trigger warning) in the biographies, and followed pro-eating disorder influencers and content, these accounts gave the algorithm all the data it needed to push them into the pro-eating disorder bubble.

Using one account as an example, it was 'active' for 5 days gaining 88 followers in that time. In a subsequent five weeks of inactivity, this account gained seven times as many followers (686 more). This growth of inactive accounts can only be down to Instagram's algorithm, which was recommending that people from the pro-eating disorder bubble follow this experimental account.

⁴ Tech Transparency Project 2021 Dangerous by design: Thinstagram

https://www.techtransparencyproject.org/articles/thinstagram-instagrams-algorithm-fuels-eating-disorder-epidemic



Figure 4: The algorithmically amplified growth of our experimental account. Over five inactive weeks, it gained on average 132 followers per week (R² = 0.997)

The pro-eating disorder bubble is worryingly young: the average age of users is only 19.

4,115 users self-identify their ages in their account biographies, providing an insight into the age range of the pro-eating disorder bubble. They were worryingly young. The median age of users was 19, and one in three (33.75%) accounts in the bubble belonged to someone under 18 years old. This means that in total, 28,000 minors have been drawn into Instagram's pro-eating disorder bubble.

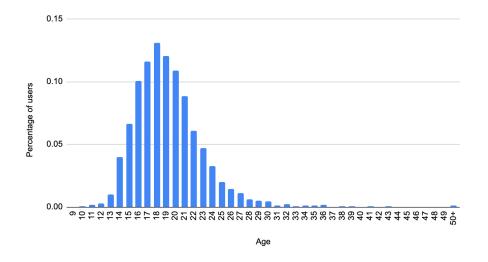


Figure 5: Self-declared ages of accounts in Instagram's pro-eating disorder bubble. n=4,115



I want to be able to say my weight out loud with no shame Length: 174 cm Current weight: 59.8 kg 🐖 Age: 13 years old

> tw Height: 164.5cm Age: 14 SW: 91kg CW: 85kg HW: 93kg GW1: 76kg GW2: 56kg UGW: 41kg ed [not pro-ana] block don't report

Figure 6: Example of account biographies in Instagram's pro-eating disorder bubble that identify age (anonymized). 'tw' is short for trigger warning, 'sw' for start weight, 'cw' for current weight, 'gw' goal weight, 'hw' is heaviest weight, 'ugw' is ultimate goal weight. 'HMU' is short for hit me up (or contact me). 'Ana' is short for anorexia. An 'Ana Coach' is someone who coaches you to lose more weight.

Instagram's terms and conditions state that a user must be at least 13 years old to create an account. The platform relies on children 'self declaring' their age when they sign up and there are few subsequent checks to ensure that young people under 13 years are not on the platform. There is much evidence to suggest that young people under 13 years join the platform, with a 2020 survey finding that 40% of 9–12 year olds use the platform at least once a day⁵.

This research was able to identify 21 young people in the pro-eating disorder bubble who stated that they are under 13 years, including users as young as 9 years⁶. It is likely that this vastly undercounts the number of children under 13 years in the bubble given that most children would not want to include their real age in their bio for fear of having their account reported. In fact, given Instagram's announcement in 2021 that it would use machine learning to identify and close the account of users under 13 years, it is noteworthy that we found any accounts that openly identified the users as under 13 years.

⁵ Thorn 2021 Responding to Online Threats

https://info.thorn.org/hubfs/Research/Responding%20to%20Online%20Threats_2021-Full-Report.pdf ⁶ Researchers reported these accounts to Instagram where possible

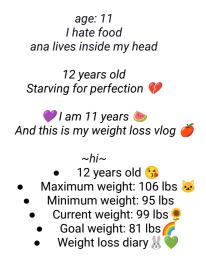


Figure 7: Example of account biographies in the bubble that identify ages under 13 (anonymized). 'Ana' is short for anorexia

Instagram's underage pro-eating disorder bubble has a disturbingly large reach: half a million accounts follow them

Instagram's algorithm amplified the reach of the underage pro-eating disorder bubble equally. Together, the minors within this bubble had 760K followers. If 69.96% of these are unique, that is over half a million users worldwide who follow children from within Instagram's pro-eating disorder bubble.

America's pro-eating disorder bubble

Using information available in account biographies, we were able to identify regional affiliations of 3,719 users. These included descriptions like 'Californian ,' ' Perth, WA' or ' Bristol'. These may be descriptions of origin or current location. More than 40 countries were mentioned in biographies, demonstrating the global reach of the bubble. Some biographies mentioned geography and age, allowing an estimate of the age range of the Eating Disorder community in the United States.

The median age of Instagram's pro-eating disorder bubble in the United States is 20 years old, and one quarter of users in the bubble self declare that they are minors.

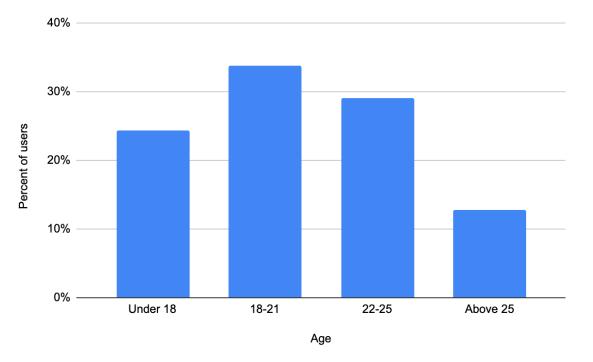


Figure 10: The self-declared ages of Instagram's pro-eating disorder bubble, USA. n=86

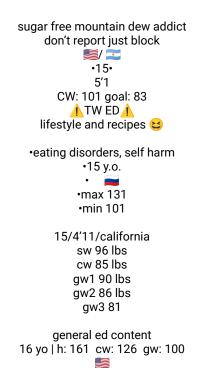


Figure 11: Example bios in the American pro-eating disorder bubble (anonymized). 'Don't report just block' is the user encouraging others not to report the account, rather to just block it from their feed. 'TW' is short for trigger warning, 'cw' for current weight, 'gw' goal weight, 'ed' for eating disorders. 'h' represents height or heaviest weight

Many young people in the pro-eating disorder bubble describe wanting to recover, but they will still be in the algorithm's bubble.

"The algorithms are very smart in the sense that they latch onto things that people want to continue to engage with. And unfortunately, in the case of teen girls and things like self harm, they develop these feedback cycles where children are using Instagram to self-soothe, but then are exposed to more and more content that makes them hate themselves."

- Frances Haugen Oct 4 2021, Testimony to US Senate Committee on Commerce, Science & Transportation

Many of the biographies of users in the bubble talk about wanting to or being in recovery, wanting to get 'better', to 'heal' or being aware of how unwell they were. However, these users are still in Instagram's algorithmically curated bubble. They will still be feeding content from other accounts in the bubble, including the seed accounts, that normalizes, glamorizes or promotes eating disorders.

anorexia is a disease, in recovery, at x 4, 13, page for ranting, trigger warning ~I just wanna feel better about myself~16 years old~ cw 52 kilos~ Trying to get prettier got me pretty screwed me up Female 17 * • fourteen • ana relapse • last attempted recovery: september 2021 • weight: 42 kilos • height: 153 cm • trigger warning ana screwed me up | relapse 16 (2 years into this) 1 report = 1 day fast choose recovery *

Figure 8: Example of biographies in the bubble that speak about wanting to recover or heal (anonymized). The hospital emoji indicates how many inpatient spells a user has had. '1 report = 1 day fast' is the user's attempt to discourage people from reporting their account, by indicating that if their account is reported, they will not eat for one day.

Instagram's Revenue from the Pro-Eating Disorder Bubble

Meta's policies outline that they will "remove content that promotes or encourages eating disorders" while allowing people to "share their own experiences and journeys around self-image and body acceptance".⁷

This is a difficult fine line for content moderators to police and allows much pro-eating disorder content and borderline content to be hosted on the platform. This might not be such a problem in

⁷ Instagram 2021 'Help Center'

https://help.instagram.com/567449254552862/?helpref=search&query=eating%20disorder&search_session__id=ecb7b2c02b7d32bb8c9d66bd2c203104&sr=2

itself if it wasn't for Instagram's algorithm; the algorithm goes on to promote the content that their moderation fails to detect to a huge amount of users worldwide.

Meta is inherently disincentivized from downgrading this content in their algorithm, and otherwise addressing the pro-eating disorder bubble that its algorithm has created. The scale and size of the community means it delivers an unhealthy profit. Any bubble that reaches 1.4% of its user base forms part of their business model, even bubbles that present significant health risks to users.

Each quarter, Meta releases a key metric called Average Revenue Per Person (ARPP) for Facebook. While Meta does not release an AARP for Instagram, Facebook's figures are the most comparable estimates available and potentially underestimate Instagram's ARPP. Instagram contributes over half of Meta's ad revenue (52.6%)⁸, despite having only around a third of the users of Facebook (Instagram had 1.074 billion monthly users worldwide in Dec 2021, while Facebook had 2.912 billion). Instagram potentially has a higher ARPP than Facebook, so using Facebook' ARPP to estimate for Instagram produces a conservative estimate.

Facebook's ARPP in Q4 2021 stood at \$11.57 per user globally, or \$60.57 per user in the US and Canada, \$19.68 per user in Europe and \$4.89 per user in the Asia Pacific region⁹.

Using these figures and the geographic regional affiliations in biographies allows us to estimate Meta's total revenue from the pro-eating disorder bubble: \$1.8 million per year. The revenue generated from all users following this bubble is \$227.9 million per year.

Meta's underage pro-eating disorder bubble is also profitable. They bring in \$0.5 million annual revenue alone, or \$62 million revenue from the people who follow those in the underage eating pro-disorder bubble. Again, all of these figures are conservative estimates and likely would be significantly higher if Meta released ARPP for Instagram users.

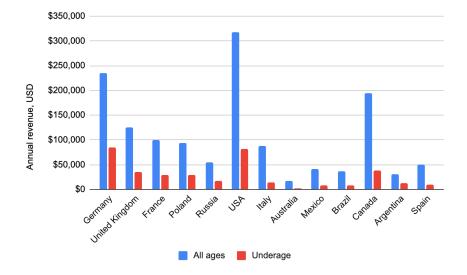


Figure 12: Meta's annual revenue from the pro-eating disorder bubble by country

⁸ Sara Lebow 2021 'Instagram contributes over haf of Facebooks US ad revenue'

https://www.emarketer.com/content/instagram-contributes-over-half-of-facebook-us-ad-revenues ⁹ Meta 2021 Meta Earnings Presentation Q4 2021

https://s21.q4cdn.com/399680738/files/doc_financials/2021/q4/Q4-2021_Earnings-Presentation-Final.pdf

Conclusions

Instagram is profiting from the promotion of a harmful Pro-Eating Disorder Bubble. Children and teens are being fed accounts (and content) encouraging restrictive diets and extreme weight loss, and in turn, Instagram is regularly promoting and recommending children and teen's pro-eating disorder accounts (and content) to half a million people globally. The algorithm is clearly not functioning in young people's best interests.

This is an example of how Meta systematically and repeatedly prioritizes profit over young people's safety and well-being. Meta's decisions around recommending eating disorder accounts and content may deliver small but steady profits to shareholders, but it has significant real life consequences for children and young people.

The Facebook Files revealed Meta has been aware of this problem since at least 2019 and have failed to act. We cannot wait for or depend on Meta to do the right thing. It is time that lawmakers and regulators around the world to take action by setting guardrails on what social media platforms can and cannot do.

Introducing regulations that require platforms like Instagram to consider the safety and well-being of young people in the way they design and operate their systems and processes is essential. Requirements to only use minor's data in their best interests must be a first step.

Proposals in front of the California legislature and Congress would require platforms to do this. These regulations are long overdue, and are demonstrably necessary to incentivise action against algorithms that promote eating disorder content.

Appendix

A note about the biographies represented in this report:

All biographies represented in this report have been anonymized. While these are not 'searchable' in search engines nor on Instagram itself, and are publicly available, they have still been anonymized in the following ways:

- Any names have been removed
- Emojis and other grammatical features have been altered
- The ordering of language has been changed
- In some instances, geographies have been 'shifted' where they would be identifiable
- Some start weights and goal weights have been altered

The meaning and intent of each biography has been maintained.

Methods used in this report:

- 1. Data collection
- 2. Data mining
- 3. Natural language processing
- 4. Statistical analysis

Timeframe of research collection:

13 December 2021 – 14 January 2022

Approach:

Step 1 – Selecting seed accounts. This involved the manual selection of Instagram profiles that post content normalizing body-image problems or promoting eating disorders and extreme weight loss. Accounts were selected where an account was public, had over 1000 followers and two of three criteria were met:

- They posted visual content that celebrated "thinspiration" or "bonespiration", such as positive imagery of extremely underweight people or other eating disorders memes;
- They had an underweight body mass index as indicated in their biography. Often BMI was mentioned in bio, or a user's height and current and goal weight were stated in bio allowing their BMI to be calculated;
- Their biography, username, or description of the content or comments contained Eating Disorder community-relevant vocabulary, such as ed (eating disorder), tw(trigger warning), ana (anorexia), mia (bulimia) etc.

No accounts that appeared to be 'recovery journals' or health awareness accounts were included in the seed accounts.

Step 2 – Data collection about followers of seed accounts. The 153 seed accounts had a total of almost 2.3 million followers (2,286,849 in total as an arithmetic sum of followers). However, many of these 2.3 million followers were following more than one of these seed accounts.

Cross referencing publicly available information from account biographies, such as usernames, suggested that 69.96% of these 2.3 million followers were unique users. This 69.96% calculation is

used throughout the research as an estimate of the proportion of unique users within a pool of followers.

Of these 2.3 million followers, an estimated 1.6 million unique users follow the 153 seed accounts (1,599,880 in total).

Step 3 – Identifying those within Instagram's pro-eating disorder bubble. Among these 1.6 million users, we identified those following three or more 'seed accounts' as within Instagram's pro-eating disorder bubble. In total 88,655 users were estimated to be within the bubble.

Step 4 – Analysis of the available data about the accounts within the bubble. We collected and analyzed the following data points about the 88,655 user's accounts:

- username
- biography
- followers count
- private account
- language

This analysis included creating estimates of:

- The age of those within the bubble. Using natural language processing searching for age by specific templates, combined with human coding, we were able to identify that 4,115 users self-identify their ages in their account biographies. These self-declared ages were used to estimate the age range of users. Age templates were multilingual, included numbers as well as words, emojis and different terms and are available upon request.
- The geography of those within the bubble. Using natural language processing searching for age by specific templates, combined with human coding, we were able to identify that 3,719 users had identified a regional affiliation in their biography. These regional affiliations were used to estimate age geographies. Regional affiliation templates were multilingual, included emoji flags as well as words and different terms and are available upon request.
- Follower counts of those following users within the bubble. The arithmetic sum of the followers of these 88,655 users is 28,158,398. The estimate of unique users with a follower count is 69.96%. This means that around 20 million (19,699,615) unique accounts follow 88,655 profiles assumed to be in the ED community on Instagram.

Creating estimates of Instagram's revenue from this bubble used publicly available information about Facebook's Average Revenue Per Person (ARPP) from Q4 2021¹⁰. Facebook's AARP was applied to the geographic regional affiliations in biographies to allow an estimate of Meta's total revenue from users within the pro-eating disorder bubble.

As geographic information was not analyzed about the followers of those within the bubble, the global average ARPP was used to generate the total estimate. This global figure includes all users for whom content from within the bubble forms *part of* their experience on the platforms. This research did not attempt to explore how much of their content came from within the bubble, or the centrality of 'the bubble' to any user's experience on the platform. Rather, this figure attempts to highlight the sum total of Meta's revenue that the pro-eating disorder bubble is a part of.

¹⁰ Meta 2021 *Meta Earnings Presentation Q4 2021* <u>https://s21.q4cdn.com/399680738/files/doc_financials/2021/q4/Q4-2021_Earnings-Presentation-Final.pdf</u>

Facebook Says AI Will Clean Up the Platform. Its Own Engineers Have Doubts. - WSJ

Facebook Says AI Will Clean Up the Platform. Its Own Engineers Have Doubts.

Oct. 17, 2021 9:17 am ET By Deepa Seetharaman, Jeff Horwitz and Justin Scheck

Facebook Inc. executives have long said that artificial intelligence would address the company's chronic problems keeping what it deems hate speech and excessive violence as well as underage users off its platforms.

That future is farther away than those executives suggest, according <u>to internal documents</u> <u>reviewed by The Wall Street Journal</u>. Facebook's AI can't consistently identify first-person shooting videos, racist rants and even, in one notable episode that puzzled internal researchers for weeks, the difference between cockfighting and car crashes.

On hate speech, the documents show, Facebook employees have estimated the company removes only a sliver of the posts that violate its rules—a low-single-digit percent, they say. When Facebook's algorithms aren't certain enough that content violates the rules to delete it, the platform shows that material to users less often—but the accounts that posted the material go unpunished.

The employees were analyzing Facebook's success at enforcing its own rules on content that it spells out in detail internally and in public documents like its community standards.

"The problem is that we do not and possibly never will have a model that captures even a majority of integrity harms, particularly in sensitive areas."

- Facebook senior engineer and research scientist

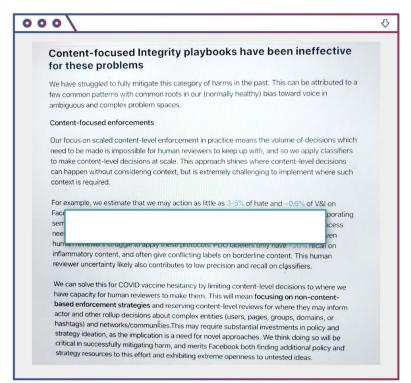
The documents reviewed by the Journal also show that Facebook two years ago cut the time human reviewers focused on hate-speech complaints from users and made other tweaks that reduced the overall number of complaints. That made the company more dependent on AI enforcement of its rules and inflated the apparent success of the technology in its public statistics.

According to the documents, those responsible for keeping the platform free from content Facebook deems offensive or dangerous acknowledge that the company is nowhere close to being able to reliably screen it.

"The problem is that we do not and possibly never will have a model that captures even a majority of integrity harms, particularly in sensitive areas," wrote a senior engineer and research scientist in a mid-2019 note.

He estimated the company's automated systems removed posts that generated just 2% of the views of hate speech on the platform that violated its rules. "Recent estimates suggest that unless there is a major change in strategy, it will be very difficult to improve this beyond 10-20% in the short-medium term," he wrote.

This March, another team of Facebook employees drew a similar conclusion, estimating that those systems were removing posts that generated 3% to 5% of the views of hate speech on the platform, and 0.6% of all content that violated Facebook's policies against violence and incitement.



from the files

For example, we estimate that we may action as little as 3-5% of hate and -0.6% of V&I on Facebook, despite being the best in the world at it. Source: Internal report titled, "'Harmful Non-Violating Narratives" is a Problem Archetype in Need of Novel Solutions'

Facebook spokesman Andy Stone said that these percentages referred to posts that were removed using AI, and didn't include other actions the company takes to reduce how many people view hate speech, including ranking posts lower in news feeds. Facebook says by that measure, the prevalence of content that violates its policies has been shrinking, and that is what the company considers its most important enforcement metric.

The statistics contrast starkly with the confidence in AI presented by Facebook's top executives, including CEO <u>Mark Zuckerberg</u>, who previously said he expected Facebook would use AI to detect "the vast majority of problematic content" by the end of 2019.

The company often says that nearly all of the hate speech it takes down was discovered by AI before it was reported by users. It calls this figure its proactive detection rate, and it had reached nearly 98% as of earlier this year.

Civil rights groups and academics have long been skeptical that the AI detection rate shows meaningful progress, saying it doesn't seem to match user experiences or their own studies. "They won't ever show their work," said Rashad Robinson, president of the civil rights group Color of Change, which helped organize an advertiser boycott of Facebook last year due to what it called the company's failure to control hate speech.

"We ask, what's the numerator? What's the denominator? How did you get that number?" he said. "And then it's like crickets."

THE FACEBOOK FILES

Want an email alert for the next article in the Journal's <u>Facebook Files</u> investigation? <u>Sign</u> <u>up here</u> and also get email alerts for major tech sector news in the future.

In an interview, Facebook's head of integrity, Guy Rosen, said it was more important to look at other data points that show the amount of hate speech shrinking as a percentage of what people see on the platform overall. Facebook says five out of every 10,000 content views contained hate

speech, an improvement from roughly 10 of every 10,000 views in mid-2020, according to its latest public report on how it enforces its policies, for the second quarter of this year.

"Prevalence is the most important metric, and it represents not what we caught, but what we missed, and what people saw, and it's the primary metric we hold ourselves accountable to," Mr. Rosen said. "We've been successful in moving it down, and it's the one that we really focus on."

Mr. Stone, the spokesman, said Facebook executives have increasingly emphasized this measurement in their public comments. He said much of the improvement has come because AI ranks suspected content lower to give it less visibility.

Mr. Rosen also said the documents reviewed by the Journal were outdated, but that they had informed Facebook's broader thinking about AI-driven content moderation.

Last month, the company said its AI systems were getting <u>better at "proactively removing</u> <u>content that violates our standards</u> on hate speech" and said it was removing 15 times more of this content than in 2017.

The documents are part of extensive internal communications reviewed by the Journal that offer an unprecedented look at Facebook's struggles to manage the products and systems at the heart of its business success.

The Journal's series, based on the documents and interviews with current and former employees, describes how the <u>company's rules favor elites</u>; how its <u>algorithms foster discord</u>; that it has long known <u>drug cartels and human traffickers use its services</u> openly; and how <u>Facebook is used by</u> <u>antivaccine activists</u>, among other issues. An article about <u>Instagram's effects on teenage girls</u>' mental health spurred <u>a Senate hearing in late September</u>.

Examples of content that Facebook's AI should have detected but missed include close-up videos of a person shooting someone, and videos of car crashes with "dismemberment and visible innards," according to the documents. Other violations of Facebook's policies that slipped through AI were violent threats directed at transgender children.



A memorial site for the shooting victims in Christchurch, New Zealand, in 2019. The attack was live streamed on Facebook.

PHOTO: VINCENT THIAN/ASSOCIATED PRESS

Facebook says it has spent about \$13 billion on "safety and security" since 2016, or nearly 4% of its revenue in that time. Mr. Rosen said that in 2016, Facebook's content-moderation system relied largely on user complaints and that the company has since built AI tools to find the objectionable content.

In 2018, Mr. Zuckerberg told a Senate committee that he was optimistic that within five to 10 years, Facebook would have the AI tools to proactively detect most hate speech. "Over the long term, building AI tools is going to be the scalable way to identify and root out most of this harmful content," he said at the time.

In July 2020, he told Congress: "In terms of fighting hate, we've built really sophisticated systems."

A <u>Facebook executive testified at the late-September Senate hearing</u> that the company is using AI to keep kids under 13 off Instagram.

'Pretty naive'

Facebook's artificial-intelligence systems comb through billions of posts looking for items that might match the company's definitions of content that violates its rules. The screening algorithms, called classifiers, are the bedrock of the company's content-moderation system.

Building these classifiers is labor intensive and complex, requiring an army of humans to mark a vast number of posts based on a set of rules. Engineers then take these examples and train their systems to determine the probability that other posts violate the rules.

Facebook's algorithms can automatically remove hate speech when they reach a certain level of confidence that the post violates policies, or they can push lower on feeds more questionable posts to limit their spread.

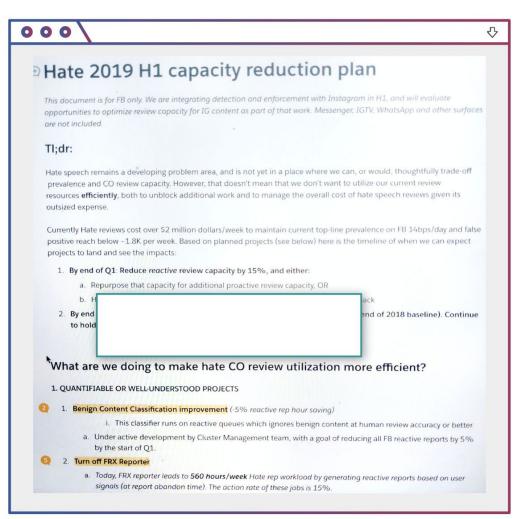
In some areas, such as with spam, Facebook's classifiers work relatively well. But they often fall short in sensitive and controversial areas, especially when Facebook's rules are complex and cultural context matters, according to the documents and people familiar with the matter.

"The classifiers are like elementary school students and they need teachers (human reviewers) to grow into PhDs," one Facebook engineer wrote in a discussion about hate-speech costs on Facebook's internal employee platform in August 2019. Based on one measure of success, the engineer wrote, "our classifiers are still pretty naive."

In one example, AI labeled a video of a carwash as a first-person shooter video, according to the documents. In another, it mistook a video of a shooting for a car crash.

Some employees say Facebook is misusing the classifiers, which they say are more effective as tools to flag broad problem areas than as the main tool for removing specific content problems.

In 2019, documents reviewed by the Journal show, Facebook introduced "hate speech cost controls" to save money on its human content review operations. Review of hate speech by human staff was costing \$2 million a week, or \$104 million a year, according to an internal document covering planning for the first half of that year.



from the files

By end of Q2: Reduce \$ cost of total hate review capacity by 15% (relative to an end of 2018 baseline). Continue to hold proactive review capacity steady. Source: 2019 document titled 'Hate 2019 H1 capacity reduction plan'

"Within our total budget, hate speech is clearly the most expensive problem," a manager wrote of the effort in a separate document, declaring that the cost of policing slurs and the denigration of minority groups, which Facebook rules bar, "adds up to real money." Mr. Stone, the spokesman, said the funds were shifted to hire more people to train Facebook's algorithms and that the overall budget stayed steady.

Roughly 75% of the costs came from employing people to review user complaints, the vast majority of which were deemed, after review, to not be hate speech, the documents show. In 2019, beyond simply cutting the number of contractor hours dedicated to reviewing hate speech, the company began employing an algorithm that led them to ignore a larger percentage of user reports that the system deemed unlikely to be violations.

It also introduced "friction" to the content reporting process, adding hoops for aggrieved users to jump through that sharply reduced how many complaints about content were made, according to the documents.

"We may have moved the needle too far," the author of one of the documents acknowledged of the company's efforts to make it less likely that users would complete their reports on hate speech to the company.

The moves helped boost the company's proactive detection rate, meaning, a greater proportion of the content that was removed was flagged by AI—the figure that is now nearly 98%. In December 2017, 24% of removed hate speech was detected by AI, and the rest from user reports, according to Facebook's quarterly public report on how it enforces its policies.

Mr. Stone said the moves to ignore user reports deemed unlikely to be violations and the addition of friction weren't intended to change the proactive detection rate but instead were intended to make the system more efficient. He added that some of that additional friction has since been rolled back.

The performance of Facebook's automated systems illustrates how difficult it is for Facebook and other tech companies to build systems that reliably and comprehensively detect content that breaks their rules.

"This is one of the hardest problems in machine learning," said J. Nathan Matias, an assistant professor at Cornell University. "It's also an area that so many companies and policy makers have just decided was going to be the solution—without understanding the problem."

User experience

The discrepancy between Facebook's public claims about the effectiveness of its AI and the reality of the user experience has long puzzled researchers and other heavy users of the platform.

In 2016, pop star Selena Gomez flew to Facebook's Menlo Park headquarters to pose for pictures with Mr. Zuckerberg and Facebook's Chief Operating Officer Sheryl Sandberg to celebrate her status as the most-followed account on Instagram. Not long after, she was startled to read a user comment on one of her Instagram posts: "Go kill yourself," according to the star's spokesman.

She grew increasingly concerned about the spread of hate speech on these platforms, and in September 2020 she sent an Instagram message that she later posted on her account to Mr. Zuckerberg and Ms. Sandberg, saying the company had a "serious problem" with hate, misinformation, racism and bigotry.

Ms. Gomez then followed up by email to ask why Facebook allowed hate groups to thrive on the site, according to emails reviewed by the Journal and <u>previously reported by the Associated</u> <u>Press</u>. Ms. Sandberg responded that Facebook's AI had detected 91% of the 1.5 million posts it removed for violating its rules against using symbols or phrases from hate groups.

Ms. Gomez wrote back that Ms. Sandberg hadn't addressed her broader questions, sending screenshots of Facebook groups that promoted violent ideologies.

"You refuse to even mention, let alone address, the problem Facebook has with white supremacists and bigots," Ms. Gomez wrote in an Oct. 10, 2020, email to Ms. Sandberg and other executives, adding that there were plenty of Facebook groups "full of hate and lies that might lead to people being hurt or, even worse, killed."

Ms. Gomez declined requests for further comment.

Mr. Stone said Ms. Sandberg has publicly highlighted Facebook's hate-speech prevalence figures this year.

Fadi Quran, a researcher at the human-rights group Avaaz, which advocates for citizen action in areas such as climate change and poverty, said he has repeatedly asked Facebook employees if

they understood how much hate speech was on their platform and how much they acted on. "They said verbatim that that was almost impossible, and they can only report with certainty on what they detect," he said.

"By hiding the problem and giving the opposite impression—that the issue is under control they're actually complicit in allowing those community violations to go forward with minimal accountability," he said.

Mr. Stone said Facebook provided Mr. Quran with public prevalence figures and other metrics.

In its quarterly public reports on how it enforces its policies, Facebook measures the prevalence of certain types of content, like hate speech, by the number of views that content attracts. The company says this is a more accurate way of measuring the true impact of a piece of content that violates its policies. In other words, hate speech viewed a million times is more of a problem than hate speech viewed just once.

The company doesn't publicly report what percentage of hate-speech views it removes. Internally, the company calculates this figure by applying their hate-speech classifiers to a sample of posts and then having humans review the same posts to see how much the classifiers missed, according to a person with direct knowledge of the estimates. The number is then used as an estimate for the amount of hate-speech views removed across the whole platform.



Guy Rosen, Facebook's head of integrity, during a 2018 interview on Frontline.

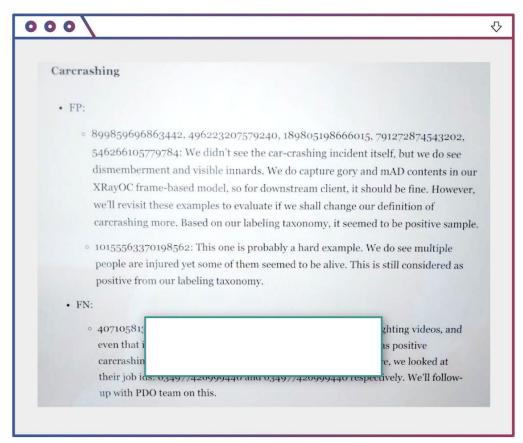
PHOTO: PHOTO COURTESY OF FRONTLINE

Mr. Rosen, the integrity chief, said in the interview that the company's quarterly public reports are evidence it is taking these problems seriously.

Cockfights, car crashes

In mid-2018, an engineer noticed a troubling trend: "a lot of car crashing and cockfighting in prevalence data," he wrote in a 2019 internal report. Facebook users were finding in their feeds videos of crashing cars and fighting roosters, which would normally violate Facebook's rules. Data scientists weren't sure why.

The engineer and a team of colleagues trained an artificial intelligence system to recognize videos of cockfights and car crashes and weed them out. "However," the engineers wrote in a memo, "the problem didn't really get solved."



from the files

These are clearly cockfighting videos, and even that it should be negative for cockfighting, but got labeled as positive carcrashing.

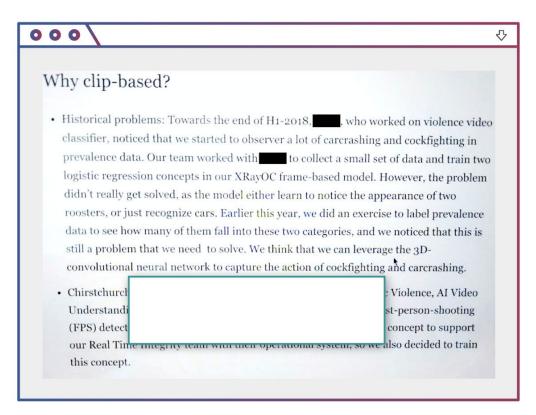
Source: June 2019 internal note titled 'XRayOC 2019a clip-based model'

Facebook also set rules for cockfighting that the AI had trouble following. Mild cockfights were deemed acceptable, but those in which the birds were seriously hurt were banned. But the computer model couldn't distinguish fighting roosters from non-fighting roosters.

To train the company's systems, the engineers employed sophisticated machine-learning programs with names like "Deep Vision" and fed hours and hours of cockfighting videos into them. Teaching the AI to flag a severely injured bird and ignore a less injured one proved difficult.

"This is hard to catch," the engineers wrote.

In two cases where the engineers did get the AI to flag a cockfight, they turned up another problem: "These are clearly cockfighting videos," but they were labeled as car crashes, the researchers wrote.



from the files

Christchurch incident: We worked with multiple partners (Graphic Violence, AI Video Understanding, etc), and we realized that we have been missing first-person-shooting (FPS) detection.

Note: A name has been redacted on this document.

Source: June 2019 internal note titled 'XRayOC 2019a clip-based model'

The same team hit obstacles around shootings recorded by the perpetrator, known as "firstperson shooter" videos, the internal memo says. Three months before the memo was written, a man in Christchurch, New Zealand, used Facebook to live stream his fatal shooting of 51 people

in two mosques.

In some cases, the AI didn't recognize shootings. In others, it mislabeled innocuous videos, such as paintball games, or the carwash, the researchers wrote.

Missing foreign languages

The AI must also be trained in foreign languages.

According to a December 2020 memo, Facebook employees debated creating a hate-speech classifier for various Arabic dialects. But the lack of training data—such as samples of the various dialects—was a problem, especially since they were having trouble with standard Arabic. "As it stands, they have barely enough content to train and maintain the Arabic classifier currently—let alone breakdowns," one employee wrote in a document.

In January, a Facebook employee reported that hate speech was one of the top "abuse categories" in Afghanistan, but the company took action against just 0.23% of the estimated hate speech posts in the country.

The employee said that the company's "seriously scant" list of slurs in the languages spoken in Afghanistan meant it could be missing many violating posts.

In March, employees gearing up for regional elections in India said hate speech was a major risk in Assam, where there is growing violence against Muslims and other ethnic groups. "Assam is of particular concern because we do not have an Assamese hate-speech classifier," according to one planning document.



Indian students and doctors protest in Assam state, India. A Facebook employee warned that hate speech related to ethnic violence in Assam was a major risk on the platform.

PHOTO: DAVID TALUKDAR/AGENCE FRANCE-PRESSE/GETTY IMAGES

While Facebook removes a tiny fraction of the content that violates its rules, executives are particularly sensitive to what it calls "over-enforcement," or taking down too many posts that don't actually violate hate-speech rules, according to people familiar with the matter. The emphasis on preventing those mistakes has pushed company engineers to train models that, in effect, allow for more hate speech on the platform to avoid false positives, according to the people.

Its own internal research shows that Facebook users world-wide are more concerned about lack of enforcement. In March 2020, Facebook found that users, on average, rated seeing violating

content like hate speech as a more negative experience than having their content taken down by mistake, according to the documents.

"Each half [year] we make incremental progress on the amount of content we're able to proactively detect. But an incremental increase on a very small number is still a very small number."

- Facebook data scientist

Globally, users ranked inaccurate content removals last among a series of problems, while hate speech and violence topped the list. American users were more concerned by inaccurate removals, but still rated the problem behind hate speech and violence, the survey shows.

In a late 2020 note, a departing data scientist noted that Facebook has a policy of allowing groups to sanction hate speech five times before they are removed from the platform. Because Facebook's systems miss so much hate speech, the groups are likely to get away with far more, the data scientist wrote.

"When you consider that we miss 95% of violating hate speech, you realize that it might actually take 100 violations for that group to accrue its five strikes," he said in the note, <u>which was</u> <u>previously reported by BuzzFeed.</u>

The outgoing data scientist noted that despite intense investment by Facebook, the company's success rate at removing banned content remained dismal. "Each half [year] we make incremental progress on the amount of content we're able to proactively detect," he wrote. "But an incremental increase on a very small number is still a very small number."

"We might just be the very best in the world at it," he wrote, "but the best in the world isn't good enough to find a fraction of it."



Written Testimony of

Frances Haugen

Before the

United States House of Representatives Committee on Energy and Commerce Subcommittee on Communications and Technology

Hearing Regarding

"Holding Big Tech Accountable"

Dec. 1, 2021

Sub-committee Chairman Doyle, Ranking Member McMorris Rodgers, Members of the Committee, thank you for the opportunity to appear before you today.

My name is Frances Haugen. I used to work at Facebook. I joined the company because I believe Facebook has the potential to bring out the best in us. But I am here today because I believe that Facebook's products harm children, stoke division in our communities, threaten our democracy, weaken our national security and much more. Facebook is a company that has paid for its immense profits with our safety and security.

I am honored to be here today to share what I know, and I am grateful for the level of scrutiny these issues are getting. I hope we can stay focused on the real harms to real people rather than talk in abstractions. This is about the teenagers whose mental health is undermined by Instagram. And it is about their parents and teachers who are struggling to deal with the consequences of that harm. It is about the doctors and nurses who have to cope with the conspiracies about COVID-19 and vaccines. It is about the people who have suffered harassment online. It is about the families -- at home and around the world -- who live in places where hate, fear, and conflict have been ratcheted up to fever pitch through online radicalization.

Facebook may not cause all of these problems. But the company has definitely made them worse. Facebook knows what is happening on the platform, and they do far too little about it -- in fact they have incentives for it to be this way. That's what has to change.

The company's leadership knows how to make Facebook and Instagram safer. But they repeatedly chose to ignore these options, and continue to put their profits before people. They can change the name of the company, but unless they change the products, they will continue to damage the health and safety of our communities and threaten the integrity of our democracies.

There have been many others sounding this same alarm. This committee has heard from many experts in recent years. They have done the painstaking work of documenting these harms. I am sad to validate their findings. We have long known that Facebook's business model is problematic -- now we have the evidence to prove it. The documents I have shared with Congress speak for themselves.

What I have to say about these documents is grounded in far more than my experience at Facebook. I have worked as a product manager at large tech companies since 2006, including Google, Pinterest, Yelp, and Facebook. My job has largely focused on algorithmic products like Google+ Search and recommendation systems like the one that powers the Facebook News Feed. I know my way around these products, and I have watched them evolve over many years.

Working at four major tech companies that operate different types of social networks has given me the perspective to compare and contrast how each company approaches and deals with different challenges. The choices being made by Facebook's leadership are a huge problem — for our children, for our communities and for our democracy -- that is why I came forward. And let's be clear: it does not have to be this way. They could make a different choice.

We are here today because of deliberate choices Facebook has made. During my time at the company, first working as the lead product manager for Civic Misinformation and later on Counter-Espionage, I saw that Facebook repeatedly encountered conflicts between its own profits and our safety. Management consistently resolved those conflicts in favor of its own profits.

Facebook wants you to have analysis paralysis, to get stuck in false choices and to not act here. But let's not miss that Facebook programs its algorithms to maximize profits, which means it decides which speakers are heard and which are not. Facebook decides which content is seen by tens of millions and which is buried. The result is a system that amplifies division, extremism, and polarization. Facebook is running the show, whether we know it or not.

Facebook's choices have led to disastrous ends in too many cases. Facebook's amplification promotes violence that harms and even kills people. In other cases, Facebook's profit-optimizing machine is generating self-harm and self-hate — especially for vulnerable groups, like teenage girls, the socially isolated, and the recently widowed. And no one is held accountable.

These problems have been confirmed repeatedly by Facebook's own internal research -secrets that do not see the light of day. This is not simply a matter of some social media users being angry or unstable. Facebook became a \$1 trillion company by paying for its profits with our safety, including the safety of our children. And that is unacceptable.

This committee's attention, and this Congress's action, are critical. The public deserves further investigation and action to protect consumers on several fronts.

First, given that platforms like Facebook have become part of the new cybersecurity attack surface on the U.S., our national security demands more oversight. Second, we should be concerned about how Facebook's products are used to influence vulnerable populations. Third, we must correct the broken incentive system that perpetuates consistent misalignment between Facebook decisions and the values espoused by the majority of its users.

I cannot stress enough that none of this will matter if there continues to be no transparency or accountability guardrails. No efforts to address these problems are ever going to be effective, if Facebook is not required to share data in support of its claims or be subject to oversight of its business decisions.

I came forward because I recognized a frightening truth: almost no one outside of Facebook knows what happens inside Facebook.

The company's leadership keeps vital information from the public, the U.S. government, its shareholders, and governments around the world. The documents I have provided prove that Facebook has repeatedly misled us about what its own research reveals about the safety of children, its role in spreading hateful and polarizing messages, and so much more.

Rising to meet these challenges won't be easy. But democracies must do what they have always done when the actions of commerce conflict with the interests of the people and society as a whole -- Democracies must step in and make new laws.

Let's not forget -- we have stood at these crossroads before. When the tobacco companies claimed that filtered cigarettes were safer for consumers, it was possible for scientists to independently invalidate that marketing message and confirm that, in fact, they still posed a serious threat to human health. But today we cannot make this kind of independent assessment of Facebook. We have to just trust that what Facebook says is true — and they have repeatedly proved that they do not deserve our blind faith.

We need to open up the black box at Facebook. We need additional capacity to investigate the problems these products cause, and the ability to audit what they tell us, because we have learned they cannot be trusted.

Facebook wants you to get caught up in a long, drawn out debate over the minutiae of different legislative approaches. Please don't fall into that trap. Time is of the essence.

There is a lot at stake here. You have a once-in-a-generation opportunity to create new rules for our online world.

I came forward, at great personal risk, because I believe we still have time to act. But we must act now.

Thank you.

Is Facebook Bad for You? It Is for About 360 Million Users, Company Surveys Suggest - WSJ

Is Facebook Bad for You? It Is for About 360 Million Users, Company Surveys Suggest By: Georgia Wells, Deepa Seetharaman, Jeff Horwitz | Nov. 5, 2021 11:09 am ET

Facebook researchers have found that 1 in 8 of its users report engaging in compulsive use of social media that impacts their sleep, work, parenting or relationships, according to documents reviewed by The Wall Street Journal.

These patterns of what the company calls problematic use mirror what is popularly known as internet addiction. They were perceived by users to be worse on Facebook than any other major social-media platform, which all seek to keep users coming back, the documents show.

A Facebook team focused on user well-being suggested a range of fixes, and the company implemented some, building in optional features to encourage breaks from social media and to dial back the notifications that can serve as a lure to bring people back to the platform.

Facebook shut down the team in late 2019.

A company spokeswoman said Facebook in recent months has begun formulating a new effort to address what it calls problematic use alongside other well-being concerns, such as body image and mental health.

The company has been public about its desire to address these problems, said Dani Lever, the spokeswoman, in a statement. Some people have struggles with other technologies, including television and smartphones, she said.

"We have a role to play, which is why we've built tools and controls to help people manage when and how they use our services," she said in the statement. "Furthermore, we have a dedicated team working across our platforms to better understand these issues and ensure people are using our apps in ways that are meaningful to them."

The Wall Street Journal's Facebook Files series has documented how Facebook knows the products and systems central to its business success routinely fail and cause harm. For some people, such as <u>teen girls</u> or <u>human-trafficking victims</u>, the risks can be significant. These documents highlight the company's research into possible negative impacts on a broader swath of users.

<u>Facebook is owned by Meta Platforms Inc.</u> A restructuring announced in late October highlights the company's focus on the so-called metaverse—an online world featuring extensive use of virtual reality—that goes beyond traditional social media.

The research into social-media use that may negatively affect people's day-to-day lives was launched several years ago with the goal of mitigating harmful behavior that the company was increasingly identifying on its platforms.

The researchers on the well-being team said some users lack control over the time they spend on Facebook and have problems in their lives as a result. They wrote that they don't consider the behavior to be a clinical addiction because it doesn't affect the brain in the same way as gambling or substance abuse. In one document, they noted that "activities like shopping, sex and Facebook use, when repetitive and excessive, may cause problems for some people."

Those problems, according to the documents, include a loss of productivity when people stop completing tasks in their lives to check Facebook frequently, a loss of sleep when they stay up late scrolling through the app and the degradation of in-person relationships when people replace time together with time online. In some cases, "parents focused more on FB than caring for or bonding with their children," the researchers wrote.

"I'm on Facebook every day, every moment. Literally, every moment; just not when I'm in the shower," a 22-year-old woman told the researchers. "I lose the notion of time."

In March 2020, several months after the well-being team was dissolved, researchers who had been on the team shared a slide deck internally with some of the findings and encouraged other teams to pick up the work.

The researchers estimated these issues affect about 12.5% of the flagship app's more than 2.9 billion users, or more than 360 million people. About 10% of users in the U.S., one of Facebook's most lucrative markets, exhibit this behavior. In the Philippines and in India, which is the company's largest market, the employees put the figure higher, at around 25%.

The researchers said in the documents that most of the people who use Facebook compulsively said they used multiple social-media apps, including Instagram and WhatsApp, which are also owned by Meta, Facebook's new corporate parent, along with Twitter and Snapchat. Some of the troublesome aspects for users on Facebook, such as feeling pressure to respond to messages and frequently checking for new content, are also widespread in smartphone use, the researchers noted.

"Why should we care?" the researchers wrote in the slide deck. "People perceive the impact. In a comparative study with competitors, people perceived lower well-being and higher problematic use on Facebook compared to any other service." The other services in the comparison also included YouTube, Reddit and the videogame "World of Warcraft."

The researchers noted the results couldn't determine causality. They said they would need to conduct more studies to determine whether, for example, Facebook causes people to have problems sleeping, or if people who have trouble sleeping experience higher stress and turn to Facebook as a distraction.

"We welcome other teams to take on these opportunities," one of the researchers posted on Facebook's internal communications system. "Please get in touch if we can help."

Facebook's findings are consistent with what many external researchers have observed for years, said Brian Primack, a professor of public health and medicine and dean of the College of Education and Health Professions at the University of Arkansas. He said there isn't a consensus on causality but that most of the evidence "should be concerning to people." His research group followed about a thousand people over six months in a nationally representative survey and found that the amount of social media that a person used was the No. 1 predictor of the variables they measured for who became depressed.

"Everything is pointing in a certain direction," he said. "There's only going to be a certain amount of time Facebook can say there is nothing causal out there."

In late <u>2017</u>, a Facebook executive and a researcher wrote a public blog post that outlined some of the issues with social-media addiction. According to the post, the company had found that while passive consumption of social media could make you feel worse, the opposite was true of more active social-media use.

"Actively interacting with people—especially sharing messages, posts and comments with close friends and reminiscing about past interactions—is linked to improvements in well-being," the company said.

Facebook then made a switch to more heavily weigh "meaningful social interactions" in its news feed as a way to combat passive consumption. One side effect of that change, as outlined in <u>a</u> <u>previous Journal article in The Facebook Files</u>, was that the company's algorithms rewarded content that was angry or sensational, because those posts increased engagement from users.

Facebook said any algorithm can promote objectionable or harmful content and that the company is doing its best to mitigate the problem.

Part of Facebook's interest in addressing use of its app that causes problems in people's day-today lives is a business calculation related to users like Ms. Gandy. In 2017, an intern found that users who exhibited "twitchy" behavior of logging on frequently for short sessions were more likely than regular users to deactivate their accounts for the stated reason that "I spend too much time on Facebook."

In a 2018 study, researchers on Facebook's core data science team wrote that they were starting to read frequent articles about addiction to Facebook. "We take these issues seriously, and though Facebook use may not meet clinical standards for addiction, we want to fix the underlying design issues that lead to this concern," they wrote.

Apple and Google had started to roll out features to address device addiction, and the researchers predicted more companies would soon follow.

In 2018, Facebook added a time-management tool to the app. It includes a dashboard where users can see their total time on the app each day and set a daily reminder to give themselves an alert when they have reached the amount of time they want to spend on it.

Inside Facebook, the researchers registered concern about the direction of Facebook's focus on certain metrics, including the number of times a person logs into the app, which the company calls a session. "One of the worries with using sessions as a north star is we want to be extra careful not to game them by creating bad experiences for vulnerable populations," a researcher wrote, referring to elements designed to draw people back to Facebook frequently, such as push notifications.

In 2018, then Facebook board member Reed Hastings, who co-founded Netflix Inc., told top Facebook executives he wasn't sure why the company needed to apologize for being heavily used, according to three people familiar with the matter. Mr. Hastings added that he wouldn't apologize for allowing people to binge-watch shows on Netflix, the people said.

A spokeswoman for Mr. Hastings declined to comment.

The well-being team, according to people familiar with the matter, was reshuffled at least twice since late 2017 before it was disbanded and could get only about half of the resources the team requested to do its work.

Chief Executive Officer <u>Mark Zuckerberg</u> has said the company continues to prioritize the issue. "We certainly do not want our products to be addictive," he said in a November 2020 Senate hearing in response to a question from Sen. Lindsey Graham. "I don't think the research has been conclusive, but it is an area that we care about and study," Mr. Zuckerberg said.

Ms. Lever, the spokeswoman, said the company also funds external research, such as with the Digital Wellness Lab run jointly by Harvard University and Boston Children's Hospital.

In 2018, Facebook's researchers surveyed 20,000 U.S. users and paired their answers with data about their behavior on Facebook. The researchers found about 3% of these users said they experienced "serious problems" in their sleep, work or relationships related to their time on Facebook that they found difficult to change. Some of the <u>researchers' work was published in a 2019 paper</u>.

According to that study, the researchers also said that a liberal interpretation of the results would be that 14% of respondents spent "a lot more time on Facebook than they want to," although they didn't label this group problematic users.

People who felt like they have a problem with the app were more likely to be men; either teens or in their 20s; have about 15 more sessions a day than the average user; and spend a greater portion of their time on the app at night. They also spent more time on Facebook overall—about 1 hour and 36 minutes a day, compared with 1 hour and 18 minutes a day for regular users. Some

of the people, although they reported problems, also said the time they spend on Facebook is more valuable than people who don't report problems.

In 2019, the researchers had come to a new figure: What they called problematic use affects 12.5% of people on Facebook, they said. This survey used a broader definition for the issue, including users who reported negative results on key aspects of their life as well as feelings of guilt or a loss of control, according to the documents.

The researchers also wrote that they had a more detailed understanding of the aspects of Facebook that triggered the issues, which they said include getting too many notifications, videos that play automatically, uncertainty over whether they will see posts from the people they want to follow and ephemeral content that users felt compelled to watch before it disappeared, among others.

Facebook provided a related research document to the Journal that described the rationale for the broader metric. "There is no established or consistently used definition of internet addiction or problematic use in academic research or clinical practice," the researchers wrote, calling the work an effort to rethink industry approaches to problem behaviors.

The researchers also asked Facebook users what aspects of Facebook triggered them most. The users said the app's many notifications sucked them in. "Red dots are toxic on the home screen," a male young adult in the U.S. told the researchers, referring to the symbol that alerts a user to new content.

Autoplay videos also made it hard for users to put the app down, especially before bedtime, the researchers said.

Ms. Lever, the company spokeswoman, said Facebook's settings offer users tools to limit notifications and allow users to turn off the autoplay of videos.

In March 2020, Facebook introduced quiet mode to allow users to mute most push notifications. But the researchers said the way Facebook buried the feature in the app's settings made it hard for users to find. They recommended Facebook add easy-to-find shortcuts to quiet mode.

One entrepreneur came up with his own solution to some of these issues. In 2016, software developer Louis Barclay manually unfollowed all the people, pages and groups he saw on Facebook in an attempt to be more deliberate about how he used technology. The process, which isn't the same as unfriending, took him days, but he was happy with the result: an empty newsfeed that no longer sucked him in for hours. He could still visit the profile pages of everyone he wanted to connect with on Facebook, but their content would no longer appear in the never-ending scroll of posts.

Thinking other people might benefit from a similar experience on Facebook, he built a tool that would enable anyone to automate the process. He created it as a piece of add-on software called

a browser extension that anyone could download. He called it Unfollow Everything and made it available on Chrome's web store free of charge.

Tom Meitner, a 36-year-old self-published crime novelist in Milwaukee, said before he used Unfollow Everything, Facebook took too much of his energy and left him feeling crabby. He has a wife and three young children, and said he aims to bring positive energy to his family life at the end of each day. But the more time he spent arguing with people on Facebook, the harder that became.

"I'd log on and it was just loaded with these ideas and opinions," he said. "It became a situation where I might post something in response to someone, and suddenly I'm having an argument with someone's uncle whom I'd never met."

Mr. Meitner said he considered quitting Facebook but was conflicted because he appreciated how the app connected him with friends and family who no longer lived in his area. And he sometimes used Facebook to advertise his novels. "Unfollowing everything allowed me to take stock of who is taking my energy, where does my brain power belong, and if I'm going to engage with certain people," Mr. Meitner said.

In July, <u>Facebook sent Mr. Barclay a cease-and-desist letter</u>, which the inventor earlier wrote about for Slate, saying his tool was a breach of its terms of service for automating user interactions. It also permanently disabled Mr. Barclay's personal Facebook and Instagram accounts.

Ms. Lever, the company spokeswoman, said Mr. Barclay's extension could pose risks if abused, and said Facebook offers its own unfollow tool that allows users to manually unfollow accounts.

Unfair Impacts:

How LGBTQIA+ Youth are Disproportionately Harmed by Online Platform Design Decisions

JUNE 2023



Unfair Impacts: How LGBTQIA+ Youth are Disproportionately Harmed by Online Platform Design Decisions

Executive Summary

Young people do not experience the digital world equally, and the way online services and products are delivered and designed can exacerbate inequalities. This briefing documents how young LGBTQIA+ people disproportionately experience online harms and explains how proposals in the Kids Online Safety Act (KOSA) may help to alleviate them. In March 2023, working with YouGov, we polled 912 teenagers aged 13-17 from around the US and found inequalities in design harms experienced by teenagers. It finds:

- Platforms design their products to maximize the amount of time and engagement users spend on them. This includes deliberately building in features that are designed to extend use. These extended use designs appear to affect young people who identify as LGBTQIA+ more so. Polling undertaken for this report finds that:
 - 55% of LGBTQIA+ young people reported scrolling for too long every time they went on social media or several times a day, compared to 49% of those who did not identify as LGBTQIA+.
 - 72% of LGBTQIA+ young people reported losing track of time when they are on social media, every time they went on social media or several times a day, compared to 65% of young people who did not identify as LGBTQIA+.

The consequences of these sticky designs were real in young people's lives. Young LGBTQIA+ identifying young people were more likely to report losing sleep or not doing as much homework as they wanted because they felt 'stuck' on social media.

- Recommender systems and algorithms can create risks for young LGBTQIA+ young people. For example, this research shows that young people who identify as LGBTQIA+ were more likely to be recommended harmful content:
 - 18% of young people who identified as LGBTQIA+ were recommended content about drugs or drug sales every time they went on social media or several times a day, compared to 12% of young people who did not identify as LGBTQIA+.
 - 24% of young people who identified as LGBTQIA+ were recommended dieting or pro-eating disorder content every time they went on social media or several times a day, compared to 18% of young people who did not identify as LGBTQIA+.

They were also more likely to recommend more 'strangers' as friends to LGBTQIA+ young people, which is known to be a safety risk. 43% of young people who identify as LGBTQIA+ claim that they are recommended a stranger to 'friend' or 'follow' every time they use social media or several times a day, compared to 35% of young people who do not identify as LGBTQIA+.

• **Targeted advertising disproportionately affects LGBTQIA+ young people.** People who identify as LGBTQIA+ have a long history of surveillance, and it appears that this has continued in the digital age for young people. Much of the data harvesting that happens in the digital world is to develop profiles to serve target ads. Young people who identify as LGBTQIA+ appear to be more affected by this targeting. We asked young people about the frequency with which they were

served stalker ads, or ads for things they just talked about. 30% of young people who identify as LGBTQIA+ reported almost always seeing ads for things they just talked about, compared to 20% of young people who did not identify as LGBTQIA+. Young LGBTQIA+ people were also slightly more likely to almost always see advertisements for products they think are probably unsafe.

It is time that lawmakers and regulators in the United States take action. Proposals in front of Congress such as the Kids Online Safety Act (KOSA) and the Children and Teens' Online Privacy Protection Act (COPPA 2.0) would help ensure that platforms are designed and operate in a manner that prioritizes children's best interests. Together, these bills would address the features and functions that exacerbate online harms for youth, including content recommendation systems, targeted advertising, and the mass data collections that make both possible. If enacted into law, these bills would help mitigate the disproportionate impacts on our most vulnerable youth.

Table of Contents

Foreword from David Jay	5
Foreword from Arielle Geismar	6
Introduction	7
Methods	9
Impacts of online platform design decisions on LGBTQIA+ youth	10
Engagement tactics, or addictive and extended use designs	10
Algorithmic recommendations	14
Surveillance advertising	17
Conclusion	18

Foreword from David Jay

Queer kids need the internet. As the founder of one of the world's largest and longest-running communities for asexual and demisexual people, I have seen how the connections that LGBTQAI+ kids form online can be literally life-saving. When queer kids are met with transphobia and homophobia in the offline world they have a long history of turning to the internet to find acceptance and support, and since its inception the internet has been a place where they have found it.

All of this means that when queer kids show up to the internet, they show up vulnerable. This vulnerability means that queer kids have more to gain from the internet, but they often also have more to lose. Business models that would rather see queer kids sleepless than supported, recommendation systems that would rather compound their shame than address it take advantage of this vulnerability. In order to understand the impact of the digital world on the mental health of young people, it is critical to examine the specific impact on LGBTQAI+ youth.

The research in this report highlights that impact. Queer kids need the internet, but not the internet that we have today and not the internet that an unregulated tech industry is building for tomorrow. Regulations like the Kids Online Safety Act (KOSA) and COPPA 2.0 play a vital role in incentivizing the kind of innovation that queer kids need, an internet where self-acceptance and support are easier to find than compulsion and shame.

David Jay Board Member Fairplay

Founder and Board Chair Asexual Visibility and Education Network

Foreword from Arielle Geismar

As a queer young person, one of the most important resources I have access to is our community via the internet. It has enabled me to learn about myself, educate others, create resources and moments, and share a deep sense of advocacy and joy. It has allowed me to strengthen my sense of self and has offered access to online platforms and audiences that stand up to hateful behavior offline. Our community and the safety our shared space holds, amidst an otherwise unsafe environment, immense value. It is an indescribable and daily necessity in mine and other queer people's lives.

This report, very critically, outlines the real impacts of harmful, profit-driven design choices made by Big Tech companies on a community that is already facing harm offline. My own identity online is disproportionately targeted and commodified based on intentional decisions by Big Tech companies to prey on vulnerabilities they believe would extend our engagement. Their choices correlate to declining mental health and well-being among a community already fighting day in and day out.

Simply put - when queer youth are under attack, we create digital spaces. They are our home, and they are our right. *They are lifesaving*. The last thing we need is to be unsafe there, too. Protections for queer youth embedded in the design of the digital world would enable us space to grow and thrive.

This report sounds a clear alarm – safeguards are needed, and accountability is crucial. I urge policymakers to heed our acute need for legislation that prioritizes and protects our well being above the profit of Big Tech. As leaders and creators on these platforms, so too should our voices be prioritized in their design and regulation.

Arielle Geismar (she/her)

Rising senior at George Washington University, Digital Wellness Leader, Content Creator, Design It For Us Coalition Member.

Introduction

An estimated 7-9% of youth identify as LGBTQIA+,¹ totalling over 3.2 million children between the ages of eight and eighteen, over half of whom are youth of color.² Sixty percent of LGBTQIA+ youth reported that they felt discriminated against due to their sexual orientation or gender identity.³ Compared to other youth, LGBTQIA+ youth are more vulnerable to mental health issues and risk of suicide. Fourty-one percent of LGBTQIA young people ages 13 to 24 seriously considered attempting suicide in the past year, with youth who are transgender, nonbinary, and/or people of color reporting even higher rates than that.⁴ Seventy and 57% of LGBTQIA+ youth ages 13-17 also reported experiencing symptoms of anxiety and depression, respectively.⁵

For LGBTQIA+ youth, the internet can be a place of refuge, with research saying that having a supportive online community correlated with lower suicide risk.⁶ In a 2021 survey, "an overwhelming majority of LGBTQIA+ youth said that social media has both positive (96%) and negative (88%) impacts on their mental health and well-being."⁷ On paper, the internet holds so much promise for LGBTQIA+ youth searching for community and exploring their identities: they could connect with friends in similar situations, get to know themselves better, or feel supported when living in an environment that doesn't accept them for who they are. But, if the best "safe" digital spaces available for queer kids and teens only exist on social media platforms like Instagram and TikTok that commodify every aspect of kids' experiences online, the platforms inevitably push them to become – and reduce them to – profit makers at the expense of their well-being.

Tech companies make deliberate decisions about the design of their online platforms, usually driven by how they can maximize profit. And, kids are big business for these companies. Through the use of sophisticated psychological and design techniques, tech companies incentivize children and teens to spend ever-increasing amounts of time on social media which also perpetuates many of the harms noted above for LGBTQIA+ youth.⁸ Some of the strategies that tech companies like TikTok, Meta (Facebook and

https://gaycenter.org/about/LGBTQ/ In this report, we also use LGBTIQ, which is the acronym used in the polling process, when directly describing the questions asked during or results of polling. ² Movement Advancement Project 2023 'LGBTQ Youth'

https://www.lgbtmap.org/policy-and-issue-analysis/Lgbtg-youth

¹ LGBTQIA+ "is an abbreviation for lesbian, gay, bisexual, transgender, queer or questioning, [asexual, intersex]... and more. These terms are used to describe a person's sexual orientation or gender identity."

³ The Trevor Project 2023 U.S. National Survey on the Mental Health of LGBTQ Young People <u>https://www.thetrevorproject.org/survey-2023/</u>

⁴ Id.

⁵ Id.

⁶ Id.

⁷ ld.

⁸ See generally, Center for Digital Democracy & Fairplay, In the Matter of Petition for Rulemaking to Prohibit the Use of Children of Design Features that Maximize for Engagement, (filed Nov. 17 2022).

<u>https://fairplayforkids.org/wp-content/uploads/2022/11/EngagementPetition.pdf</u>; see also Center for Digital Democracy & Fairplay, Comments Re: Request for Public Comment on the Federal Trade Commission's Request for Comments Regarding Topics to be Discussed at Dark Patterns Workshop, (filed May 27, 2021),

https://fairplayforkids.org/wp-content/uploads/2021/05/darkpatterns.pdf; Julie Jargon, TikTok Brain Explained: Why Some Kids Seem Hooked on Social Video Feeds, Wall Street Journal (April 2, 2022),

https://www.wsj.com/articles/tiktok-brain-explained-why-some-kids-seem-hooked-on-social-video-feeds-1164886 6192.

Instagram), and Snapchat use keep children tied to their devices and expose them to harmful content. Some of harmful design decisions include:

Engagement tactics. Also called addictive or extended use designs, these features encourage compulsive behavior by rewarding kids unpredictably for merely scrolling, tapping, and/or logging onto a website or service in order to maximize a young person's time on the service. They may also include nudges or notifications to bring someone back to an app once they have stopped using it or social manipulation tactics, like "snapstreaks" or "likes" which leverage youth's desire for social relationships to encourage greater time spent and/or activities performed on a website or service.⁹

Algorithmic recommendations. Algorithms drive much of what we see on social media platforms. For example, in 2018, YouTube outlined that around 70% of what people viewed on that platform was a result of their recommender algorithm. Algorithms drive recommendations of what content to see, watch, who to follow, or who to friend.¹⁰ It is well documented that algorithmic recommendations frequently lead users into "rabbit holes" of content; a 2021 study showed that engagement with the unregulated transphobic content that is rampant on TikTok led users to *even more* content that was blatantly anti-LGBTQIA+, racist, violent, antisemitic, and white supremacist.¹¹

Surveillance advertising. Surveillance advertising or targeted advertising includes products or content that is directly recommended to a user based on data the platform knows about you, including your name, age, and location but also how many seconds you spend watching a certain type of TikTok video, what's in your online shopping cart, what stores a child passes by on their way home from school.¹² Targeted ads may include "stalker ads," or ads for things they just talked about or ads related to content they have interacted with online, even if they are harmful.

This report discusses how each of these types of design decisions disproportionately impacts LGBTQIA+ youth and sheds light on the inequitable impacts Big Tech has on their well-being.

These design decisions continue to be just that: choices that tech companies are making. Current proposed legislation such as the Kids Online Safety Act (KOSA) and the Children and Teens' Online Privacy Protection Act (COPPA 2.0) has the potential to impose duties that would require tech companies to put the best interests of children at the forefront of their design and to limit the amount of data companies collect from youth in the first place. This report concludes with a discussion of how this legislation would specifically mitigate the harms to LGBTQIA+ youth.

⁹ Petition for Rulemaking to Prohibit the Use on Children of Design Features that Maximize for Engagement <u>https://fairplayforkids.org/wp-content/uploads/2022/11/EngagementPetition.pdf</u>

¹⁰ "Ashley Rodriguez 2018 "YouTube's recommendations drive 70% of what we watch" *Quartz* <u>https://qz.com/1178125/youtubes-recommendations-drive-70-of-what-we-watch/</u>

¹¹ Id.

¹² Sam Garin "Making sense of surveillance advertising (spoiler: there is none!" *Fairplay: Childhood Beyond Brands* https://fairplayforkids.org/surveillanceads_ftc_comments/

Methods

Working with YouGov, we polled 912 teenagers aged 13-17 in March 2023.

The poll included questions about the types of platforms young people use, the frequency at which they experienced various design harms (such as feeling stuck on social media, being recommended strangers as friends, etc.), as well as some of the consequences of this (such as lost sleep). We also asked about their experiences with targeted or behavioral advertising.

We asked young people to self identify their LGBTQIA+ status, asking respondents 'if you identify as LGBTIQ+'. 80% of the sample responded 'no' (or 731 young people), 14% of the sample responded 'yes' LGBTIQ+ (136 young people) and another 6% said they'd rather not say. The results analyzed below compare those who identify as LGBTIQ+, compared to those who did not identify as LGBTIQ+.

About the sample:

- **Geography:** Included young people from 37 states across the US
- **Gender:** 49% identified as male, 48% as female and 2% as non-binary (the other 1% is rounding)
- Age: 62% of respondents were aged between 13-15 years olds (3 year bracket) and 38% aged 16 or 17 years old (2 year bracket)
- **Race:** 54% of the sample identified as White, 24% as Hispanic, 14% as Black and 8% as Asian. This diversity was also reflected in those who identified as LGBTIQ+ and those who did not (see table 1).

Identified as	White	Hispanic	Black	Asian/Other
LGBTIQ+	57%	20%	11%	12%
Not LGBTIQ+	55%	23%	15%	7%

Table 1: A breakdown of the Race of respondents who identified as LGBTIQ+ (LGBTQIA+) and those who did not.

Impacts of online platform design decisions on LGBTQIA+ youth

Engagement tactics, or addictive and extended use designs

Young people can be especially vulnerable to extended use designs or 'addictive' design features that attempt to keep young people 'hooked' on a digital product. Also called engagement tactics, these include push notifications designed to pull young people back into an app,¹³ endless scroll, content recommender algorithms that are "optimized for addiction"¹⁴ (i.e., "trained" to maximize the amount of time young people spend watching videos),¹⁵ removing video time markers,¹⁶ or other features that might remind young people to log off and take a break.¹⁷ Currently, 36 percent of American teenagers aged 13-17 say they spend too much time on social media, and 54 percent say it would be hard or very hard to give up social media.¹⁸ And a report released this year by Amnesty International on young people ages 13-24 found "a staggering 74 percent of respondents report checking their social media accounts more than they would like to.¹⁹

In rare cases, this extends to a medical addiction, called internet gaming disorder.²⁰ An estimated 8 percent of American children who use the internet and games show signs of clinical addiction.²¹ More commonly, extended use design causes constant relationship harm. Intrafamily conflict around screen

https://techcrunch.com/tag/frances-haugen/#:~:text=Instagram%20guietly%20limits%20%E2%80%98daily%20tim e%20limit%E2%80%99%20option%20Natasha.photo-sharing%20app%20Instagram%20appears%20to%20have %20guietly%20remove)

¹³ De Montfort University 2022 DMU research suggests 10-year-olds lose sleep to check social media https://www.dmu.ac.uk/research/research-news/2022/dmu-research-suggests-10-year-olds-lose-sleep-to-check-s ocial-media.aspx#:~:text=Research%20support-,DMU%20research%20suggests%2010%2Dyear%2Dolds%20los e%20sleep%20to%20check.up%20to%20use%20social%20media

¹⁴ Allison Zakon 2022 'Optimized for addiction: Extending product liability concepts to defectively designed social media algorithms and overcoming the communications decency act' *Wisconsin Law Review* (5) https://ssrn.com/abstract=3682048

¹⁵ Kevin Roose 2019 'The Making of a YouTube Radical' New York Times

https://www.nytimes.com/interactive/2019/06/08/technology/youtube-radical.html

¹⁶ Louise Matsakis 2019 'On TikTok, There Is No Time' Wired

https://www.wired.com/story/tiktok-time/

¹⁷ For example, Instagram allows users to set daily time limits to prevent overuse. Consumers used to be able to self define their daily limit, including setting limits at 10 or 15 min. Earlier this year, Meta set a new 'limit' to these daily limits. Consumers can only now set a daily limit of 30 minutes or more (See Natash Lomas 2022 'Instagram quietly limits 'daily time limit' option' *TechCrunch*

¹⁸Pew Research Center 2022 *Teens*, Social Media and Technology 2022 <u>https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/</u>

¹⁹ 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/

²⁰ As defined in DSM5 onwards (See American Psychiatric Association 2013 *Diagnostic and Statistical Manual of Mental Disorders. 5th edn.* American Psychiatric Publishing Arlington). See also Cecilie Andreassen 2015 'Online social network site addiction: A comprehensive review' *Current Addiction Reports*

doi:10.1007/s40429-015-0056-9, who explores the potential for social networking sites to be addictive

²¹ Douglas Gentile 2009 'Pathological video-game use among youth ages 8 to 18: a national study' Psychological Science 2009 doi: 10.1111/j.1467-9280.2009.02340

time is rife,²² and many teachers report conflict in the classroom over the use of digital devices.²³ These can also cause physical harm, because they can lead to a loss of sleep.²⁴ But these abusive designs are not felt equally by all young people. Extended-use design techniques can exacerbate social inequity for children and young people.

We asked teens ages 13-17 about how often they felt affected by extended use designs, and while the effects were significant for all young people, young LGBTIQ+ young people appear to fare worse.

For example, young people who identify as LGBTIQ+ were more likely to report scrolling for too long on social media. 55% of LGBTIQ+ young people reported scrolling for too long every time they went on social media or several times a day, compared to 49% of young people who did not identify as LGBTQIA+.

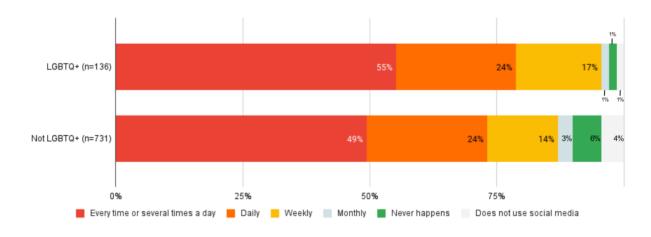


Figure 1: The percentage of teens who say they scroll for too long on social media, frequency by LGBTIQ+ status (Source: Polling from YouGov, March 2023)

Likewise, young people who identify as LGBTIQ+ were more likely to report losing track of time on social media more often. 72% of LGBTIQ+ young people reported losing track of time when they are on social media, every time they went on social media or several times a day, compared to 65% of young people who did not identify as LGBTIQ+.

²² Sarah Domoff, Aubrey Borgen, Sunny Jung Kim, Jennifer Emond 2021 'Prevalence and predictors of children's persistent screen time requests: A national sample of parents' Human Behavior and Emerging Tech doi.org/10.1002/hbe2.322

²³ Abigail Hess 2019 'Research continually shows how distracting cell phones are—so some schools want to ban them' *CNBC*

https://www.cnbc.com/2019/01/18/research-shows-that-cell-phones-distract-students--so-france-banned-them-in -school--.html

²⁴ De Montfort University 2022 DMU research suggests 10-year-olds lose sleep to check social media https://www.dmu.ac.uk/research/research-news/2022/dmu-research-suggests-10-year-olds-lose-sleep-to-check-s ocial-media.aspx#:~:text=Research%20support-.DMU%20research%20suggests%2010%2Dyear%2Dolds%20los e%20sleep%20to%20check.up%20to%20use%20social%20media

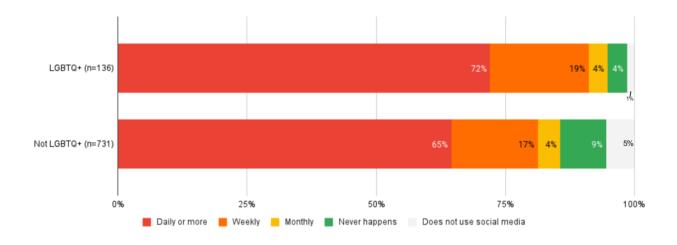


Figure 2: The percentage of teens who report losing track of time when they are on social media, frequency by LGBTIQ+ status (Source: Polling from YouGov, March 2023)

These extended use designs can have consequences for young people's lives. For example, LGBTIQ+ young people suggested they were more likely to report losing sleep or not doing as much homework as they wanted because they felt stuck on social media. 49% of young people who identify as LGBTQIA+ suggested they lost sleep every day (compared to 45% of non-LGBTIQ+ young people), and 47% said they did not do as much homework as they wanted (compared to 42% of non-LGBTIQ+ young people) because they felt stuck on social media.

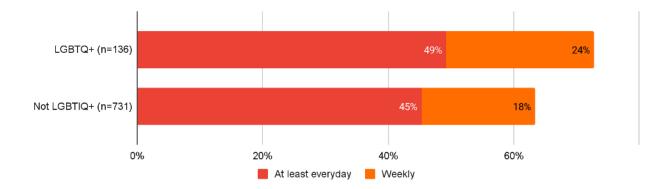


Figure 3: The percentage of teens who report losing sleep, because they felt stuck on social media, frequency by LGBTIQ+ status (Source: Polling from YouGov, March 2023)

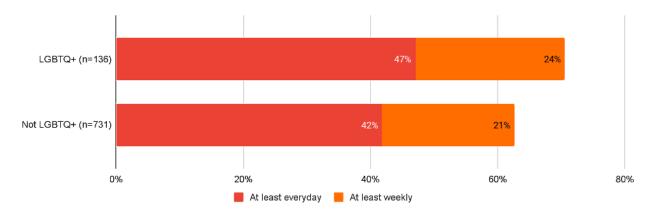


Figure 4: The percentage of teens who report not doing as much homework as they wanted, because they felt stuck on social media, frequency by LGBTIQ+ status (Source: Polling from YouGov, March 2023)

Algorithmic recommendations

All algorithms, including 'content recommender' algorithms, 'ad delivery' algorithms, and 'friend recommender algorithms,' have the ability to discriminate. Algorithms work by profiling young people in order to recommend content or advertisements that companies have calculated as being potentially interesting to users. No recommendation is 'neutral,' and every profile created inherently has race, gender, religion, and other sensitive characteristics baked into it. This means that algorithms can exacerbate social inequity where they unevenly choose to promote or restrict harmful content, ads, or contacts.

Content recommender systems

When it comes to the algorithmic promotion of content to children and young people, this can physically hurt children and damage their health when it recommends harmful content. For example, search algorithms routinely make dangerous challenges available to children²⁵ and recommender algorithms promote pro-anorexia content and creators,²⁶ or extremist material,²⁷ to young people. These effects can be catastrophic. Recently, a UK coroner ruled that online content had played more than a minor role in causing the suicide of 14 year-old Molly Russell, after seeing extensive self-harm and suicide content in her recommended (algorithmically promoted) feed. The coroner concluded that Molly "died from an act of self-harm while suffering from depression and the negative effects of online content".²⁸ What we promote in young people's feeds matters.

But 'content recommender systems' can also create new discriminations and exacerbate inequalities, too. We polled 912 teenagers from across the US, and asked how often they were recommended content that shows promotes dieting or disordered eating and content about drugs or drug sales. We found the young people who identified as LGBTQIA+ were more likely to report being recommended this content more frequently. 18% of young people who identified as LGBTQIA+ were recommended content about drugs or drug sales every time they went on social media or several times a day, compared to 12% of young people who identify as LGBTQIA+.

Likewise, 24% of young people who identified as LGBTIQ+ suggested they were recommended dieting or pro-eating disorder content every time they went on social media or several times a day, compared to 18% of young people who did not identify as LGBTIQ+.

²⁵ Fairplay 2022 Dared by the Algorithm: Dangerous Challenges are Just a Click Away <u>https://fairplayforkids.org/dared-by-algorithm/</u>

²⁶ For example, a photo-sharing platform's algorithms routinely promote pro-anorexia content and creators to users (Fairplay 2022 *Designing for Disorder*)

https://fairplayforkids.org/wp-content/uploads/2022/04/designing_for_disorder.pdf?eType=EmailBlastContent&eId= ec346b0d-3a84-4f12-b071-a72549987438

 ²⁷ Ralph Housego & Rys Farthing 2022 'Social Grooming: Algorithms mis/shaping political discourse for young voters' *AQ Magazine*, 93(4), 3–9, <u>https://search.informit.org/doi/10.3316/informit.642086521993890</u>
 ²⁸ BBC 2022 'Molly Russell inquest: Father makes social media plea' *BBC*

https://www.cnbc.com/2019/01/18/research-shows-that-cell-phones-distract-students--so-france-banned-them-in -school--.html

This is reinforced by other research, that shows that girls and young women who identify as LGBTIQ+ are more likely to report seeing harmful suicide and self-harm content and harmful eating disorders content across most popular social media platforms.²⁹

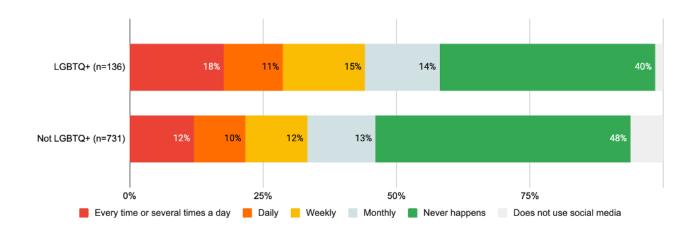


Figure 5: The percentage of teens who report seeing content about drug use or drug sale, frequency by LGBTIQ+ status (Source: Polling from YouGov, March 2023)

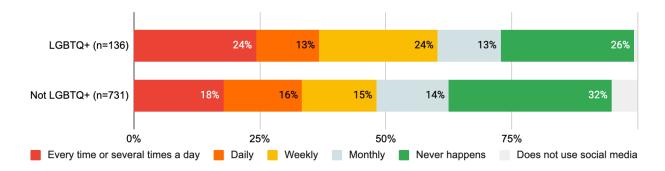


Figure 6: The percentage of teens who report seeing content that promotes dieting or eating disorders, frequency by LGBTIQ+ status (Source: Polling from YouGov, March 2023)

Friend recommender systems

Young people's privacy is important, and it helps to keep them safe. The design of social media features can make young people more private and safe, or less private and safe. As Meta's own internal research highlighted, 75% of all 'inappropriate adult-minor contact' (i.e. 'grooming') on Facebook was a result of

²⁹ Common Sense Media 2020 *How Girls Really Feel About Social Media* <u>https://www.commonsensemedia.org/sites/default/files/research/report/how-girls-really-feel-about-social-media-re</u> <u>searchreport_final_1.pdf</u> their 'People You May Know' friends recommendation feature.³⁰ Likewise, features can help keep young people safe and private; where a young person's account is defaulted to private, they are not immediately recommended as 'friends' or as accounts to 'follow' to adult strangers.

In our poll, we asked teens if either a platform's 'friend' recommender feature had recommended that they follow someone they don't know, or that someone they don't know has followed them because of this feature. Young people who identify as LGBTIQ+ appeared to be likely to be recommended to strangers to be followed; 43% of young people who identify as LGBTIQ+ being recommended a stranger to 'friend' or 'follow' every time they use social media or several times a day, compared to 35% of young people who do not identify as LGBTIQ+. While some of these may be celebrities or friends of friends, this creates real risks of contact with adult strangers that appear to particularly place young LGBTIQ+ people at additional risks.

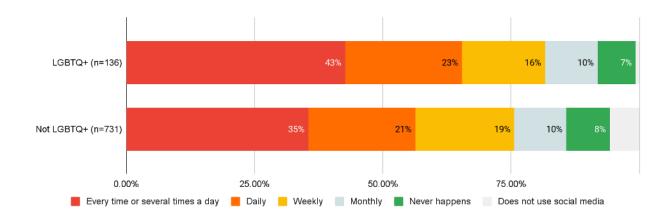


Figure 7: The percentage of teens who report that social media platforms recommend they friend or follow someone they do not know, frequency by LGBTIQ+ status (Source: Polling from YouGov, March 2023)

³⁰ As made public in Alexis Spence et al. v. Meta, U.S. District Court for the Northern District of California, Case No. 3:22-cv-03294 (filed June 6, 2022) ("<u>Spence Complaint</u>") p. 11-12, Growth, Friending + PYMK, and Downstream Integrity Problems.

Surveillance advertising

People who identify as LGBTIQ+ have a long history of surveillance,³¹ and it appears that this has continued in the digital age for young people. Much of the data harvesting that happens in the digital world is to develop profiles to serve target ads. Young people who identify as LGBTQIA+ appear to be more affected by this targeting.

We asked young people about the frequency with which they were served "stalker ads," or ads for things they just talked about. 30% of young people who identify as LGBTIQ+ reported almost always seeing ads for things they just talked about, compared to 20% of young people who did not identify as LGBTIQ+.

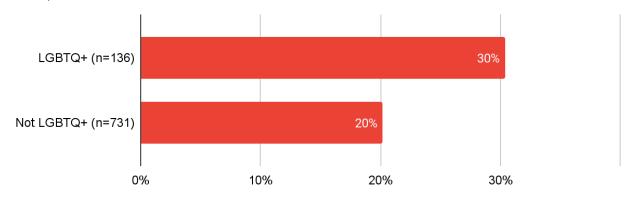


Figure 8: The percentage of teens who reported almost always seeing ads for things they just talked about, by LGBTIQ+ status (Source: Polling from YouGov, March 2023)

Young people who identified as LGBTIQ+ were also slightly more likely to report almost always seeing ads for products they thought were unsafe

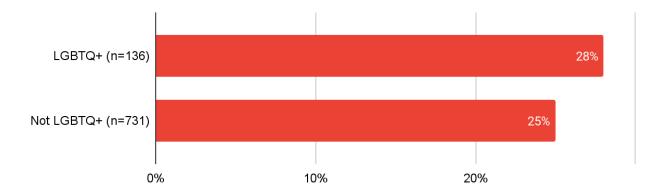


Figure 9: The percentage of teens who reported almost always seeing ads for things they think are probably unsafe, by LGBTIQ+ status (Source: Polling from YouGov, March 2023)

³¹ See for example Ian Thompson (ACLS) 2014 Abusive Surveillance Is an LGBTQIA Rights Issue <u>https://www.aclu.org/news/national-security/abusive-surveillance-LGBTQIA-rights-issue</u>

Conclusion

Teens overall are experiencing a number of harms online– but LGBTQIA+ youth often experience some of the worst of it. As noted in our findings, it appears that LGBTQIA+ youth are more susceptible to the endless efforts of Big Tech companies to get users to stay online and to make purchases. Furthermore, algorithmic recommendations systems put LGBTQIA+ youth in even more danger by feeding them harmful content including those that promote eating disorders and drug use.

Taken together, the protections proposed in the Kids Online Safety Act (KOSA) and the Children and Teens' Online Privacy Protection Act (COPPA 2.0) would help prevent some of the harms identified in this report. Together, these bills would:

- Impose a duty of care that would require platforms to identify potential risks to young people and take reasonable measures to prevent and mitigate harms
- Ban platforms from targeting young users with surveillance advertising
- Require platforms to build in safeguards for minors by default, such as by restricting features that encourage compulsive use and extended time online
- Limit collection of young users' data, which fuels harmful algorithmic recommendations
- Require platforms to explain to young users how their content recommender systems work and provide them with the option to 'opt-out' of personalized recommendations
- Prohibit online platforms from advertising illegal and age-inappropriate products

LGBTQIA+ youth deserve to learn and develop in a world that values them, and that includes the online world. Yet, deliberate design decisions undermine their well-being. Now is the time to hold Big Tech accountable for the harms it perpetuates against children and teens.

Our Work Latest Events

Q

PRESS RELEASES New poll finds overwhelming public support for bipartisan legislation to

Nearly 9 in 10 U.S. voters support the Kids Online Safety Act (KOSA) which would adopt responsible safeguards

protect kids from online harms

NOV 16, 2023

MEDIA CONTACT

Cory Combs Director of Media Relations

Issues

Q 202-204-8553

ccombs@issueone.org

Bipartisan legislation that would require social media platforms to protect kids and teens from online harms has near universal support across the political spectrum, according to a <u>new poll</u> released today by Issue One's <u>Council for</u> <u>Responsible Social Media</u> and <u>Fairplay</u>. The findings come amid growing calls for lawmakers to put responsible safeguards in place to address the harmful impact of social media on young people after another whistleblower came before Congress to testify that Meta knew its products were hurting kids.

In the new poll of U.S. voters, conducted by Hans Kaiser and Associates/Hart Research, 87% of the electorate believes that it is important for the president and Congress to take action to combat the harms being caused by social media platforms. This includes 86% of respondents who voted for former President Trump in the 2020 presidential election, and 88% of voters who supported thencandidate Joe Biden. Nearly all voters (94%) agree that mental health challenges facing children and teens today are a serious problem, and three in four (73%) blame social media and say the platforms have had a negative impact on the mental health of youth over the last 20 years.

Further demonstrating the overwhelming public support for congressional action, 86% of voters support the bipartisan Kids Online Safety Act (KOSA), which would require social media platforms to protect minors from specific online harms, such as the promotion of eating disorders, suicide, substance abuse, and sexual exploitation. The bill would provide children and parents with new safeguards, require the strongest safety settings by default, and impose penalties on companies whose design features expose children to these types of harms on their platforms. DONATE

"Parents have had enough. They're doing everything they can to keep their kids safe online, but parents can't do this alone," said **Alix Fraser, director of Issue One's Council for Responsible Social Media**. "Congress must take action now by passing KOSA into law. Voters are demanding leadership, and it's time for lawmakers to deliver on their promises and take meaningful steps to keep our children safe online and finally hold tech companies accountable."

Support for KOSA crosses partisan lines, with 84% of Republicans, 92% of Democrats, and 81% of independents in favor of it. Only 8% of poll respondents expressed opposition to KOSA.

"For years, Big Tech has put profits ahead of kids' lives while Congress has sat on the sidelines," said **Josh Golin, executive director of Fairplay**. "Our nation's leaders can no longer be silent in the face of a strong bipartisan majority of the public that wants to see strong action to protect young people online. KOSA will make the internet a safer and healthier place for kids and teens."

More than 90% of all respondents also expressed concern about a wide range of negative impacts social media is having on children and teens, from being vulnerable to online predators to rates of cyberbullying, anxiety, depression, and suicide.

"The American Academy of Pediatrics has long understood the value in the Kids Online Safety Act's approach to making online environments and experiences healthier and safer for children and teens, and these results make clear that the American public understands the need for the accountability and safeguards KOSA would put in place," said **Mark Del Monte, chief executive officer of the American Academy of Pediatrics**. "This robust support for KOSA across nearly every category of public opinion further underscores that now is the time for Congress to act."

KOSA was introduced earlier this year by Sens. Richard Blumenthal (D-CT) and Marsha Blackburn (R-TN). The bill was voted unanimously out of the Senate Commerce Committee in July, and has nearly fifty cosponsors from members of both parties. KOSA is currently awaiting a full vote in the Senate.

ISSUE: Kids' Online Safety



About Us Our Work Latest Events Press

Privacy policy Contact Jobs Financial Statements and 990s



Get Updates

Join us to receive important actions and breaking news

Email Address	SIGN UP	
---------------	---------	--

(f) (in) 🖸

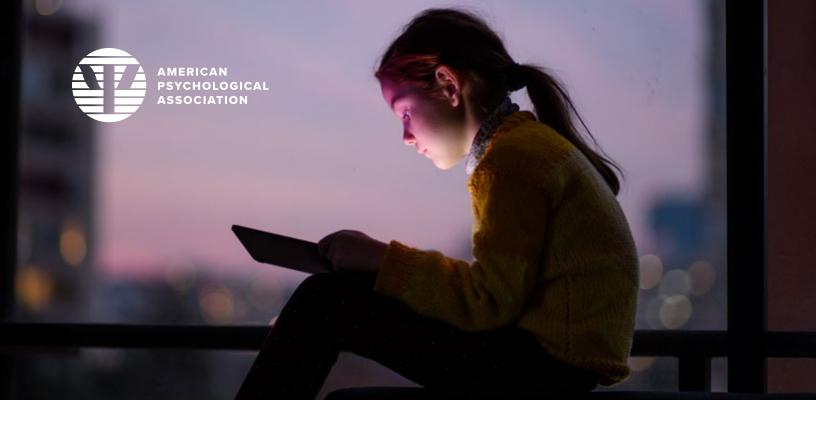
 (\mathbf{X})

© 2024 Issue One. All rights reserved.

Listen to election officials talk about America's free, fair, and secure elections.

ุ LISTEN

Made with igvee by creatives with a conscience



Potential Risks of Content, Features, and Functions

A CLOSER LOOK AT THE SCIENCE BEHIND HOW SOCIAL MEDIA AFFECTS YOUTH

APRIL 2024

Almost a year after the American Psychological Association issued its <u>health advisory on social media use in adolescence</u>, society continues to wrestle with ways to maximize the benefits of these platforms while protecting youth from the potential harms associated with them.¹ By early 2024, few meaningful changes to social media platforms had been enacted by industry, and no federal policies had been adopted. There remains a need for social media companies to make fundamental changes to their platforms. Psychological science continues to reveal benefits from social media use, as well as risks and opportunities that certain content, features, and functions present to young social media users. The science discussed below highlights the need to enact new, responsible safety standards to mitigate harm.²

ELABORATION OF SCIENCE ON SOCIAL MEDIA CONTENT, FEATURES, AND FUNCTIONS

Platforms built for adults are not inherently suitable for youth.ⁱ Youth require special protection due to areas of competence or vulnerability as they progress through the childhood, teenage, and late adolescent years.ⁱⁱ This is especially true for youth experiencing psychological, physical, intellectual, mental health, or other developmental challenges; **chronological age is not directly associated with social media readiness**.ⁱⁱⁱ

¹ These recommendations enact policies and resolutions approved by the APA Council of Representatives including the <u>APA Resolution on Child and Adolescent Mental and</u> <u>Behavioral Health</u> and the <u>APA Resolution on Dismantling Systemic Racism</u> in contexts including social media. These are not professional practice guidelines but are intended to provide information based on psychological science.

² This report seeks to elaborate on extant psychological science findings, which may be particularly relevant in the creation of policy solutions that protect young people, and to inform the development of social media safety standards.

YOUTH HYPERSENSITIVITY TO SOCIAL FEEDBACK

Brain development starting at ages 10–13 (i.e., the outset of puberty) until approximately the mid-twenties is linked with hypersensitivity to social feedback/stimuli.^{iv} In other words, youth become especially invested in behaviors that will help them get personalized feedback, praise, or attention from peers.

- Al-recommended content has the potential to be especially influential and hard to resist within this age range.^v It is critical that Al-recommended content be designed to prioritize youth safety and welfare over engagement. This suggests potentially restricting the use of personalized recommendations using youth data, design features that may prioritize content evoking extreme emotions, or content that may depict illegal or harmful behavior.
- Likes and follower counts activate neural regions that trigger repetitive behavior, and thus may exert greater influence on youths' attitudes and behavior than among adults.^{vi} Youth are especially sensitive to both positive social feedback and rejection from others. Using these metrics to maintain platform engagement capitalizes on youths' vulnerabilities and likely leads to problematic use.
- The use of youth data for tailored ad content similarly is influential for youth who are biologically predisposed toward peer influence at this stage and sensitive to personalized content.^{vii}

YOUTH NEED FOR RELATIONSHIP SKILL BUILDING

Adolescence is a critical period for the development of more complex relationship skills, characterized by the ability to form emotionally intimate relationships.^{viii} The adolescent years should provide opportunities to practice these skills through one-on-one or small group interactions.

 The focus on metrics of followers, likes, and views focuses adolescents' attention on unilateral, depersonalized interactions and may discourage them from building healthier and psychologically beneficial relationship skills.^{ix}

YOUTH SUSCEPTIBILITY TO HARMFUL CONTENT

Adolescence is a period of heightened susceptibility to peer influence, impressionability, and sensitivity to social rejection.[×]Harmful content, including cyberhate, the depiction of illegal behavior, and encouragement to engage in self-harm (e.g., cutting or eating-disordered behavior) is



associated with increased mental health difficulties among both the targets and witnesses of such content. $^{\rm xi}$

• The absence of clear and transparent processes for addressing reports of harmful content makes it harder for youth to feel protected or able to get help in the face of harmful content.

YOUTH UNDERDEVELOPED IMPULSE CONTROL

Youths' developing cortical system (particularly in the brain's inhibitory control network) makes them less capable of resisting impulses or stopping themselves from behavior that may lead to temporary benefit despite negative longer-term consequences.^{xii} This can lead to adolescents making decisions based on short-term gain, lower appreciation of long-term risks, and interference with focus on tasks that require concentration.

- Infinite scroll is particularly risky for youth since their ability to monitor and stop engagement on social media is more limited than among adults.^{xiii} This contributes to youths' difficulty disengaging from social media and may contribute to high rates of youth reporting symptoms of clinical dependency on social media.^{xiv}
- The lack of time limits on social media use similarly is challenging for youth, particularly during the school day or at times when they should be doing homework.^{xv}
- Push notifications capitalize on youths' sensitivity to distraction. Task-shifting is a higher order cognitive ability not fully developed until early adulthood and may interfere with youths' focus during class time and when they should be doing homework.^{xvi}

The use and retention of youths' data without appropriate parental consent, and/or child assent in developmentally appropriate language, capitalizes on youths' relatively poor appreciation for long-term consequences of their actions, permanence of online content, or their ability to weigh the risks of their engagement on social media.^{xvii}

YOUTH RELIANCE ON SLEEP FOR HEALTHY BRAIN DEVELOPMENT

Other than the first year of life, puberty is the most important period of brain growth and reorganization in our lifetimes.^{xviii} Sleep is essential for healthy brain development and mental health in adolescence.^{xix} Sleep delay or disruptions have significant negative effects on youths' attention, behavior, mood, safety, and academic performance.

 A lack of limits on the time of day when youth can use social media has been cited as the predominant reason why adolescents are getting less than the recommended amount of sleep, with significant implications for brain and mental health.^{xx}

YOUTH VULNERABILITY TO MALICIOUS ACTORS

Youth are easily deceived by predators and other malicious actors who may attempt to interact with them on social media channels.^{xxi}

• **Connection and direct messaging with adult strangers** places youth at risk of identity theft and potentially dangerous interactions, including sexploitation.

YOUTH NEED FOR PARENTAL/CAREGIVER PARTNERSHIP

Research indicates that youth benefit from parental support to guide them toward safe decisions and to help them understand and appropriately respond to complex social interactions.^{xxii} Granting parents oversight of youths' accounts should be offered in balance with adolescents' needs for autonomy, privacy and independence. However, it should be easier for parents to partner with youth online in a manner that fits their family's needs.

 The absence of transparent and easy-to-use parental/ caregiver tools increases parents' or guardians' difficulty in supporting youths' experience on social media.^{xxiii}

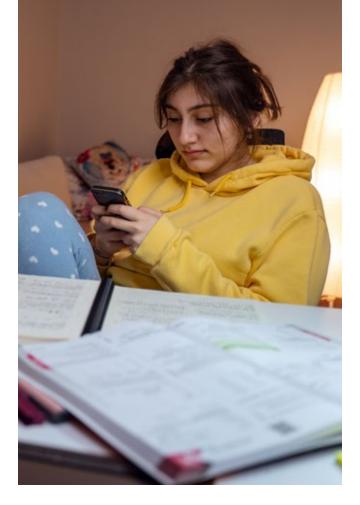
A PATH FORWARD BASED ON SCIENCE

Change is needed soon. Solutions should reflect a greater understanding of the science in at least three ways.

First, youth vary considerably in how they use social media. Some uses may promote healthy development and others may create harm. As noted in the APA Health Advisory, using social media is not inherently beneficial or harmful to young people. The effects of social media depend not only on what teens can do and see online, but teens' pre-existing strengths or vulnerabilities, and the contexts in which they grow up.

Second, science has highlighted biological and psychological abilities/vulnerabilities that interact with the content, functions, and features built into social media platforms, and it is these aspects of youths' social media experience that must be addressed to attenuate risks.^{xxiv} Social media use, functionality, and permissions/consenting should be tailored to youths' developmental capabilities. Design features created for adults may not be appropriate for children.

Third, youth are adept at working around age restrictions. Substantial data reveal a remarkable number of children aged 12 years and younger routinely using social media, indicating that current policies and practices to restrict use to older youth are not working.^{xxv}



Policies will not protect youth unless technology companies are required to reduce the risks embedded within the platforms themselves.

As policymakers at every level assess their approach to this complex issue, it is important to note the limitations of frequently proposed policies, which are often misreported and fall far short of comprehensive safety solutions that will achieve meaningful change.

LIMITATIONS IN RESTRICTING DOWNLOADS

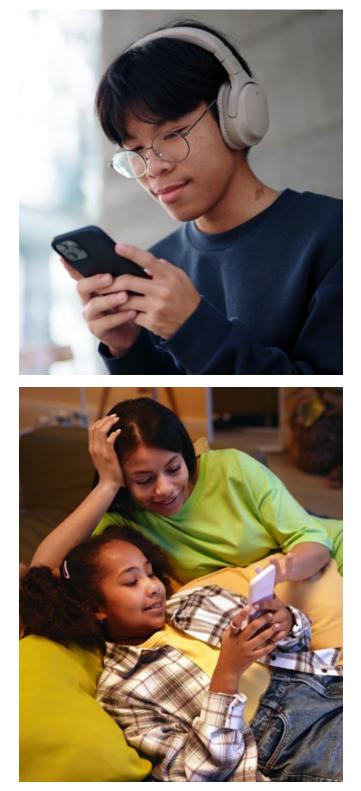
Restricting application downloads at the device level does not fully restrict youths' access and will not meaningfully improve the safety of social media platforms. Allowing platforms to delegate responsibility to app stores does not address the vulnerabilities and harms built into the platforms.

LIMITATIONS IN REQUIRING AGE RESTRICTIONS

Focusing only on age restrictions does not improve the platforms or address the biological and psychological vulnerabilities that persist past age 18. While age restriction proposals could offer some benefits if effectively and equitably implemented, they do not represent comprehensive improvements to social media platforms, for at least four reasons: (1) Creating a bright line age limit ignores individual differences in adolescents' maturity and competency; (2) These proposals fail to mitigate the harms for those above the age limit and can lead to a perception that social media is safe for adolescents above the threshold age, though neurological changes continue until age 25; (3) Completely limiting access to social media may disadvantage those who are experiencing psychological benefits from social media platforms, such as community support and access to science-based resources, which particularly impact those in marginalized populations; (4) The process of age-verification requires more thoughtful consideration to ensure that the storage of official identification documents does not systematically exclude subsets of youth, create risks for leaks, or circumvent the ability of young people to maintain anonymity on social platforms.

LIMITATIONS IN USE OF PARENTAL CONTROLS

Granting parents and caregivers greater access to their children's social media accounts will not address risks embedded within platforms themselves. More robust and easy-to-use parental controls would help some younger age groups, but as a sole strategy, this approach ignores the complexities of adolescent development, the importance of childhood autonomy and privacy, and disparities in time or resources available for monitoring across communities.^{xxvi} Some parents might be technologically ill-equipped, lack the time or documentation to complete requirements, or simply be unavailable to complete these requirements. Disenfranchising some young people from these platforms creates inequities.^{xxvii}



ACKNOWLEDGEMENTS

We wish to acknowledge the outstanding contributions to this report made by the following individuals:

EXPERT ADVISORY PANEL

Co-chairs

Mary Ann McCabe, PhD, ABPP, member-at-large, Board of Directors, American Psychological Association; associate clinical professor of pediatrics, The George Washington University School of Medicine and Health Sciences

Mitchell J. Prinstein, PhD, ABPP, chief science officer, American Psychological Association; John Van Seters Distinguished Professor of Psychology and Neuroscience, University of North Carolina at Chapel Hill

Members

Mary K. Alvord, PhD, founder, Alvord, Baker & Associates; board president, Resilience Across Borders; adjunct associate professor of psychiatry and behavioral sciences, The George Washington University School of Medicine and Health Sciences

Dawn T. Bounds, PhD, PMHNP-BC, FAAN, assistant professor, Sue & Bill Gross School of Nursing, University of California, Irvine

Linda Charmaraman, PhD, senior research scientist, Wellesley Centers for Women, Wellesley College

Sophia Choukas-Bradley, PhD, associate professor, Department of Psychology, University of Pittsburgh

Dorothy L. Espelage, PhD, William C. Friday Distinguished Professor of Education, University of North Carolina at Chapel Hill

Joshua A. Goodman. PhD, assistant professor, Department of Psychology, Southern Oregon University

Jessica L. Hamilton, PhD, assistant professor, Department of Psychology, Rutgers University

Brendesha M. Tynes, PhD, Dean's Professor of Educational Equity, University of Southern California

L. Monique Ward, PhD, professor, Department of Psychology (Developmental), University of Michigan

Lucía Magis-Weinberg, MD, PhD, assistant professor, Department of Psychology, University of Washington

We also wish to acknowledge the contributions to this report made by Katherine B. McGuire, chief advocacy officer, and Corbin Evans, JD, senior director of congressional and federal relations, American Psychological Association.

SELECTED REFERENCES

- i Maza, M. T., Fox, K. A., Kwon, S. J., Flannery, J. E., Lindquist, K. A., Prinstein, M. J., & Telzer, E. H. (2023). Association of habitual checking behaviors on social media with longitudinal functional brain development. *JAMA Pediatrics*, 177(2), 160-167; Prinstein, M. J., Nesi, J., & Telzer, E. H. (2020). Commentary: An updated agenda for the study of digital media use and adolescent development—Future directions following Odgers & Jensen (2020). *Journal of Child Psychology and Psychiatry*, 61(3), 349–352. https://doi.org/10.1111/jcpp.13219.
- ii Nesi, J., Choukas-Bradley, S., & Prinstein, M. J. (2018). Transformation of adolescent peer relations in the social media context: Part 1—A theoretical framework and application to dyadic peer relationships. *Clinical Child and Family Psychology Review*, 21(3), 267–294. https://doi.org/10.1007/s10567-018-0261-x.
- Valkenburg, P. M., & Peter, J. (2013). The differential susceptibility to media effects model. *Journal of Communication*, 63(2), 221–243. https://doi.org/10.1111/ jcom.12024
- iv Fareri, D. S., Martin, L. N., & Delgado, M. R. (2008). Reward-related processing in the human brain: developmental considerations. Development and psychopathology, 20(4), 1191-1211; Somerville, L. H., & Casey, B. J. (2010). Developmental neurobiology of cognitive control and motivational systems. *Current Opinion in Neurobiology*, 20(2), 236-241. https://doi.org/10.1016/j. conb.2010.01.006.
- v Shin, D. (2020). How do users interact with algorithm recommender systems?1 The interaction of users, algorithms, and performance2. *Computers in Human Behavior, 109,* 106344. https://doi.org/10.1016/j.chb.2020.106344
- vi Sherman, L. E., Payton, A. A., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2016). The power of the Like in adolescence: Effects of peer influence on neural and behavioral responses to social media. *Psychological Science*, 27(7), 1027-1035. https://doi.org/10.1177/0956797616645673.
- vii Albert, D., Chein, J., & Steinberg, L. (2013). The Teenage Brain: Peer Influences on Adolescent Decision Making. *Current Directions in Psychological Science*, 22(2), 114-120. https://doi.org/10.1177/0963721412471347
- viii Armstrong-Carter, E., & Telzer, E. H. (2021). Advancing measurement and research on youths' prosocial behavior in the digital age. *Child Development Perspectives*, 15(1), 31–36. https://doi.org/10.1111/cdep.12396; Newcomb, A. F., & Bagwell, C. L. (1995). Children's friendship relations: A meta-analytic review. *Psychological Bulletin*, 117(2), 306.
- Nesi, J., & Prinstein, M. J. (2019). In search of likes: Longitudinal associations between adolescents' digital status seeking and health-risk behaviors. Journal of Clinical Child & Adolescent Psychology, 48(5), 740–748. https://doi.org/10.1 080/15374416.2018.1437733; Rotondi, V., Stanca, L., & Tomasuolo, M. (2017). Connecting alone: Smartphone use, quality of social interactions and well-being. Journal of Economic Psychology, 63, 17–26. https://doi.org/10.1016/j. joep.2017.09.001.
- x Sherman, L. E., Payton, A. A., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2016). The Power of the Like in Adolescence: Effects of Peer Influence on Neural and Behavioral Responses to Social Media. *Psychological Science*, 27(7), 1027-1035. https://doi.org/10.1177/0956797616645673
- xi Susi, K., Glover-Ford, F., Stewart, A., Knowles Bevis, R., & Hawton, K. (2023). Research review: viewing self-harm images on the Internet and social media platforms: systematic review of the impact and associated psychological mechanisms. *Journal of Child Psychology and Psychiatry*, 64(8), 1115-1139.
- xii Hartley, C. A., & Somerville, L. H. (2015). The neuroscience of adolescent decision-making. *Current Opinion in Behavioral Sciences*, 5, 108–115. https://doi. org/10.1016/j.cobeha.2015.09.004
- xiii Atherton, O. E., Lawson, K. M., & Robins, R. W. (2020). The development of effortful control from late childhood to young adulthood. *Journal of Personality* and Social Psychology, 119(2), 417-456. https://doi.org/10.1037/pspp0000283
- xiv Boer, M., Stevens, G. W., Finkenauer, C., & Van den Eijnden, R. J. (2022). The course of problematic social media use in young adolescents: A latent class growth analysis. Child Development, 93(2), e168-e187.
- xv Hall, A. C. G., Lineweaver, T. T., Hogan, E. E., & O'Brien, S. W. (2020). On or off task: The negative influence of laptops on neighboring students' learning depends on how they are used. *Computers & Education*, *153*, 103901. https://doi. org/10.1016/j.compedu.2020.103901; Sana, F., Weston, T., & Cepeda, N. J. (2013). Laptop multitasking hinders classroom learning for both users and nearby peers. *Computers & Education*, *62*(0360-1315), 24–31. https://doi. org/10.1016/j.compedu.2012.10.003.

- xvi von Bastian, C. C., & Druey, M. D. (2017). Shifting between mental sets: An individual differences approach to commonalities and differences of task switching components. *Journal of Experimental Psychology: General*, 146(9), 1266–1285. https://doi.org/10.1037/xge0000333.
- xvii Andrews, J. C., Walker, K. L., & Kees, J. (2020). Children and online privacy protection: Empowerment from cognitive defense strategies. Journal of Public Policy & Marketing, 39(2), 205-219. https://doi. org/10.1177/0743915619883638; Romer D. (2010). Adolescent risk taking, impulsivity, and brain development: implications for prevention. *Developmental Psychobiology*, 52(3), 263-276. https://doi.org/10.1002/dev.20442
- xviii Orben, A., Przybylski, A. K., Blakemore, S.-J., Kievit, R. A. (2022). Windows of developmental sensitivity to social media. *Nature Communications*, 13(1649). https://doi.org/10.1038/s41467-022-29296-3.
- xix Paruthi, S., Brooks, L. J., D'Ambrosio, C., Hall, W. A., Kotagal, S., Lloyd, R. M., Malow, B. A., Maski, K., Nichols, C., Quan, S. F., Rosen, C. L., Troester, M. M., & Wise, M. S. (2016). Recommended amount of sleep for pediatric populations: A consensus statement of the American Academy of Sleep Medicine. *Journal of Clinical Sleep Medicine*, 12(6), 785-786. https://doi.org/10.5664/jcsm.5866.
- xx Perrault, A. A., Bayer, L., Peuvrier, M., Afyouni, A., Ghisletta, P., Brockmann, C., Spiridon, M., Hulo Vesely, S., Haller, D. M., Pichon, S., Perrig, S., Schwartz, S., & Sterpenich, V. (2019). Reducing the use of screen electronic devices in the evening is associated with improved sleep and daytime vigilance in adolescents. *Sleep*, 42(9), zsz125. https://doi.org/10.1093/sleep/zsz125; Telzer EH, Goldenberg D, Fuligni AJ, Lieberman MD, Gálvan A. (2015). Sleep variability in adolescence is associated with altered brain development. *Developmental Cognitive Neuroscience*, 14, 16-22. doi:10.1016/j.dcn.2015.05.007.
- xxi Livingstone, S., & Smith, P. K. (2014). Annual research review: Harms experienced by child users of online and mobile technologies: The nature, prevalence and management of sexual and aggressive risks in the digital age. *Journal of Child Psychology and Psychiatry*, 55(6), 635–654. https://doi.org/10.1111/ jcpp.12197; Wolak, J., Finkelhor, D., Mitchell, K. J., & Ybarra, M. L. (2008). Online "predators" and their victims: Myths, realities, and implications for prevention and treatment. *American Psychologist*, *63*(2), 111–128. https://doi.org/10.1037/0003-066X.63.2.111.
- xxii Wachs, S., Costello, M., Wright, M. F., Flora, K., Daskalou, V., Maziridou, E., Kwon, Y., Na, E.-Y., Sittichai, R., Biswal, R., Singh, R., Almendros, C., Gámez-Guadix, M., Görzig, A., & Hong, J. S. (2021). "DNT LET 'EM H8 U!": Applying the routine activity framework to understand cyberhate victimization among adolescents across eight countries. *Computers & Education*, *160*, Article 104026. https://doi.org/10.1016/j.compedu.2020.104026; Padilla-Walker, L. M., Stockdale, L. A., & McLean, R. D. (2020). Associations between parental media monitoring, media use, and internalizing symptoms during adolescence. *Psychology of Popular Media*, *9*(4), 481. https://doi.org/10.1037/ppm0000256
- xxiii Dietvorst, E., Hiemstra, M., Hillegers, M.H.J., & Keijsers, L. (2018). Adolescent perceptions of parental privacy invasion and adolescent secrecy: An illustration of Simpson's paradox. *Child Development*, *89*(6), 2081-2090. https://doi. org/10.1111/cdev.13002; Auxier, B. (2020, July 28). Parenting Children in the Age of Screens. Pew Research Center: Internet, Science & Tech; Pew Research Center. https://www.pewresearch.org/internet/2020/07/28/parenting-children-in-the-age-of-screens/.
- xxiv National Academies of Sciences, Engineering, and Medicine. 2024. Social media and adolescent health. Washington, DC: The National Academies Press. https:// doi.org/10.17226/27396.
- xxv Charmaraman, L., Lynch, A. D., Richer, A. M., & Zhai, E. (2022). Examining Early Adolescent Positive and Negative Social Technology Behaviors and Well-Being During the COVID-19 Pandemic. *Technology, Mind, and Behavior,* 3(1: Spring 2022). https://doi.org/10.1037/tmb0000062.
- xxvi Dietvorst, E., Hiemstra, M., Hillegers, M.H.J., & Keijsers, L. (2018). Adolescent perceptions of parental privacy invasion and adolescent secrecy: An illustration of Simpson's paradox. *Child Development*, 89(6), 2081-2090. https://doi. org/10.1111/cdev.13002.
- xxvii Charmaraman, L., Lynch, A. D., Richer, A. M., & Zhai, E. (2022). Examining Early Adolescent Positive and Negative Social Technology Behaviors and Well-Being During the COVID-19 Pandemic. *Technology, Mind, and Behavior*, 3(1: Spring 2022). https://doi.org/10.1037/tmb0000062.





Article The Relationship between Social Media and the Increase in Mental Health Problems

Hasan Beyari 回

Department of Administrative and Financial Sciences, Applied College, Umm Al-Qura University, Makkah 24382, Saudi Arabia; hmbeyari@uqu.edu.sa

Abstract: Social media has become an indispensable aspect of young people's digital interactions, as they use it mostly for entertainment and communication purposes. Consequently, it has the potential to have both positive and negative effects on them. Deterioration in mental health is one of the side effects stemming from social media overuse. This study investigates the relationship between social media and the increase in mental health problems in Saudi Arabia. The population considered for analysis includes young people from Saudi Arabia, with a sample size of 385. A closed-ended survey questionnaire was used to collect data on different social media features and criteria. Using the Analytical Hierarchical Process (AHP), the researcher analyzed data to compare the effect of different social media features on mental health. The social media features included in this paper are private chats and calls, group chats and calls, browsing posts, games, media sharing, adverts, likes/comments/followers, and pages. The researcher adopted entertainment, information, social interaction, privacy, esteem, and communication as the criteria in the AHP process. Among these criteria, the study found that entertainment was the most significant, while privacy was the least significant. Findings suggested that likes, comments, and followers were the biggest contributors to poor mental health (total utility = 56.24). The least effective feature was 'games' (total utility = 2.56). The researcher recommends that social media users be cautious when interacting with social media features, especially likes, comments, followers, media, and posts, because of their significant effect on mental health.

Keywords: social media; mental health; analytical hierarchical process (AHP); followers; posts; Saudi Arabia

1. Introduction

Mental health is a crucial aspect of human wellbeing, yet it is often overlooked and stigmatized. According to the World Health Organization, the prevalence of mental health problems is increasing at a rate of 13% per year [1]. Anxiety and depression are the most common mental health issues, affecting 264 million and 280 million people worldwide, respectively [2,3]. In addition, an estimated 269 million people were struggling with drug and substance abuse by the end of 2018 [4]. These numbers are likely to continue to rise due to a variety of factors. One factor that has been identified as contributing to the increase in mental health challenges is the use of technologies, including social media. Social media refers to applications that allow users to interact with each other through the creation and exchange of media, text, and calls within a network [5]. Some examples of social media platforms include Facebook, Twitter, Instagram, and TikTok. Key social media features considered in this investigation are private chats, group chats, browsing posts, adverts, media sharing, calls, likes and comments, and pages. Social media has been linked to poor sleep patterns, depression, and anxiety [6]. In addition, ref. [7] warns of the negative impact that excessive social media use can have on the mental health of young people.

Saudi Arabia has a high level of social media usage, with 82.3% of the population (29.5 million people) using social media in 2022 [8]. Young people, who make up 36.74% of the



Citation: Beyari, H. The Relationship between Social Media and the Increase in Mental Health Problems. *Int. J. Environ. Res. Public Health* **2023**, 20, 2383. https://doi.org/10.3390/ ijerph20032383

Academic Editor: Sen-Chi Yu

Received: 28 December 2022 Revised: 20 January 2023 Accepted: 27 January 2023 Published: 29 January 2023



Copyright: © 2023 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). population, are the biggest users of social media in Saudi Arabia, with 98.43% of young people using social networking sites [9]. The top three reasons given by Saudis for using social media are keeping in touch with friends and family, use of free time, and finding products to purchase [8]. The prevalence of mental health issues in the KSA is estimated to be around 20.2% [10]. Depression is the most common mental health condition, affecting 21% of the population, followed by anxiety (17.5%) and stress (12.6%) [11]. Research has shown that social media use in Saudi Arabia is correlated with increased mental health issues [12]. High social media exposure has also been found to be associated with a higher risk of depression and anxiety in the kingdom [12]. Studies have also shown a significant correlation between the use of social networking sites and the increase in depression-related conditions in Saudi Arabia [13].

The aim of this study is to examine the impact of social media on mental health in Saudi Arabia and to identify which social media features have the greatest impact on increasing mental health issues. The study uses an Analytical Hierarchical Process (AHP) to analyze several social media features and determine their impacts on mental health. By understanding the specific features that contribute to mental health problems, individuals and policymakers can take steps to alleviate mental health issues and reduce the negative effects of social media. The results of this study will provide valuable insights into the impact of social media on mental health in Saudi Arabia and can inform the development of strategies to mitigate these effects.

2. Literature Review

One of the primary features of social media is chatting. As a social network, chats are a powerful method of communication among social media users. They may take the form of group or private chats. According to [14], young people with psychological issues tend to worsen their conditions by participating in social media chatrooms. Private chats are not exempted, as ref. [15] found that constant chatting with other people without feeling their physical presence is one reason for the increase in mental health issues among social media users. The outcome is more loneliness, a common factor in psychological deterioration. While chatting may not directly cause depression and other mental health problems, it can exacerbate an individual's symptoms if one engages in long chats [16]. The studies further caution that young people must be careful when chatting with their peers on social media.

Browsing posts and advertisements are equally part of social media. Social media posts often portray falsehoods by allowing one to elevate their good qualities and suppress their negative ones [17]. Young people may not understand this fact, and they are likely to think that something is wrong with themselves because they do not look as good as the posts made by their friends. The authors of [18] found that social media influencers significantly contribute to the poor mental health of social media users. Advertisements power most social networking platforms, and users have had to embrace the presence of ads alongside their digital social lives. Because of their wide viewership, ads shape the psychology and opinions of young people on these platforms [19]. An advertisement portraying a muscular individual may depress a social media user who does not have similar body features. Similarly, ads with tall girls may negatively impact young girls psychologically because of social projection.

Sharing media, playing games on digital social networks, and interacting on video conferencing channels may negatively impact an individual's mental health. In some cases, ref. [14] found that the sharing of media and interactions on social media prompts users to think less of themselves. Some users may not have good enough videos because their equipment, such as cameras, is not as good as their friends' devices. Moreover, watching videos on social media can be an addictive habit if left unchecked. The authors of [20] argue that the active watching of and commenting on YouTube videos makes the platform overly addictive compared to people who passively watch videos without associated interactions. The authors advise that people's interactions on video-based social media platforms should be minimal. Regarding games, ref. [21] argues that high involvement in social media games

can result in addiction. Such a condition may make an individual overly dependent on these games, which distorts their mental health.

An individual's following and the intensity with which people react to their posts can impact their mental health. For example, ref. [22] reports that users who update more frequently on their social media pages tend to receive more feedback in the form of likes and comments. This feedback is important, as it enhances the self-esteem of post authors. Moreover, ref. [23] observes that people receiving negative feedback from their social media posts are more susceptible to emotional distress. The study affirms that technologies aiding young people in comparing social statuses present a risk to their mental wellbeing. Some turn to social media to increase followers and gain a sense of gratification to compensate for their emotional and psychological challenges [24]. This leads them further down the path of a graver depression.

3. Methodology

This section provides an explanation of the methodological processes that the researcher used in order to acquire data and analyze them. The research design of this study is described in Section 3.1, which is then followed by the population, the sampling method, and the survey instrument. The phases of the Analytical Hierarchical Process (AHP) used in the research are explained in the following subsections.

3.1. Research Design

The specific approach taken by the researcher is the Analytical Hierarchical Process (AHP). It is a decision-making model that uses paired comparisons to determine the most significant factors that affect a decision [25]. In this case, the researcher wished to identify and rank social media factors impacting mental health. This ranking will help in prioritizing which aspects of social media use to manage at a personal level. The elements of social media in this study are private chats, group chats, browsing posts, adverts, media sharing, calls, likes and comments, and pages. The study undertakes a survey that asks respondents to indicate how useful these social media features are to them and how each element may lead to mental health problems.

3.2. Population, Sampling, and Survey Instrument

This study considered Saudi Arabia as the unit of study, while the study population was Saudi youth aged between 18 and 35. The United Nations defines youth as persons between 18 and 24. However, the researcher sought a more accommodating criterion regarding respondent ages. The selection of young people as the target population was motivated by the fact that 98.43% of them are on social media [9]. In addition, ref. [9] also reports that 7,623,336 young people belong to this demographic. The computed sample size from this population is 385 using Yamane's formula [26]. Gender-wise, the researcher allowed respondents to indicate whether they were male, female, or non-binary. All respondents selected either the male or female category. Hence, the researcher analyzed the results in this fashion. The sample for this study was selected using simple random sampling on social media platforms such as Facebook and Twitter. This sampling method involves selecting participants randomly from the target population, which in this case were young people in Saudi Arabia who use social media. This helped to ensure that the sample was representative of the target population and that the responses were accurate and reliable. To ensure the content validity of the questionnaire, a pre-test of the survey was performed, since it is in the researcher's best interest to have expert evaluations and reviews of the comprehensibility and clarity of the used research instrument. Several questions were altered, reworded, or eliminated in response to positive comments and ideas for small modifications. The amended questionnaire was forwarded to the collaborating academics for review and evaluation to confirm the instrument's face validity. This questionnaire's question types were determined by their degree of relevance to each identified concept. The Content Validity Index (CVI) was calculated to be 1, indicating that all three questions

were relevant and appropriate for the study. This suggests that the questionnaire was valid and that it measured the variables of interest in a reliable and accurate manner.

The researcher used social media platforms to reach a diverse and representative sample of young people in the country. The social media platforms used in communication with participants (personal and business) included Facebook, Instagram, Twitter, and Snapchat. The researcher sent out a post including all the details about the research, and a link was included to direct the participants to the questionnaire page. The questionnaire was hosted on Google Forms to facilitate distribution, and it was left open for one month to allow respondents to respond at their convenience. The final questionnaire had a two-part structure, including demographic questions and three main questions with selective options for participants. Appendix A shows the list of questions asked to the respondents.

3.3. Analytical Hierarchical Process

The Analytical Hierarchical Process involves four primary steps, which are

- 1. Identifying decisions, options, and criteria;
- 2. Conducting pairwise comparisons;
- 3. Computing weights for the criteria;
- 4. Calculating utility values.

3.3.1. Identifying Decisions, Options, and Criteria

The decision is determining which social media features have the biggest effect on increasing mental health problems. The options were the eight social media features, namely private chats, group chats, browsing posts, adverts, media sharing, calls, likes and comments, and pages. The criteria for determining which features are the most influential were the importance of a feature to an individual, the time spent interacting with the feature, and the recency of interaction.

3.3.2. Pairwise Comparison

Pairwise comparisons involve comparing two criteria simultaneously to build a square $n \times n$ matrix, where n is the number of criteria. The comparison is structured in such a way that the value entered in a cell represents the number of times one criterion is more important relative to the other. Because the two criteria being compared are the same, the relative value of each criterion is equal to one when they are compared to each other [25]. The maximum possible score is n, and larger numbers indicate that a criterion is becoming essential. The pairwise comparison will compare time spent on a feature, recency in using the feature, and the overall importance of the feature to the respondents.

3.3.3. Importance Weights

After populating the matrix, it is used to compute the importance weights. They signal to an analyst the extent to which each criterion will affect their ultimate decision. The researcher gave the biggest weight to the item with the most significant importance. The study computed the geometric mean of the criteria to ensure objectivity in the computation in the first step, as suggested by [27]. In the second step, the relative composition of the criterion values was determined, which was used to determine their weights [28]. In order to complete the procedure, the computation of the ratio of the value of each criterion to the overall value is needed.

3.3.4. Calculating Utility Values

Computing the utility is the final step in the analytical hierarchal process. It involves establishing the 'utiles' associated and multiplying them by their corresponding importance scores [27]. The 'utiles' are obtained using respondents' subjective evaluation of how each feature instigates mental health challenges. 'Utility' is a quantitative value that indicates how useful something is to an individual. This figure helps in selecting the most significant option. It is possible to represent utility as a percentage. It is argued that a criterion's

usefulness increases as its advantages or benefits increase. Depending on the criterion, it is conceivable that utility will be computed differently. The importance of the criteria selected for investigation and the utility attached to the criterion were multiplied to show the utility calculation for each criterion. The values for each criterion were added to determine the total utility of each social media feature.

4. Results

4.1. Analysis of Demographic Characteristics

This section analyzes the age, gender, and occupations of the study participants. The findings reveal that the most populous age group was that of members aged between 18 and 25, as they constituted 60.3% (232) of the study population. Male respondents accounted for 55.3% (213) of the sampled participants. The most dominant group by occupation was students, as they accounted for 41.8% (161) of the sampled participants. Table 1 provides further details about the demographic characteristics of the respondents.

Demographics		Frequency	Percentage (%)	
Gender				
	Male	213	55.3	
	Female	172	44.7	
Age				
0	18–25	232	60.3	
	26–30	114	29.6	
	31–35	39	10.1	
Occupation				
-	Student	161	41.8	
	Unemployed	138	35.8	
	Employed	86	22.3	
	Total	385	100%	

Table 1. Respondents' demographic characteristics.

4.2. Favorite Features of Respondents

The researcher first examined which of the selected social media features were favored by the respondents. The findings suggested that likes, comments, and followers were the most relevant aspects of social media that the respondents liked, obtaining a mean score of 7.29/8.00. The least favorite feature was gaming, scoring a mean of 2.05/8.00. Table 2 shows the performance of the different features.

Table 2. Ranking the relevance of social media features to respondents.

Feature	Mean Relevance
Likes, Comments, and Followers	7.29
Media Sharing and Consuming	7.16
Browsing Posts	6.33
Group Chats and Calls	4.80
Private Chats and Calls	3.98
Pages	3.11
Games	2.05
Adverts	1.26

4.3. Pairwise Comparison

The researcher established the criteria comparison matrix using the responses to questions that asked participants to rank the factors influencing their sentiments on social media features. The ranking was based on the mean score obtained from the 385 responses regarding their criteria ranking. In this case, the highest ranked criteria by the respondents scored higher values in Table 3. Evidence suggests that people decided which social media

feature they valued mostly based on its entertainment value (value = 6) and less so based on the feature's privacy (value = 1).

Table 3. Criteria importance.

Key	Feature	Value
ENT	Entertainment	6
INF	Information	2
SOC	Social Interaction	5
PRI	Privacy	1
EST	Esteem	4
COM	Communication	3

The computation of matrix values in Table 4 was based on the values established in Table 3 above. The basis of the values is the mean ranks of the criteria, as expressed by the respondents. In this case, the matrix values indicated the number of times one criterion was more important than the corresponding criterion [28]. For example, the highlighted pair in Table 4 shows that esteem was two times more important that the corresponding information criterion.

Table 4. Pairwise comparison matrix.

	$\mathbf{Ranks} \rightarrow$	6	2	5	1	4	3		
Ranks \downarrow		ENT	INF	SOC	PRI	EST	COM	V	W
6	ENT	1.00	3.00	1.20	6.00	1.50	2.00	2.004	0.28571
2	INF	0.33	1.00	0.40	2.00	0.50	0.67	0.668	0.09524
5	SOC	0.83	2.50	1.00	5.00	1.25	1.67	1.670	0.23810
1	PRI	0.17	0.50	0.20	1.00	0.25	0.33	0.334	0.04762
4	EST	0.67	2.00	0.80	4.00	1.00	1.33	1.336	0.19048
3	COM	0.50	1.50	0.60	3.00	0.75	1.00	1.002	0.14286

4.4. Importance Weights

The first step involves the computation of the criteria's geometric mean [28] to determine their influence on the final decision. In this case, it is the sixth root of the product of the row elements in Table 4. Below is the basic formula used in computing the weights of the criteria, assuming n criteria:

$$V_i = \sqrt[n]{X_{i1} \times X_{i2} \times \cdots \times X_{in}}$$

where:

 V_i : Geometric mean for criterion *i*; X_{i1} : Pairwise importance of criterion *i* relative to criterion 1; X_{i2} : Pairwise importance of criterion *i* relative to criterion 2; X_{in} : Pairwise importance of criterion *i* relative to criterion *n*; *n*: Number of criteria.

The second step involves finding the proportionate composition of the criteria values, which will count as their weights [28]. The procedure requires the computation of the ratio of each criterion's value against the total value:

$$W_i = \frac{V_i}{\sum_{j=1}^n V_j}$$
$$\sum_{j=1}^6 V_j = 7.014$$

where:

W_i: Weights for criterion *i*.

4.5. Computing Utility Values

The researcher computed the feature utiles by first ranking their respective mean responses. The findings in Table 5 show that respondents thought that likes, comments, and followers on social media would often cause people's mental health problems. Other similarly high-risk features are browsing posts and adverts.

Table 5. Utility values.

Feature	Utiles
Private Chats and Calls	2.26
Group Chats and Calls	3.48
Browsing Posts	7.11
Games	1.25
Media Sharing and Consuming	3.55
Adverts	5.75
Likes, Comments, and Followers	7.71
Pages	4.89

4.6. Comparing Social Media's Effects on Mental Health

This study computed the total utility as the product of the utiles (feature strengths), importance weights (criteria weights), and how favored the features were by the respondents (relevance). In Table 6, each feature's strength is multiplied by the criteria weights to obtain the cell values. The row values are then added and multiplied by a feature's importance to determine the total utility. The total utility is obtained using the following formula:

$$TU_i = \sum_{j=1}^n W_i \times UV_j \times MR_i$$

where:

 TU_i : Total Utility for criterion *i*; W_i : Weights for criterion *i*; UV_j = Utility Value for feature *j*; MR_i : Mean Relevance for criterion *i*; *i* from 1 to 8, *j* from 1 to 6.

Table 6. Estimating the effect of social media features on mental health problems.

			Criterion Weights							
			0.29 0.10 0.24 0.05 0.19 0.14					-		
			ENT	INF	SOC	PRI	EST	СОМ	Mean Relevance	Total Utility
	7.71	LCF	2.20	0.73	1.84	0.37	1.47	1.10	7.29	56.24416
	7.11	BRP	2.03	0.68	1.69	0.34	1.35	1.02	6.33	45.03454
Easterns	3.55	MDS	1.01	0.34	0.84	0.17	0.68	0.51	7.16	25.39835
Feature	3.48	GCC	1.00	0.33	0.83	0.17	0.66	0.50	4.80	16.72801
Strength	4.89	PGS	1.40	0.47	1.16	0.23	0.93	0.70	3.11	15.20282
(Utility Value)	2.26	PCC	0.65	0.22	0.54	0.11	0.43	0.32	3.98	9.024443
	5.75	ADV	1.64	0.55	1.37	0.27	1.09	0.82	1.26	7.241052
	1.25	GMS	0.36	0.12	0.30	0.06	0.24	0.18	2.05	2.561511

The findings suggest that the feature with the most significant negative effect on

mental health is 'likes, comments, and followers.' This feature scored a total utility of 56.24. On the other hand, the feature with the least significant negative effect on mental health is 'social media games'. This study found the feature to have a total utility of 2.56. While the respondents had opined in Table 3 that adverts substantially contribute to mental instability, the criteria weights for this feature were too low to significantly impact the feature's total utility.

5. Discussion

In this study, the researcher found that social media has a significant negative impact on the mental health of Saudi Arabian youth. The feature that had the greatest impact was likes, comments, and followers, with a utility value of 56.24. This suggests that individuals who are seeking validation and social esteem through social media may be more prone to experiencing stress, depression, and anxiety. Browsing posts and media sharing were also identified as significant features that negatively impact mental health, with utility values of 45.03 and 25.40, respectively. These findings align with previous research that has identified the presence of influencers on social media as a potential source of stress and depression for regular users who may feel pressure to emulate these individuals [18]. Additionally, excessive exposure to social media videos has been linked to negative mental health outcomes [20].

On the other hand, this study found that social media games had the least impact on mental health, with a utility value of only 2.05. This finding differs from previous research that has identified games on social media as highly addictive and potentially harmful to mental health [21]. However, it is important to note that this study only compared the negative impact of different social media features on mental health, and it is possible that social media games may have a greater impact when studied in isolation. These findings highlight the need for caution in the use of social media, particularly among young people in Saudi Arabia. While social media can provide a sense of connection and support, it is important to be aware of its potential negative impacts on mental health. In light of these findings, it may be beneficial for individuals to set limits on their social media use and prioritize activities that promote mental wellbeing, such as physical exercise and social interaction with friends and family.

One potential implication of these findings is the need for greater education and awareness about the potential dangers of social media. This could involve educating people about the importance of finding validation from sources other than social media, as well as helping people to develop healthy habits when it comes to their social media use. This could involve setting limits on the amount of time spent on social media, being selective about the content that is consumed, and finding ways to disconnect from social media when necessary. Overall, these findings highlight the need for caution when using social media, particularly for youth in Saudi Arabia. While social media can be a useful tool for communication and connection, it is important to be mindful of the potential negative effects on mental health. It may be helpful for individuals to limit the attention they pay to certain features, such as likes, comments, and followers, and to engage in passive rather than active consumption of media. Further research is needed to understand the specific mechanisms by which social media impacts mental health and to identify effective interventions to mitigate negative effects.

There are several potential limitations to this study that should be considered when interpreting the results. First, the sample size of 385 participants may not be representative of the larger population of Saudi Arabian youth. Additionally, the self-reported nature of the data may be subject to bias, as individuals may not accurately recall or report their social media habits. Finally, the cross-sectional design of the study means that it is not possible to establish cause-and-effect relationships between social media use and mental health. Another limitation of this study is that the definition of "youth" is not explicitly stated. It is possible that the experiences and activities of respondents aged 18 and those

aged 35 may differ significantly. Additionally, the study did not explicitly consider the potential impact of gender on the relationship between social media use and mental health. Future research should aim to further explore these demographic variables in order to better understand the specific effects of social media on mental health among different populations. Such investigations should consider using larger and more diverse samples, as well as more robust research designs to further explore the relationship between social media and mental health.

6. Conclusions

The purpose of this study was to examine the effects of social media on mental health among young people. Social media has become an integral part of modern society, with platforms such as Facebook, Twitter, and Instagram offering a range of features including messaging, media sharing, and gaming. However, there is growing concern that the use of social media may have negative effects on mental health, particularly among young people who are more likely to use these platforms extensively. The study aimed to identify the specific features of social media that have the greatest impact on mental health and to examine the underlying reasons for these effects. To achieve these objectives, the study used AHP to assess the relevance and importance of eight social media features to 385 respondents aged between 18 and 35. The findings showed that likes, comments, and followers were the most relevant features to respondents, while gaming was the least favorite feature. In terms of the criteria influencing the respondents' sentiments, entertainment was the most important factor, while privacy was the least important. The study concludes that social media can have both positive and negative effects on mental health, depending on how it is used and the specific features that are engaged with. It is therefore important for young people to be aware of the potential risks and to use social media in a balanced and responsible manner.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study are available on request from the corresponding author.

Conflicts of Interest: The author declares no conflict of interest.

Appendix A. List of Questions Asked to the Respondents

Question 1: Rank the importance of the following social media features as they occur to you as (1) for the least important and (8) for the most important.	 Private Chats and Calls Group Chats and Calls Browsing Posts Games Media Sharing Adverts Likes and Comments Pages
Question 2: How do you determine the importance of social media features to you? Rank how the following factors influence your sentiments as (1) for least significant Determinant and (6) for the most significant Determinant.	 Entertainment Value (Such as from watching videos and playing games) Information Value (Such as from viewing—people's and page updates and adverts) Social Interaction Value (Such as engaging in group chats) Privacy Value (Such as engaging in private chats) Esteem Value (Such as followership, likes, and comments received) Communication Value (Such as private chats)

Question 3: On a scale of 1 to 8, rate the effect of the below social media features in inducing mental health issues as (1) for Smallest Effect and (8) for Biggest Effect	 Private Chats and Calls Group Chats and Calls Browsing Posts Games Media Sharing Adverts Likes and Comments Pages
--	--

References

- 1. World Health Organization. *Mental Health;* World Health Organization: Geneva, Switzerland, 2022.
- Hull, M. Anxiety Disorders Facts and Statistics. 2022. Available online: https://www.therecoveryvillage.com/mental-health/ anxiety/anxiety-disorder-statistics/ (accessed on 26 December 2022).
- Searing, L. Depression Affects about 280 Million People Worldwide. 2022. Available online: https://www.washingtonpost.com/ health/2022/02/27/depression-worldwide/ (accessed on 26 December 2022).
- UNODC World Drug Report 2020: Global Drug Use Rising; While COVID-19 Has Far Reaching Impact on Global Drug Markets. 2020. Available online: https://www.unodc.org/unodc/press/releases/2020/June/media-advisory---global-launch-of-the-2020-world-drug-report.html (accessed on 15 September 2022).
- 5. Duradoni, M.; Innocenti, F.; Guazzini, A. Well-being and social media: A systematic review of Bergen addiction scales. *Future Internet* 2020, 12, 24. [CrossRef]
- 6. Meier, A.; Reinecke, L. Computer-mediated communication, social media, and mental health: A conceptual and empirical meta-review. *Commun. Res.* 2021, *48*, 1182–1209. [CrossRef]
- Coyne, S.M.; Rogers, A.A.; Zurcher, J.D.; Stockdale, L.; Booth, M. Does time spent using social media impact mental health? An eight year longitudinal study. *Comput. Hum. Behav.* 2020, 104, 106160. [CrossRef]
- Saudi Arabia Social Media Statistics. 2022. Available online: https://www.globalmediainsight.com/blog/saudi-arabia-socialmedia-statistics/ (accessed on 3 September 2022).
- 9. General Authority for Statistics. *GASTAT: (98.43%) of Saudi Youth on Social Networking Sites;* General Authority for Statistics: Riyadh, Saudi Arabia, 2022.
- 10. Alangari, A.S.; Knox, S.S.; Kristjansson, A.L.; Wen, S.; Innes, K.E.; Bilal, L.; Altwaijri, Y.A. Barriers to mental health treatment in the Saudi National Mental Health Survey. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3877. [CrossRef]
- AlHadi, A.N.; Alarabi, M.A.; AlMansoor, K.M. Mental health and its association with coping strategies and intolerance of uncertainty during the COVID-19 pandemic among the general population in Saudi Arabia: Cross-sectional study. BMC Psychiatry 2021, 21, 382. [CrossRef]
- 12. Alrasheed, M.; Alrasheed, S.; Alqahtani, A.S. Impact of Social Media Exposure on Risk Perceptions, Mental Health Outcomes, and Preventive Behaviors during the COVID-19 Pandemic in Saudi Arabia. *Saudi J. Health Syst. Res.* 2022, 2, 107–113. [CrossRef]
- 13. AlHamad, N.S.; AlAmri, K. The association between social media use and depressive symptoms among adults in Riyadh, Saudi Arabia. *J. Fam. Med. Prim. Care* **2021**, *10*, 3336. [CrossRef]
- 14. Naslund, J.A.; Bondre, A.; Torous, J.; Aschbrenner, K.A. Social media and mental health: Benefits, risks, and opportunities for research and practice. *J. Technol. Behav. Sci.* 2020, *5*, 245–257. [CrossRef]
- 15. Twenge, J.M.; Campbell, W.K. Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Prev. Med. Rep.* **2018**, *12*, 271–283. [CrossRef] [PubMed]
- 16. Berry, N.; Emsley, R.; Lobban, F.; Bucci, S. Social media and its relationship with mood, self-esteem and paranoia in psychosis. *Acta Psychiatr. Scand.* **2018**, *138*, 558–570. [CrossRef]
- 17. Buchanan, T. Why do people spread false information online? The effects of message and viewer characteristics on self-reported likelihood of sharing social media disinformation. *PLoS ONE* **2020**, *15*, e0239666. [CrossRef] [PubMed]
- Li, J.; Qi, J.; Wu, L.; Shi, N.; Li, X.; Zhang, Y.; Zheng, Y. The Continued Use of Social Commerce Platforms and Psychological Anxiety—The Roles of Influencers, Informational Incentives and FoMO. *Int. J. Environ. Res. Public Health* 2021, *18*, 12254. [CrossRef] [PubMed]
- 19. Staniewski, M.; Awruk, K. The influence of Instagram on mental well-being and purchasing decisions in a pandemic. *Technol. Forecast. Soc. Change* **2022**, 174, 121287. [CrossRef]
- 20. Wong, N.; Yanagida, T.; Spiel, C.; Graf, D. The association between appetitive aggression and social media addiction mediated by cyberbullying: The moderating role of inclusive norms. *Int. J. Environ. Res. Public Health* **2022**, *19*, 9956. [CrossRef] [PubMed]
- Burén, J.; Nutley, S.B.; Sandberg, D.; Ström Wiman, J.; Thorell, L.B. Gaming and Social Media Addiction in University Students: Sex Differences, Suitability of Symptoms, and Association With Psychosocial Difficulties. *Front. Psychiatry* 2021, *11*, 1720. [CrossRef]
- 22. Marengo, D.; Montag, C.; Sindermann, C.; Elhai, J.D.; Settanni, M. Examining the links between active Facebook use, received likes, self-esteem and happiness: A study using objective social media data. *Telemat. Inform.* **2021**, *58*, 101523. [CrossRef]

- Lee, H.Y.; Jamieson, J.P.; Reis, H.T.; Beevers, C.G.; Josephs, R.A.; Mullarkey, M.C.; Yeager, D.S. Getting fewer "likes" than others on social media elicits emotional distress among victimized adolescents. *Child Dev.* 2020, 91, 2141–2159. [CrossRef]
- Hartanto, A.; Quek, F.Y.X.; Tng, G.Y.Q.; Yong, J.C. Does Social Media Use Increase Depressive Symptoms? A Reverse Causation Perspective. Front. Psychiatry 2021, 12, 641934. [CrossRef]
- 25. Ho, W.; Ma, X. The state-of-the-art integrations and applications of the analytic hierarchy process. *Eur. J. Oper. Res* 2018, 267, 399–414. [CrossRef]
- 26. Yamane, Y. Mathematical Formulae for Sample Size Determination. J. Mathemetics 1967, 1, 1–29.
- Krejč cí, J.; Stoklasa, J. Aggregation in the analytic hierarchy process: Why weighted geometric mean should be used instead of weighted arithmetic mean. *Expert Syst. Appl.* 2018, 114, 97–106. [CrossRef]
- Jagoda, J.A.; Schuldt, S.J.; Hoisington, A.J. What to Do? Let's Think It Through! Using the Analytic Hierarchy Process to Make Decisions. *Front. Young Minds* 2020, *8*, 1–10. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.

Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show

Its own in-depth research shows a significant teen mental-health issue that Facebook plays down in public

By Georgia Wells, Jeff Horwitz and Deepa Seetharaman Sept. 14, 2021 7:59 am ET

About a year ago, teenager Anastasia Vlasova started seeing a therapist. She had developed an eating disorder, and had a clear idea of what led to it: her time on Instagram.

She joined the platform at 13, and eventually was spending three hours a day entranced by the seemingly perfect lives and bodies of the fitness influencers who posted on the app.

"When I went on Instagram, all I saw were images of chiseled bodies, perfect abs and women doing 100 burpees in 10 minutes," said Ms. Vlasova, now 18, who lives in Reston, Va.

Around that time, researchers inside Instagram, <u>which is owned by Facebook Inc.</u>, were studying this kind of experience and asking whether it was part of a broader phenomenon. Their findings confirmed some serious problems.

"Thirty-two percent of teen girls said that when they felt bad about their bodies, Instagram made them feel worse," the researchers said in a March 2020 slide presentation posted to Facebook's internal message board, reviewed by The Wall Street Journal. "Comparisons on Instagram can change how young women view and describe themselves."

For the past three years, Facebook has been conducting studies into <u>how its photo-sharing app affects</u> <u>its millions of young users</u>. Repeatedly, the company's researchers found that Instagram is harmful for a sizable percentage of them, most notably teenage girls.

"We make body image issues worse for one in three teen girls," said one slide from 2019, summarizing research about teen girls who experience the issues.

"Teens blame Instagram for increases in the rate of anxiety and depression," said another slide. "This reaction was unprompted and consistent across all groups."

Among teens who reported suicidal thoughts, 13% of British users and 6% of American users traced the desire to kill themselves to Instagram, one presentation showed.

Expanding its base of young users is vital to the company's more than \$100 billion in annual revenue, and it doesn't want to jeopardize their engagement with the platform.

More than 40% of Instagram's users are 22 years old and younger, and about 22 million teens log onto Instagram in the U.S. each day, compared with five million teens logging onto Facebook, where young users have been shrinking for a decade, the materials show.

On average, teens in the U.S. spend 50% more time on Instagram than they do on Facebook.

"Instagram is well positioned to resonate and win with young people," said a researcher's slide posted internally. Another post said: "There is a path to growth if Instagram can continue their trajectory."

In public, Facebook has consistently played down the app's negative effects on teens, and hasn't made its research public or available to academics or lawmakers who have asked for it.

"The research that we've seen is that using social apps to connect with other people can have positive mental-health benefits," CEO <u>Mark Zuckerberg</u> said at a congressional hearing in March 2021 when asked about children and mental health.

In May, Instagram head Adam Mosseri told reporters that research he had seen suggests the app's effects on teen well-being is likely "quite small."

In a recent interview, Mr. Mosseri said: "In no way do I mean to diminish these issues....Some of the issues mentioned in this story aren't necessarily widespread, but their impact on people may be huge."

He said he believes Facebook was late to realizing there were drawbacks to connecting people in such large numbers. "I've been pushing very hard for us to embrace our responsibilities more broadly," he said.

He said the research into the mental-health effects on teens was valuable, and that Facebook employees ask tough questions about the platform. "For me, this isn't dirty laundry. I'm actually very proud of this research," he said.

Some features of Instagram could be harmful to some young users, and they aren't easily addressed, he said. He added: "There's a lot of good that comes with what we do."

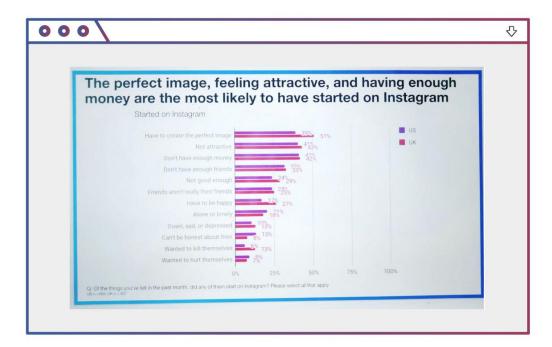
What Facebook knows

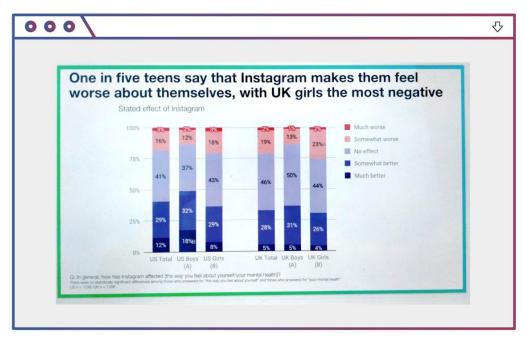
The Instagram documents form part of a trove of internal communications reviewed by the Journal, on areas including teen mental health, political discourse and human trafficking. They offer an unparalleled picture of how Facebook is acutely aware that the products and systems central to its business success routinely fail.

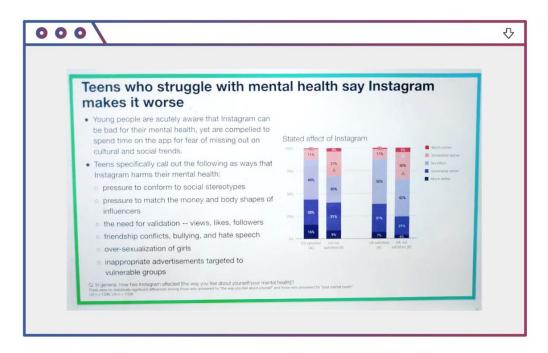
The documents also show that Facebook has made minimal efforts to address these issues and plays them down in public.

The company's research on Instagram, the deepest look yet at what the tech giant knows about its impact on teens and their mental well-being, represents one of the clearest gaps revealed in the documents between Facebook's understanding of itself and its public position.

Its effort includes focus groups, online surveys and diary studies in 2019 and 2020. It also includes largescale surveys of tens of thousands of people in 2021 that paired user responses with Facebook's own data about how much time users spent on Instagram and what they saw there.







Source: 2019 Instagram slide presentation called 'Teen Mental Health Deep Dive'

The researchers are Facebook employees in areas including data science, marketing and product development who work on a range of issues related to how users interact with the platform. Many have backgrounds in computer science, psychology and quantitative and qualitative analysis.

In five presentations over 18 months to this spring, the researchers conducted what they called a "teen mental health deep dive" and follow-up studies.

They came to the conclusion that some of the problems were specific to Instagram, and not <u>social media</u> <u>more broadly</u>. That is especially true concerning so-called social comparison, which is when people assess their own value in relation to the attractiveness, wealth and success of others.

"Social comparison is worse on Instagram," states Facebook's deep dive into teen girl body-image issues in 2020, noting that <u>TikTok, a short-video app</u>, is grounded in performance, while users on Snapchat, a rival photo and video-sharing app, are sheltered by jokey filters that "keep the focus on the face." In contrast, Instagram focuses heavily on the body and lifestyle.

The features that Instagram identifies as most harmful to teens appear to be at the platform's core.

The tendency to share only the best moments, a pressure to look perfect and an addictive product can send teens spiraling toward eating disorders, an unhealthy sense of their own bodies and depression, March 2020 internal research states. It warns that the Explore page, which serves users photos and videos curated by an algorithm, can send users deep into content that can be harmful.

"Aspects of Instagram exacerbate each other to create a perfect storm," the research states.

The research has been reviewed by top Facebook executives, and was cited in a 2020 presentation given to Mr. Zuckerberg, according to the documents.

At a congressional hearing this March, Mr. Zuckerberg defended the company against criticism from lawmakers about <u>plans to create a new Instagram product for children under 13</u>. When asked if the company had studied the app's effects on children, he said, "I believe the answer is yes."

In August, Sens. Richard Blumenthal and Marsha Blackburn in a letter to Mr. Zuckerberg called on him to release Facebook's internal research on the impact of its platforms on youth mental health.

In response, Facebook sent the senators a six-page letter that didn't include the company's own studies. Instead, Facebook said there are many challenges with conducting research in this space, saying, "We are not aware of a consensus among studies or experts about how much screen time is 'too much,' " according to a copy of the letter reviewed by the Journal.

Facebook also told the senators that its internal research is proprietary and "kept confidential to promote frank and open dialogue and brainstorming internally."

A Facebook spokeswoman said the company welcomed productive collaboration with Congress and would look for opportunities to work with external researchers on credible studies.

"Facebook's answers were so evasive—failing to even respond to all our questions—that they really raise questions about what Facebook might be hiding," Sen. Blumenthal said in an email. "Facebook seems to be taking a page from the textbook of Big Tobacco—targeting teens with potentially dangerous products while masking the science in public."

Mr. Mosseri said in the recent interview, "We don't send research out to regulators on a regular basis for a number of reasons." He added Facebook should figure out a way to share high-level overviews of what the company is learning, and that he also wanted to give external researchers access to Facebook's data.

He said the company's plan for the <u>Instagram kids product</u>, <u>which state attorneys general have objected</u> <u>to</u>, is still in the works.

When told of Facebook's internal research, Jean Twenge, a professor of psychology at San Diego State University who has published research finding that social media is harmful for some kids, said it was a potential turning point in the discussion about how social media affects teens.

"If you believe that R.J. Reynolds should have been more truthful about the link between smoking and lung cancer, then you should probably believe that Facebook should be more upfront about links to depression among teen girls," she said.

Race for teen users

When Facebook paid \$1 billion for Instagram in 2012, it was a tiny startup with 13 employees and already a hit. That year, Facebook for the first time had observed a decline in the number of teens using

its namesake Facebook product, according to the documents. The company would come to see Instagram as Facebook's best bet for growth among teens.

Facebook had been tracking the rise of buzzy features on competitor apps, including Snapchat, and in 2016 directed employees to focus on winning what they viewed as a race for teen users, according to former Instagram executives.

Instagram made photos the app's focus, with filters that made it easy for users to edit images. It later added videos, feeds of algorithmically chosen content and tools that touched up people's faces.

Before long, Instagram became the online equivalent of the high-school cafeteria: a place for teens to post their best photos, find friends, size each other up, brag and bully.

Facebook's research indicates Instagram's effects aren't harmful for all users. For most teenagers, the effects of "negative social comparison" are manageable and can be outweighed by the app's utility as a fun way for users to express themselves and connect with friends, the research says.

But a mounting body of Facebook's own evidence shows Instagram can be damaging for many.

In one study of teens in the U.S. and U.K., Facebook found that more than 40% of Instagram users who reported feeling "unattractive" said the feeling began on the app. About a quarter of the teens who reported feeling "not good enough" said the feeling started on Instagram. Many also said the app undermined their confidence in the strength of their friendships.

Instagram's researchers noted that those struggling with the platform's psychological effects weren't necessarily logging off. Teens regularly reported <u>wanting to spend less time on Instagram</u>, the presentations note, but lacked the self control to do so.

"Teens told us that they don't like the amount of time they spend on the app but feel like they have to be present," an Instagram research manager explained to colleagues, according to the documents. "They often feel 'addicted' and know that what they're seeing is bad for their mental health but feel unable to stop themselves."

During the isolation of the pandemic, "if you wanted to show your friends what you were doing, you had to go on Instagram," said Destinee Ramos, 17, of Neenah, Wis. "We're leaning towards calling it an obsession."

Ms. Ramos and her friend Isabel Yoblonski, 18, believed this posed a potential health problem to their community, so they decided to survey their peers as a part of a national science competition. They found that of the 98 students who responded, nearly 90% said social media negatively affected their mental health.

In focus groups, Instagram employees heard directly from teens who were struggling. "I felt like I had to fight to be considered pretty or even visible," one teen said of her experience on Instagram.

After looking through photos on Instagram, "I feel like I am too big and not pretty enough," another teen told Facebook's researchers. "It makes me feel insecure about my body even though I know I am skinny."

"For some people it might be tempting to dismiss this as teen girls being sad," said Dr. Twenge. But "we're looking at clinical-level depression that requires treatment. We're talking about self harm that lands people in the ER."

'Kick in the gut'

Eva Behrens, a 17-year-old student at Redwood High School in Marin County, Calif., said she estimates half the girls in her grade struggle with body-image concerns tied to Instagram. "Every time I feel good about myself, I go over to Instagram, and then it all goes away," she said.

When her classmate Molly Pitts, 17, arrived at high school, she found her peers using Instagram as a tool to measure their relative popularity. Students referred to the number of followers their peers had as if the number was stamped on their foreheads, she said.

Now, she said, when she looks at her number of followers on Instagram, it is most often a "kick in the gut."

For years, there has been little debate among medical doctors that for some patients, Instagram and other social media exacerbate their conditions. Angela Guarda, director for the eating-disorders program at Johns Hopkins Hospital and an associate professor of psychiatry in the Johns Hopkins School of Medicine, said it is common for her patients to say they learned from social media tips for how to restrict food intake or purge. She estimates that Instagram and other social-media apps play a role in the disorders of about half her patients.

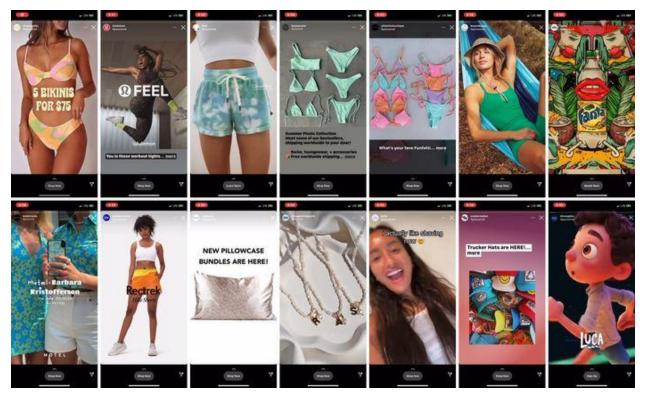
"It's the ones who are most vulnerable or are already developing a problem—the use of Instagram and other social media can escalate it," she said.

Lindsay Dubin, 19, recently wanted to exercise more. She searched Instagram for workouts and found some she liked. Since then the app's algorithm has filled her Explore page with photos of how to lose weight, the "ideal" body type and what she should and shouldn't be eating. "I'm pounded with it every time I go on Instagram," she said.

Jonathan Haidt, a social psychologist at New York University's Stern School of Business and co-author of the bestseller "The Coddling of the American Mind," has been concerned about the effects of social media on teens since he started studying it in 2015. He has twice spoken with Mr. Zuckerberg about Facebook's effects on teen mental health, the first time after the CEO reached out in 2019.

Mr. Zuckerberg indicated that on the issues of political polarization and teen mental health, he believed that the research literature was contradictory and didn't point clearly to any harmful causal effects, according to Mr. Haidt. He said he felt Mr. Zuckerberg at the time was "a partisan, but curious."

"I asked Mark to help us out as parents," he said. "Mark said he was working on it."



Lindsay Dubin found that in two minutes of watching Instagram stories, she saw 33 stories of accounts she follows as well as these 14 ads, many of which were focused on physical appearances.

In January 2020, Facebook invited Mr. Haidt to its Menlo Park, Calif., headquarters, where Mr. Mosseri and Instagram staff briefed him on the platform's efforts to combat bullying and reduce social pressure on the platform. Mr. Haidt said he found those efforts sincere and laudable but warned that they likely weren't enough to battle what he believes is a mounting public-health epidemic.

"It was not suggested to me that they had internal research showing a problem," he said.

The Facebook spokeswoman declined to comment on the interaction.

Some Instagram researchers said it was challenging to get other colleagues to hear the gravity of their findings. Plus, "We're standing directly between people and their bonuses," one former researcher said.

Instead of referencing their own data showing the negative effects of Instagram, Facebook executives in public have often pointed to studies from the Oxford Internet Institute that have shown little correlation between social-media use and depression.

Other studies also found discrepancies between the amount of time people say they use social media and the amount of time they actually use such services. Mr. Mosseri has pointed to these studies as evidence for why research using self-reported data might not be accurate.

Facebook has in the past been a donor to a researcher at the Oxford institute, which is part of the research and teaching department of Britain's Oxford University.

Oxford's lead researcher on the studies, Andrew Przybylski, who said he didn't receive funding from Facebook, said companies like Facebook need to be more open about their research. "The data exists within the tech industry," he said. "Scientists just need to be able to access it for neutral and independent investigation."

In an interview, Mr. Przybylski said, "People talk about Instagram like it's a drug. But we can't study the active ingredient."

Facebook executives have struggled to find ways to reduce Instagram's harm while keeping people on the platform, according to internal presentations on the topic.

For years, Facebook experimented with hiding the tallies of "likes" that users see on their photos. Teens told Facebook in focus groups that "like" counts caused them anxiety and contributed to their negative feelings.

When Facebook tested a tweak to hide the "likes" in a pilot program they called Project Daisy, it found it didn't improve life for teens. "We didn't observe movements in overall well-being measures," Facebook employees wrote in a slide they presented to Mr. Zuckerberg about the experiment in 2020.

Nonetheless, <u>Facebook rolled out the change as an option</u> for Facebook and Instagram users in May 2021 after senior executives argued to Mr. Zuckerberg that it could make them look good by appearing to address the issue, according to the documents.

"A Daisy launch would be received by press and parents as a strong positive indication that Instagram cares about its users, especially when taken alongside other press-positive launches," Facebook executives wrote in a discussion about how to present their findings to Mr. Zuckerberg.

When Facebook rolled out Project Daisy, Mr. Mosseri acknowledged publicly that the feature didn't actually change much about how users felt.

In the interview, he said he doesn't think there are clear-cut solutions to fixing Instagram. He said he is cautiously optimistic about tools Instagram is developing to identify people who are in trouble and to try to "nudge" them toward more positive content.

Facebook made two researchers available to discuss their work. They said they are also testing a way to ask users if they want to take a break from Instagram. Part of the challenge, the researchers said, is they struggle to determine which users face the greatest risk. The researchers also said that the causality of some of their findings was unclear, and noted some of the studies had small sample sizes.

"I think anything and everything should be on the table," Mr. Mosseri said. "But we have to be honest and embrace that there's trade-offs here. It's not as simple as turning something off and thinking it gets better, because often you can make things worse unintentionally."

Zeroed in on selfies

In the internal documents, Facebook's researchers also suggested Instagram could surface "fun" filters rather than ones around beautification. They zeroed in on selfies, particularly filtered ones that allow

users to touch-up their faces. "Sharing or viewing filtered selfies in stories made people feel worse," the researchers wrote in January.

Sylvia Colt-Lacayo, a 20-year-old at Stanford University, said she recently tried out a face filter that thinned her cheeks and made them pink. But then Ms. Colt-Lacayo realized the filter had minimized her cheeks that she inherited from her Nicaraguan father, and made them look more European. That gave her "a bitter taste in my mouth," she said.

Ms. Colt-Lacayo uses a wheelchair, and in the past Instagram made her feel like she didn't look the way she was supposed to, or do the things that other teen girls on the app were doing, she said.

She said she began following people who use wheelchairs, or who are chronically ill or refer to other disabilities, and the platform became a place she could see images of older disabled people just being happy.

In March, the researchers said Instagram should reduce exposure to celebrity content about fashion, beauty and relationships, while increasing exposure to content from close friends, according to a slide deck they uploaded to Facebook's internal message board.

A current employee, in comments on the message board, questioned that idea, saying celebrities with perfect lives were key to the app. "Isn't that what IG is mostly about?" he wrote. Getting a peek at "the (very photogenic) life of the top 0.1%? Isn't that the reason why teens are on the platform?"

A now-former executive questioned the idea of overhauling Instagram to avoid social comparison. "People use Instagram because it's a competition," the former executive said. "That's the fun part."

To promote more positive use of Instagram, the company has partnered with nonprofits to promote what it calls "emotional resilience," according to the documents. Videos produced as part of that effort include recommending that teens consider daily affirmations to remind themselves that "I am in control of my experience on Instagram."

Facebook's researchers identified the over-sexualization of girls as something that weighs on the mental health of the app's users. Shevon Jones, a licensed clinical social worker based in Atlanta, said this can affect Black girls especially because people often assume Black girls are older than they are and critique the bodies of Black girls more frequently.

"What girls often see on social media are girls with slimmer waists, bigger butts and hips, and it can lead them to have body image issues," Ms. Jones said. "It's a very critical time and they are trying to figure out themselves and everything around them."

Teen boys aren't immune. In the deep dive Facebook's researchers conducted into mental health in 2019, they found that 14% of boys in the U.S. said Instagram made them feel worse about themselves. In their report on body image in 2020, Facebook's researchers found that 40% of teen boys experience negative social comparison.

"I just feel on the edge a lot of the time," a teen boy in the U.S. told Facebook's researchers. "It's like you can be called out for anything you do. One wrong move. One wrong step."

Many of the teens interviewed for this article said they didn't want Instagram to disappear. Ms. Vlasova, who no longer uses Instagram, said she is skeptical Facebook's executives have tried hard enough to make their platform less toxic.

"I had to live with my eating disorder for five years, and people on Instagram are still suffering," she said.

For questions or additional information, please contact Lia@FightForTheFuture.org and Matt@FightForTheFuture.org

In support of the DELETE Act

To Members of the House Energy and Commerce Subcommittee on Innovation, Data, and Commerce,

We, the undersigned organizations, call on you to defend hundreds of millions of Americans from the abusive business practices of data brokers by passing H.R.4311, the DELETE Act, or including it in a privacy package. The vast majority of people do not want sensitive personal information that can be used to harm and harass them publicly listed and sold across the internet. Yet, there are <u>over 500</u> data broker websites to opt-out from, and if you opt out once, data brokers will just put your information up again when they find it elsewhere.

Like <u>Californians</u>, who will receive a data broker opt-out option in 2026, everyone in the US deserves a one-click opt out to tell these data brokers to stop putting us and our loved ones in danger for profit. And we need it quickly, before <u>AI supercharges</u> both data broker-enabled <u>scams</u> and the bulk collection of <u>sensitive personal data</u> for brokers to exploit.

Just as you gave us a tool to protect ourselves by directing the FTC to create the National Do Not Call Registry to combat telemarketers and robocalls, we ask you now to do the same for data brokers with a vigorous DELETE Act that will permanently get people's private personal information off the internet. Whether we serve poll workers, librarians, civil servants, doctors or patients, abuse survivors, activists, veterans, journalists, or just people who value the privacy of their homes, we urge you to act with haste and give everyone the tools we need to keep ourselves and our loved ones safe.

Sincerely,

Fight For The Future U.S. PIRG (Public Interest Research Group) Consumer Action Surveillance Technology Oversight Project 18 Million Rising Woodhull Freedom Foundation Yale Privacy Lab RootsAction.org Accountable Tech Consumer Federation of America National Consumer Law Center (on behalf of its low-income clients) OpenMedia Privacy Rights Clearinghouse Convocation Research + Design Dangerous Speech Project Oakland Privacy WA People's Privacy The Value Alliance COYOTE RI X-Lab



April 17, 2024

The Honorable Gus Bilirakis Chairman Innovation, Data, and Commerce Subcommittee Energy and Commerce Committee United States House of Representatives Washington, D.C. 20515

The Honorable Jan Schakowsky Ranking Member Innovation, Data, and Commerce Subcommittee Energy and Commerce Committee United States House of Representatives Washington, D.C. 20515

Letter for the Record: Legislative Solutions to Protect Kids Online and Ensure Americans' Data Privacy Rights.

Dear Chairman Bilirakis, Ranking Member Schakowsky and Members of the Subcommittee:

The American Psychological Association (APA). APA Services, Inc. is the companion organization of the American Psychological Association, which is the nation's largest scientific and professional nonprofit organization representing the discipline and profession of psychology, as well as over 157,000 members and affiliates who are clinicians, researchers, educators, consultants, and students in psychological science. Through the application of psychological science and practice, our association's mission is to use psychological science and information to benefit society and improve lives.

We are grateful you have called attention to youth and the online environment. Our youth are struggling in many ways, largely due to our society's failure to adequately attend to child and adolescent mental health.



This submission is broken down into the following sections to help inform the subcommittee about the complexities of the challenges before us and to help shape policy solutions:

•	Overview	pg. 2
•	Online/ Social Media Behaviors and Youth Mental Health	pg. 6
•	Elaboration of Science on Social Media Content, Features, and Functions	pg. 17
•	Psychological Effects of Lost Opportunities While Youth Are Online	pg. 23
•	Potential Solutions and Policy Implications	pg. 26

Overview

Today, we are seeing the repercussions of our underinvestment and lack of focus on children's mental health. Depression rates for teens doubled between 2009 and 2019 and suicide is the second leading cause of death for U.S. youth, up 4% since 2020, with one in five teens considering suicide during the pandemic and eating disorder emergency room admissions for girls 12 to 17 years old doubling since 2019¹. Furthermore, since the start of the pandemic, over

https://www.nimh.nih.gov/health/statistics/suicide#%3A~%3Atext%3DSuicide%20is%20a%20Leading%20Cause%20of%20Death%20in%20the%20United%20States%2C-

¹Radhakrishnan, L. (2022). Pediatric Emergency Department Visits Associated with Mental Health Conditions Before and During the COVID-19 Pandemic — United States, January 2019–January 2022. MMWR. Morbidity and Mortality Weekly Report, 71(8). <u>https://doi.org/10.15585/mmwr.mm7108e2</u>; Curtin, S. (2022). Vital Statistics Rapid Release Provisional Numbers and Rates of Suicide by Month and Demographic Characteristics: United States, 2021. https://www.cdc.gov/nchs/data/vsrr/vsrr024.pdf; Daly, M. (2021). Prevalence of Depression Among Adolescents in the U.S. From 2009 to 2019: Analysis of Trends by Sex, Race/Ethnicity, and Income. Journal of Adolescent Health. <u>https://doi.org/10.1016/j.jadohealth.2021.08.026</u>; Suicide. (n.d.). National Institute of Mental Health (NIMH). Retrieved February 10, 2023, from

According%20to%20the%26text%3DSuicide%20was%20the%20second%20leading%2Cages%20of%2035%20and %2044; Yard, E. (2021). Emergency Department Visits for Suspected Suicide Attempts Among Persons Aged 12– 25 Years Before and During the COVID-19 Pandemic — United States, January 2019–May 2021. MMWR. Morbidity and Mortality Weekly Report, 70(70(24);888–894). https://doi.org/10.15585/mmwr.mm7024e1.



167,000 children have lost a parent or caregiver to the virus ². This kind of profound loss can have significant impacts on the mental health of children, leading to anxiety, depression, trauma, and stress-related conditions ³. Faced with such data, in December 2021, the U.S. Surgeon General issued an advisory calling for a unified national response to the mental health challenges young people are facing ⁴. APA has issued our own Health Advisory detailing these impacts and a follow up report focused on the features, functions, and content of social media that are most impacting kids today. The rarity of such advisories further underscores the need for action to help stem the mental health crisis of children and adolescents.

There are many reasons why youth are experiencing this crisis today, and it is likely that there are simultaneous contributors to the outcomes presented above. Today, we are here to talk about whether youths' engagement with social media, and other online platforms, may be a relevant factor. Many psychological scientists, including myself and my colleagues, have been asking this same question for years. We seek to understand how this new context in which youths' social interactions occur may be related to development, including potential benefits or risks that may be conferred by the online environment. As the discipline with expertise on all of human behavior, our work has been broad in scope; and to date, our focus has been on the adolescent period, during which more complex and mature behaviors are developed through intricate and precise interactions among neural, biological, social, contextual, and social systems. Today, although this remains a relatively nascent body of research, we would like to share what we know so far, so policymakers, educators, parents, caregivers, and youth can learn from what we are beginning to discover and make choices that will ensure the safety of youth.

² Hidden Pain: Children Who Lost a Parent or Caregiver to COVID-19 and What the Nation Can Do To Help Them | COVID Collaborative. (n.d.). Www.covidcollaborative.us. <u>https://www.covidcollaborative.us/initiatives/hidden-pain</u>.

³ Almeida, I. L. L., Rego, J. F., Teixeira, A. C. G., & Moreira, M. R. (2021). Social isolation and its impact on child and adolescent development: a systematic review. Revista paulista de pediatria : orgao oficial da Sociedade de Pediatria de Sao Paulo, 40, e2020385. https://doi.org/10.1590/1984-0462/2022/40/2020385.

⁴ Richtel, M. (2021, December 7). Surgeon General Warns of Youth Mental Health Crisis. The New York Times. <u>https://www.nytimes.com/2021/12/07/science/pandemic-adolescents-depression-anxiety.html#:~:text=The%20United%20States%20surgeon%20general.</u>



In this filing, we outline emerging research with findings that have begun to suggest possible benefits, and as well as possible adverse effects of technology and social media use on adolescent development. We also present legislative and regulatory solutions that if enacted, would represent positive steps towards learning more about, and hopefully solving this problem. We are calling for new legislation and regulations that increase research funding and provide education on how children can use online platforms without experiencing the most harmful impacts; legislation that creates a requirement that social media companies protect the well-being of child users; legislation that prohibits problematic business practices and prevents companies from tricking and manipulating users; and bills that provide more leverage for federal regulators to clamp down on known harmful impacts while building internal expertise to prepare to tackle newly discovered harms. APA supported these efforts in past Congresses and commits to work to see these proposals enacted because, as we present below, scientific data are beginning to suggest areas of serious concern that must not be allowed to continue unchecked.

Before we discuss specific impacts of online platforms or solutions, it is important to acknowledge that causal data are not available for many of these issues, since the experimental designs needed to make cause-and-effect statements would be considered unethical or require access to currently inaccessible data. This underscores the need for increased access to data and funding for high-quality research. However, as with non-causal research revealing the effects of childhood adversity on mental health, or the effects of combat on PTSD among veterans, extant, rigorous science can nevertheless allow us to reach reasonable conclusions that can shape policy.

It also is important to acknowledge that technology and social media may not, in themselves, be problematic for child development, as each device and platform offers a multitude of features and communication opportunities that users can choose from. Extensive research has demonstrated that the amount of screentime alone is not likely associated with negative



psychological outcomes among youth ⁵. Moreover, not all youth exposed to identical stimuli are affected in the same ways. Thus, the most appropriate question is: what specific online *behaviors, features, or content* may be associated with benefit or risk to which youth. This is the focus of the most recent work among psychological scientists, yielding some comforting, but also some worrying results.

But first, to understand the role of social media in youths' development, it is necessary to understand the role of social interactions more generally at this critical developmental stage.

Children's interactions with peers are not merely for fun. It is within the social context that most children's education occurs; thus, peer interactions significantly affect cognitive development. The peer context also is the milieu in which children learn social rules, norms, and expectations; develop emotional competence and morality; and in which all of children's behaviors are consistently reinforced (or corrected), thus influencing long-term behavioral development. Indeed, numerous studies have revealed that children's interactions with peers have enduring effects on their occupational status, salary, relationship success, emotional development, mental health, and even on physical health and mortality over 40 years later ⁶. These effects are stronger than the effects of children's IQ, socioeconomic status, and educational attainment. These enduring effects likely occur because of remarkably powerful and reciprocal interactions between youths' social experiences and their biological development. Children's brains and peripheral nervous systems influence how they interact with peers, and in turn, those experiences change the development of their brain structures, neural pathways, and even how their nervous system responds to stress throughout their lives.

5

⁵ Odgers CL, Jensen MR. Annual Research Review: Adolescent mental health in the digital age: facts, fears, and future directions. J Child Psychol Psychiatry. 2020;61(3):336-348. doi:10.1111/jcpp.13190.

⁶ For a review, see; Prinstein, M. J., & Giletta, M. (2020). Future Directions in Peer Relations Research. Journal of Clinical Child & Adolescent Psychology, 49(4), 556–572. <u>https://doi.org/10.1080/15374416.2020.1756299</u>.



Our brains, our bodies, and our society have been evolving together to shape human development for millennia, influencing our communities, our culture, and our society. Within the last twenty years, the advent of portable technology and social media platforms is changing what took 60,000 years to evolve. We are just beginning to understand how this may impact youth development.

I will first discuss the potential effects of technology and social media use on youth mental health. This will include an outline of five main issues emerging from the research, including the risks of pre-adulthood use of social media, the ramifications that come from unmonitored (and "liked") content online, the potential effects of digital stress, the encouragement of social comparisons, and research demonstrating benefits of social media use among youth. In the following section, we will discuss the psychological effects of opportunities lost while youth spend time online. Last, we will discuss potential solutions and policy recommendations.

Online/ Social Media Behaviors and Youth Mental Health

Pre-adulthood use of technology and social media may be particularly concerning. There is reason to be significantly concerned about the age at which many youth begin using technology and social media. Developmental neuroscientists have revealed that there are two highly critical periods for adaptive neural development. Aberrations in our brain growth during these periods may have lifetime implications. One of these is the first year of life. The second begins at the outset of puberty and lasts until early adulthood (i.e., from approximately 10 to 25 years old). This latter period is highly relevant, as this is when a great number of youths are offered relatively unfettered access to devices and unrestricted or unsupervised use of social media and other online platforms ⁷. Within the age range of 10-25 years, change occurs

⁷ Vogels, E. A., Gelles-Watnick, R., & Massarat, N. (2022, August 10). Teens, social media and technology 2022. Pew Research Center. <u>https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/</u>.



gradually and steadily; thus risks likely are greater towards the beginning of this range and become attenuated as youth mature. Herein, this period is referred to as "pre-adulthood."

At the outset of puberty, adolescents' brains begin developing in a specific, pre-determined sequence. Generally, sub-cortical areas shared with many mammalian species mature before areas at the top layer of the brain, which is responsible for many of our more human capabilities, such as premeditation, reflection, and inhibition. Among these initial areas developing among most youth, typically starting at the ages of 10-12 years old, are regions associated with our craving for "social rewards," such as visibility, attention, and positive feedback from peers. In contrast, regions involved in our ability to inhibit our behavior, and resist temptations (i.e., the prefrontal cortex) do not fully develop until early adulthood (i.e., approximately 10-15 years later). In other words, when it comes to youths' cravings for social attention, they are "all gas pedal with no brakes." Adolescence is thus a developmentally vulnerable period during which youth may be especially motivated to pursue social rewards, and not yet fully capable of restraining themselves.

Research suggests that technology and social media use may exploit this biological vulnerability among youth. Data reveal that social media stimuli, such as receiving "likes" or followers activates the social reward regions of the brain ⁸. In other words, these features of social media capitalize on youths' biologically based need for social rewards before they are able to regulate themselves from over-use. This has at least four significant implications for youth mental health.

Social Media and Loneliness. Although ostensibly social media platforms are built to foster interpersonal contacts and connections, they are not designed primarily to foster meaningful and mutually rewarding relationships that confer psychological benefits. Relationships are most beneficial to youths' psychological development when they are characterized by support, emotional intimacy, disclosure, positive regard, reliable alliance (e.g., "having each other's

⁸ Sherman, L. E., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2018). What the brain 'Likes': neural correlates of providing feedback on social media. Social cognitive and affective neuroscience, 13(7), 699–707. https://doi.org/10.1093/scan/nsy051.



backs"), and trust 9 . It is possible to use social media to foster exactly these types of relationship qualities, such as through direct messaging features. However, these are not the functions that are highlighted on most platforms. More typically, users are directed towards the number of "likes," followers, or reposts they received, often without immediate access to the identity of those who engaged with their profile or content. In other words, platforms are more apt to motivate users towards one's metrics than people themselves, which has led many youth to upload curated or filtered content to portray themselves most favorably. Note that these features of social media, and the resulting behaviors of those who use social media create the exact opposite qualities needed for successful and adaptive relationships (i.e., disingenuous, anonymous, depersonalized). In other words, social media offers the "empty calories of social interaction," that appear to help satiate our biological and psychological needs, but do not contain any of the healthy ingredients necessary to reap benefits. Anecdotally, teens' behavior reflects this issue - the "Finsta" phenomenon reflects digital natives' attempt to find more honest and intimate relationships with one another, but without experience in doing so first offline. Scientific data also support this claim; research reveals that in the hours following social media use, teens paradoxically report *increases* rather than decreases in loneliness ¹⁰.

Heightened Risk for Negative Peer Influence. Adolescents frequently are exposed to content online depicting illegal, immoral, dangerous, and unethical behavior. The architecture of many social media platforms allows users to like, repost, or comment on this content. Emerging data suggest that these features of social media present a significant risk to adolescents' mental health. Specifically, data reveal that social media may change adolescents' susceptibility to maladaptive behavior through both biological and psychological pathways. Research examining

⁹ Furman, W., Bukowski, W. M., Newcomb, A. F., & Hartup, W. W. (1996). The company they keep: Friendship in childhood and adolescence. Cambridge studies in social and emotional development. In W. Bukowski., A. Newcomb & W. Hartup (Eds), The measurement of friendship perceptions: Conceptual and methodological, (41-

Newcomb & W. Hartup (Eds), The measurement of friendship perceptions: Conceptual and methodological, (41-65). ¹⁰ Armstrong Cartor E. Carrott S. L. Nick E. A. Prinstein, M. L. & Talzer, E. H. (2022). Momentary links

¹⁰ Armstrong-Carter, E., Garrett, S. L., Nick, E. A., Prinstein, M. J., & Telzer, E. H. (2022). Momentary links between adolescents' social media use and social experiences and motivations: Individual differences by peer susceptibility. Developmental Psychology. Advance online publication. <u>https://doi.org/10.1037/dev0001503</u>.



adolescents' brains while on a simulated social media site, for example, revealed that when exposed to illegal, dangerous imagery, activation of the prefrontal cortex was observed suggesting healthy inhibition towards maladaptive behaviors. However, when these same images were shown with icons indicating that they were "liked" on social media, there was a significant decrease in activation of the brain's imbibition center, suggesting that the "likes" may reduce youths' inhibition (i.e., perhaps increasing their proclivity) towards dangerous and illegal behavior.¹¹ This is evidence that social media features are changing how youths' brains respond to images in ways that confer risk for the development of maladaptive behavior.

There also is evidence that these features of social media may promote a psychological affinity for dangerous and risk-taking behavior. For instance, a study of young high school students revealed that adolescents' exposure to "liked" posts depicting alcohol use was associated with changes in teens' perceptions of their peers' acceptance of alcohol use, which in turn predicted these same teens' early engagement in heavy episodic drinking (i.e., five or more drinks on a single occasion) ¹². Related research has demonstrated that individuals are more likely to "like" a post that they see others have "liked" before them, and this may increase the likelihood of exposure to similarly themed-posts, via AI-derived algorithms ¹³. These findings illustrate clear and powerful ways that the features embedded in social media platforms may have an important and highly concerning effect on youth mental health. Note, it is also possible that these same processes can be used to influence peers towards positive behaviors; however, this has not been adequately investigated.

¹¹ See for example, Sherman, L. E., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2018). What the brain 'Likes': neural correlates of providing feedback on social media. Social cognitive and affective neuroscience, 13(7), 699–707. <u>https://doi.org/10.1093/scan/nsy051</u>.

¹² Nesi J, Rothenberg WA, Hussong AM, Jackson KM. Friends' Alcohol-Related Social Networking Site Activity Predicts Escalations in Adolescent Drinking: Mediation by Peer Norms. J Adolesc Health. 2017;60(6):641-647. doi:10.1016/j.jadohealth.2017.01.009.

¹³ Egebark J, Ekström M. Liking what others "Like": using Facebook to identify determinants of conformity. Exp Econ. 2017;21(4):1-22. doi:10.1007/s10683-017-9552-1.



Risks for Addictive Social Media Use. Youths' biological vulnerabilities also have significant implications for "problematic social media use" or addictive behaviors; note that the regions of the brain activated by social media use overlap considerably with the regions involved in addictions to illegal and dangerous substances ¹⁴. As noted above, the developing brain is built to increase a desire for social rewards (that social media delivers abundantly), without the ability to show the capacities of inhibition and restraint capable among adults. This suggests that youth may be at risk for extraordinarily frequent uses of social media. Several bodies of research reveal that this indeed may be a very significant concern. For instance, data suggest that almost half of all adolescents report that they use social media "almost constantly" ¹⁵. Research also has compared social media use to diagnostic criteria for substance use dependencies, revealing that many adolescents report an inability to stop using social media, even when they want to, remarkable efforts to maintain access to social media, the use of social media to regulate their emotions, a need for increasing social media use to achieve the same level of pleasure (i.e., tolerance symptoms), withdrawal symptoms following abstinence, an significant impairment in their daily educational, social, work routines. A recent study revealed that over 54% of 11–13year-old youth reported at least one of these symptoms of problematic social media use ¹⁶. About 85% of youth report spending more time than intended online and 61% reporting failing when trying to stop or reduce their use of social media¹⁷.

¹⁴ De-Sola Gutiérrez, J., Rodríguez de Fonseca, F., & Rubio, G. (2016). Cell-Phone Addiction: A Review. Frontiers in Psychiatry, 7(175). <u>https://doi.org/10.3389/fpsyt.2016.00175</u>; Griffiths, M. D., Kuss, D. J., & Demetrovics, Z. (2014). Social networking addiction: An overview of preliminary findings. In K. P. Rosenberg & L. Curtiss Feder (Eds.), Behavioral addictions: Criteria, evidence, and treatment (pp. 119–141). Elsevier Academic Press. <u>https://doi.org/10.1016/B978-0-12-407724-9.00006-9</u>; Kirby, B., Dapore, A., Ash, C., Malley, K., & West, R. (2020). Smartphone pathology, agency and reward processing. Lecture Notes in Information Systems and Organisation, 321-329. https://doi.org/10.1007/978-3-030-60073-0_37.

 ¹⁵ Vogels, E. A., Gelles-Watnick, R., & Massarat, N. (2022, August 10). Teens, social media and technology 2022.
 Pew Research Center. <u>https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/</u>.
 ¹⁶ Boer M, Stevens GWJM, Finkenauer C, van den Eijnden RJJM. The course of problematic social media use in young adolescents: A latent class growth analysis. Child Dev. 2022;93(2):e168-e187. doi:10.1111/cdev.13712
 ¹⁷ The Common Sense Census: Media Use by Tweens and Teens. (2021).

https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf.



Alterations in Brain Development. Youths' biological vulnerability to technology and social media, and their resulting frequent use of these platforms, also has the potential to alter youths' neural development since our brains develop in response to the environment we live in. Recent studies have revealed that technology and social media use is associated with changes in structural brain development (i.e., changing the size and physical characteristics of the brain). In addition, research with my own colleagues at the University of North Carolina at Chapel Hill recently has revealed that technology and social media use also is associated with changes in how the brain works). Our data has revealed that youth indeed spend a remarkable amount of time using their devices ¹⁸. Objective data measured by teens' phones themselves indicated that the average number of times that youth in sixth grade picked up their phones was over 100, with some interrupting daily activities to pick up their phones over 400 times a day. On average, adolescents also reported an average of 8.2 hours of time on their devices each day, with some logging double this amount ¹⁹. The phone "apps" adolescents picked up their devices to use most often were popular social media platforms. Our research using annual fMRI brain scans revealed that more frequent uses of adolescents' devices (i.e., predominantly for social media) was associated with changes in how their brains developed. More phone "pickups" were associated with unique development of brain regions. In short, results found that high social media users may have promoted brain development in a way that may make adolescents more inclined to focus on social rewards (e.g., attention from peers) and altered self-control ²⁰.

Youth's Exposure to Unmonitored Content Poses Potential Risks. There are two domains of problematic content online that many youth are exposed to. Research demonstrates that this also likely contributes to mental health difficulties among children and adolescents. One domain pertains to content that actively showcases and promotes engagement in psychologically

¹⁸ Armstrong-Carter, E., Garrett, S. L., Nick, E. A., Prinstein, M. J., & Telzer, E. H. (2022). Momentary links between adolescents' social media use and social experiences and motivations: Individual differences by peer susceptibility. *Developmental psychology*.

¹⁹ Maza MT, Fox KA, Kwon S-J, et al. Association of habitual checking behaviors on social media with longitudinal functional brain development. JAMA Pediatr. 2023;177(2):160-167. doi:10.1001/jamapediatrics.2022.4924.
²⁰ See above.



disordered behavior, such as sites that discuss eating disordered behaviors (i.e., "pro-Anna" sites that encourage fasting, laxative use, excessive exercise) and pro-cutting sites depicting nonsuicidal self-injury ²¹. Research indicates that this content has proliferated on social media sites, not only depicting these behaviors, but teaching young people how to engage in each, how to conceal these behaviors from adults, actively encouraging users to engage in these behaviors, and socially sanctioning those who express a desire for less risky behavior ²². Moreover, in some cases this content is not removed nor are trigger warnings included to protect vulnerable youth from the effects that exposure to this content can have on their own behavior. This underscores the need for platforms to deploy tools to filter content, display warnings, and create reporting structures to mitigate these harms.

A second area of concern regarding online content pertains to the frequency of online discrimination and cyberbullying, including youths' posts that encourage their peers to attempt suicide. Research demonstrates that online victimization, harassment, and discrimination against racial, ethnic, gender, and sexual minorities is frequent online and often targeted at young people ²³. LGBTQ+ youth experience a heightened level of bullying, threats, and self-harm on social media. One in three young LGBTQ+ people have said that they had been sexually harassed online, four times as often as other young people ²⁴. Brain scans of adults and youths reveal that online harassment activates the same regions of the brain that respond to physical pain and trigger a cascade of reactions that replicate physical assault and create physical and mental health damage

²² Whitlock JL, Powers JL, Eckenrode J. The virtual cutting edge: the internet and adolescent self-injury. Dev Psychol. 2006 May;42(3):407-17. doi: 10.1037/0012-1649.42.3.407. PMID: 16756433.

²³ Moreno, M. A., Chassiakos, Y. R., Cross, C., Hill, D., Ameenuddin, N., Radesky, J., Hutchinson, J., Boyd, R., Mendelson, R., Smith, J., Swanson, W. S., & Media, C. C. (2016). Media use in school-aged children and adolescents. Pediatrics, 138(5). <u>https://doi.org/10.1542/peds.2016-2592</u>; Tynes, B. M., Giang, M. T., Williams, D. R., & Thompson, G. N. (2008). Online racial discrimination and psychological adjustment among adolescents. Journal of Adolescent Health, 43(6), 565-569. <u>https://doi.org/10.1016/j.jadohealth.2008.08.021</u>.

²¹ Lewis, S. P., Heath, N. L., St Denis, J. M., & Noble, R. (2011). The scope of nonsuicidal self-injury on YouTube. Pediatrics, 127(3), e552–e557. <u>https://doi.org/10.1542/peds.2010-2317</u>.

²⁴ Out Online: The Experiences of LGBT Youth on the Internet. (2013). GLSEN. https://www.glsen.org/news/out-online-experiences-lgbt-youth-internet.



²⁵. Moreover, research has revealed that online discrimination often is harsher and more severe than offline discriminatory experiences. Results reveal that the effects of online discrimination and bullying on youths' risk for depression and anxiety are significant above and beyond the effects of experiences that these same youth experience offline. The permanence, potential for worldwide dissemination, anonymity, and the like, repost, and comment features afforded on most social media platforms seem to contribute to youths' mental health difficulties. As with other forms of harassment and associated harms, new policies and processes are needed to blunt the impact of these harms.

The Potential Effects of Digital Stress. Social media platforms frequently include a variety of features designed to maintain users' engagement online, or encourage users to return to the app. Psychological theory and research have begun to reveal that this has become a significant source of stress. This is highly relevant since stress is one of the strongest predictors of children's and adolescents' mental health difficulties, including suicidal behavior. "Digital stress," is characterized by a youth's a) connection overload (i.e., notification and implicit social requirements to participate on social media platforms), b) the fear of missing out on conversations and other social interactions taking place exclusively online, c) the need to remain constantly available to others online, and d) approval anxiety (i.e., concerns about the response to one's own posts) are each notable factors influencing the way youth think about their connection to online platforms ²⁶. Nearly half of all young people participating in online platforms report experiencing digital stress. Research demonstrates that higher levels of digital stress are associated with greater increases in depressive symptoms among adolescents ²⁷.

²⁵ Cannon, D. S., Tiffany, S. T., Coon, H., Scholand, M. B., McMahon, W. M., & Leppert, M. F. (2007). The PHQ-9 as a brief assessment of lifetime major depression. Psychological Assessment, 19(2), 247-251. https://doi.org/10.1037/1040-3590.19.2.247.

²⁶²⁶ Steele, R. G., Hall, J. A., & Christofferson, J. L. (2020). Conceptualizing Digital Stress in Adolescents and Young Adults: Toward the Development of an Empirically Based Model. Clinical child and family psychology review, 23(1), 15–26. <u>https://doi.org/10.1007/s10567-019-00300-5</u>.

²⁷ Nick, E. A., Kilic, Z., Nesi, J., Telzer, E. H., Lindquist, K. A., & Prinstein, M. J. (2022). Adolescent Digital Stress: Frequencies, Correlates, and Longitudinal Association With Depressive Symptoms. The Journal of adolescent health : official publication of the Society for Adolescent Medicine, 70(2), 336–339. https://doi.org/10.1016/j.jadohealth.2021.08.025.



Social Media Encourages Social Comparisons. The quantitative nature of social media, combined with the use of visual stimuli, creates a fertile ground for social comparisons. Adolescence, a period defined by psychologists as a process of identity development via reflected appraisal processes (i.e., evaluating oneself based on feedback from peers) are especially likely to engage with social media in ways that allow them to compare their appearance, friends, social activities with others with what they see online, especially when those in their own social network are commenting and "liking" these same posts. The opportunity for constant feedback, commentary, quantitative metrics of approval, and 24-hour social engagement is unprecedented among our species. Research suggests that these social comparison processes, and youths' tendency to seek positive feedback or status (i.e., more "likes," followers, online praise) is associated with a risk for depressive symptoms ²⁸. In addition, psychological science demonstrates that exposure to this online content is associated with lower self-image and distorted body perceptions among young people. This exposure creates strong risk factors for eating disorders, unhealthy weight-management behaviors, and depression ²⁹. As with other impacts of online platforms, evidence indicates that these body image issues are particularly prevalent in LGBTQ+ youth. Leaving these youth more predisposed to eating disorders, depression, bullying, substance abuse and other mental health harms.

Potentially Beneficial Effects of Social Media Use. It is important to acknowledge that research on social media use and adolescent development is relatively new, as are many social media platforms. In addition, there has been remarkably little funding designated for research on

²⁸ Choukas-Bradley, S., Nesi, J., Widman, L., & Galla, B. M. (2020). The Appearance-Related Social Media Consciousness Scale: Development and validation with adolescents. Body Image, 33, 164-174.
<u>https://doi.org/10.1016/j.bodyim.2020.02.017</u>; Hawes, T., Zimmer-Gembeck, M. J., & Campbell, S. M. (2020). Unique associations of social media use and online appearance preoccupation with depression, anxiety, and appearance rejection sensitivity. Body Image, 33, 66-76. <u>https://doi.org/10.1016/j.bodyim.2020.02.010</u>; Nesi, J.L., & Prinstein, M.J. (2015). Using social media for social comparison and feedback seeking: Gender and popularity moderate associations with depressive symptoms. Journal of Abnormal Child Psychology, 43(8), 1427–1438.
²⁹ Carrotte, E. R., Vella, A. M., & Lim, M. S. (2015). Predictors of "liking" three types of health and fitness-related content on social media: A cross-sectional study. Journal of Medical Internet Research, 17(8), e205. https://doi.org/10.2196/jmir.4803; https://doi.org/10.1016/j.paid.2011.11.011.



this topic. Consequently, the long-term effects of social media use on youth development is relatively uncharted. For instance, above we discussed some of the potential effects of technology social media use on brain development. Yet, it is unknown whether adolescent brain development, known for its plasticity, may "correct" some of the alternations in brain structure or function, whether compensatory neural processes may develop, or whether these alterations may confer unknown future strengths.

In addition, there is some research demonstrating that social media use is linked with positive outcomes that may benefit psychological development among youth. Perhaps most notably, psychological research suggests that young people form and maintain friendships online. These relationships often afford opportunities to interact with a more diverse peer group than offline, and the relationships are close and meaningful and provide important support to youth in times of stress ³⁰. The buffering effects of social support from peers has been well documented in the psychological literature ³¹. This may be especially important for youth with marginalized identities, including racial, ethnic, sexual, and gender minorities. Digital platforms provide an important space for self-discovery and expression for LGBTQ+ youth.

Research also suggests that during the COVID-19 lockdown from 2020-2021, the use of one-on-one (i.e., direct messaging) on social media and sharing funny content reduced stress

https://www.pewresearch.org/internet/2018/11/28/teens-friendships-and-online-groups/; Charmaraman L, Hodes R, Richer AM. Young Sexual Minority Adolescent Experiences of Self-expression and Isolation on Social Media: Cross-sectional Survey Study. JMIR Ment Health. 2021;8(9):e26207. doi:10.2196/26207; Massing-Schaffer M, Nesi J, Telzer EH, Lindquist KA, Prinstein MJ. Adolescent Peer Experiences and Prospective Suicidal Ideation: The Protective Role of Online-Only Friendships. J Clin Child Adolesc Psychol. 2022;51(1):49-60.

doi:10.1080/15374416.2020.1750019; Marciano L, Ostroumova M, Schulz PJ, Camerini A-L. Digital Media Use and Adolescents' Mental Health During the Covid-19 Pandemic: A Systematic Review and Meta-Analysis. Front Public Health. 2021;9:793868. doi:10.3389/fpubh.2021.793868; Baskin-Sommers A, Simmons C, Conley M, et al. Adolescent civic engagement: Lessons from Black Lives Matter. Proc Natl Acad Sci USA. 2021;118(41). doi:10.1073/pnas.2109860118.

³⁰Anderson, M., & Jiang, J. (2018, November 28). 2. Teens, friendships and online groups. Pew Research Center: Internet, Science & Tech; Pew Research Center: Internet, Science & Tech.

³¹ Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98(2), 310–357. <u>https://doi.org/10.1037/0033-2909.98.2.310</u>.



among youth . There also is some evidence that youth are more likely to engage in civic activism online than off ³².

A growing area of research has also focused on the use of youths' interest in online activities as an opportunity for digital-based intervention ³³. Adolescents report high levels of comfort with, and a preference for, online communication, especially when discussing mental health. Studies also show that adolescents commonly use the internet for mental health information ³⁴. These elements, taken together, present the possibility that digital modes of treatment and other health interventions may be particularly effective for young people.

Research into the field of digital mental health interventions is growing and the existing information is heavily skewed toward more established modalities (e.g., telehealth, online/web-based interventions). Evidence supports the use of videoconferencing as an effective form of treatment for youth mental health across a range of problems ³⁵. While many computerized programs and internet-based treatment programs were found to be of moderate to high quality, a systematic review of the literature found that the inclusion of a therapist or clinician improved outcomes in adolescents with depression and anxiety over those that were self-paced ³⁶. Young

³⁴ Intervention and Prevention in the Digital Age. (2022). In J. Nesi, E. Telzer, & M. Prinstein (Eds.), Handbook of Adolescent Digital Media Use and Mental Health (pp. 363-416). Cambridge: Cambridge University Press. doi:10.1017/9781108976237.019; Park, E., & Kwon, M. (2018). Health-Related Internet Use by Children and Adolescents: Systematic Review. Journal of medical Internet research, 20(4), e120. https://doi.org/10.2196/jmir.7731.

³⁵ Myers, K. M., Valentine, J. M., Melzer, S. M. (2007, Nov). Feasibility, acceptability, and sustainability of telepsychiatry for children and adolescents. Psychiatric Services, 58(11), 1493-1496. <u>https://doi.org/10.1176/ps.2007.58.11.1493</u>; Nelson, E. L., Cain, S., & Sharp, S. (2017, Jan). Considerations for conducting telemental health with children and adolescents. Child Adolescent Psychiatric Clinics of North America, 26(1), 77-91. https://doi.org/10.1016/j.chc.2016.07.008.

³² Marciano, L., Ostroumova, M., Schulz, P. J., & Camerini, A. L. (2022). Digital Media Use and Adolescents' Mental Health During the Covid-19 Pandemic: A Systematic Review and Meta-Analysis. Frontiers in public health, 9, 793868. <u>https://doi.org/10.3389/fpubh.2021.793868</u>.

³³ Bradford, S., & Rickwood, D. (2015). Young people's views on electronic mental health assessment: Prefer to type than talk? Journal of Child and Family Studies, 24(5), 1213–1221. <u>https://doi.org/10.1007/s10826-014-9929-0</u>.

³⁶ Clarke, T. C., Black, L. I., Stussman, B. J., Barnes, P. M., & Nahin, R. L. (2015). Trends in the use of complementary health approaches among adults: United States, 2002-2012. National health statistics reports, (79), 1–16.; Wozney L, McGrath P, Gehring N, Bennett K, Huguet A, Hartling L, Dyson M, Soleimani A, Newton A.



people with a history of suicidal ideation often prefer to initially seek and receive healthcare online ³⁷. Even when individuals have strong support systems offline, they may struggle to access that support in times of need ³⁸. Early indications that online support may be appealing because of its immediate nature and because the interactions are among peers with shared experience and experiential knowledge ³⁹. Yet, it is crucial for young people to have access to in-person screenings and clinician support.

Elaboration of Science on Social Media Content, Features, and Functions

Platforms built for adults are not inherently suitable for youth⁴⁰. Youth require special protection due to areas of competence or vulnerability as they progress through the childhood,

³⁸ Kruzan, K. P., Whitlock, J., & Bazarova, N. N. (2021). Examining the Relationship Between the Use of a Mobile Peer-Support App and Self-Injury Outcomes: Longitudinal Mixed Methods Study. JMIR Mental Health, 8(1), e21854. <u>https://doi.org/10.2196/21854</u>; Lavis, A., & Winter, R. (2020). #Online harms or benefits? An ethnographic analysis of the positives and negatives of peer-support around self-harm on social media. Journal of Child Psychology and Psychiatry, and Allied Disciplines, 61(8). <u>https://doi.org/10.1111/jcpp.13245</u>.

³⁹ Marchant, A., Hawton, K., Stewart, A., Montgomery, P., Singaravelu, V., Lloyd, K., Purdy, N., Daine, K., & John, A. (2017). A systematic review of the relationship between internet use, self-harm and suicidal behaviour in young people: The good, the bad and the unknown. PLOS ONE, 12(8), e0181722.

https://doi.org/10.1371/journal.pone.0181722; Thoits, P. A. (2011). Mechanisms Linking Social Ties and Support to Physical and Mental Health. Journal of Health and Social Behavior, 52(2), 145–161. https://doi.org/10.1177/0022146510395592.

eMental Healthcare Technologies for Anxiety and Depression in Childhood and Adolescence: Systematic Review of Studies Reporting Implementation Outcomes. JMIR Ment Health 2018;5(2):e48. <u>https://mental.jmir.org/2018/2/e48</u>; Hollis, C., Falconer, C. J., Martin, J. L., Whittington, C., Stockton, S., Glazebrook, C., & Davies, E. B. (2017). Annual Research Review: Digital health interventions for children and young people with mental health problems - a systematic and meta-review. Journal of child psychology and psychiatry, and allied disciplines, 58(4), 474–503. https://doi.org/10.1111/jcpp.12663.

³⁷ Frost, M., Casey, L. M., & O'Gorman, J. G. (2017). Self-injury in young people and the help-negation effect. Psychiatry Research, 250, 291–296. <u>https://doi.org/10.1016/j.psychres.2016.12.022</u>.

⁴⁰ Maza, M. T., Fox, K. A., Kwon, S. J., Flannery, J. E., Lindquist, K. A., Prinstein, M. J., & Telzer, E. H. (2023). Association of habitual checking behaviors on social media with longitudinal functional brain development. *JAMA Pediatrics*, *177*(2), 160-167; Prinstein, M. J., Nesi, J., & Telzer, E. H. (2020). Commentary: An updated agenda for the study of digital media use and adolescent development—Future directions following Odgers & Jensen (2020). *Journal of Child Psychology and Psychiatry*, *61*(3), 349–352. https://doi.org/10.1111/jcpp.13219.



teenage, and late adolescent years⁴¹. This is especially true for youth experiencing psychological, physical, intellectual, mental health, or other developmental challenges; chronological age is not directly associated with social media readiness⁴².

<u>Youth Hypersensitivity to Social Feedback</u>. Brain development starting at ages 10–13 (i.e., the outset of puberty) until approximately the mid-twenties is linked with hypersensitivity to social feedback/stimuli⁴³. In other words, youth become especially invested in behaviors that will help them get personalized feedback, praise, or attention from peers.

AI-recommended content has the potential to be especially influential and hard to resist within this age range⁴⁴. It is critical that AI-recommended content be designed to prioritize youth safety and welfare over engagement. This suggests potentially restricting the use of personalized recommendations using youth data, design features that may prioritize content evoking extreme emotions, or content that may depict illegal or harmful behavior.

Likes and follower counts activate neural regions that trigger repetitive behavior, and thus may exert greater influence on youths' attitudes and behavior than among adults⁴⁵. Youth are especially sensitive to both positive social feedback and rejection from others. Using

⁴¹ Nesi, J., Choukas-Bradley, S., & Prinstein, M. J. (2018). Transformation of adolescent peer relations in the social media context: Part 1—A theoretical framework and application to dyadic peer relationships. *Clinical Child and Family Psychology Review*, *21*(3), 267–294. <u>https://doi.org/10.1007/s10567-018-0261-x</u>.

⁴² Valkenburg, P. M., & Peter, J. (2013). The differential susceptibility to media effects model. *Journal of Communication*, 63(2), 221–243. <u>https://doi.org/10.1111/jcom.12024</u>

⁴³ Fareri, D. S., Martin, L. N., & Delgado, M. R. (2008). Reward-related processing in the human brain: developmental considerations. Development and psychopathology, 20(4), 1191-1211; Somerville, L. H., & Casey, B. J. (2010). Developmental neurobiology of cognitive control and motivational systems. *Current Opinion in Neurobiology*, 20(2), 236–241. <u>https://doi.org/10.1016/j.conb.2010.01.006</u>.

⁴⁴ Shin, D. (2020). How do users interact with algorithm recommender systems?1 The interaction of users, algorithms, and performance2. *Computers in Human Behavior*, *109*, 106344. https://doi.org/10.1016/j.chb.2020.106344

⁴⁵ Sherman, L. E., Payton, A. A., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2016). The power of the Like in adolescence: Effects of peer influence on neural and behavioral responses to social media. *Psychological Science*, *27*(7), 1027–1035. <u>https://doi.org/10.1177/0956797616645673</u>.



these metrics to maintain platform engagement capitalizes on youths' vulnerabilities and likely leads to problematic use.

The use of youth data for tailored ad content similarly is influential for youth who are biologically predisposed toward peer influence at this stage and sensitive to personalized content⁴⁶.

<u>Youth Need for Relationship Skill Building</u>. Adolescence is a critical period for the development of more complex relationship skills, characterized by the ability to form emotionally intimate relationships⁴⁷. The adolescent years should provide opportunities to practice these skills through one-on-one or small group interactions.

The focus on metrics of followers, likes, and views focuses adolescents' attention on unilateral, depersonalized interactions and may discourage them from building healthier and psychologically beneficial relationship skills⁴⁸.

<u>Youth Susceptibility to Harmful Content</u>. Adolescence is a period of heightened susceptibility to peer influence, impressionability, and sensitivity to social rejection⁴⁹. Harmful content, including cyberhate, the depiction of illegal behavior, and encouragement to engage in self-harm (e.g.,

⁴⁶ Albert, D., Chein, J., & Steinberg, L. (2013). The Teenage Brain: Peer Influences on Adolescent Decision Making. *Current Directions in Psychological Science*, 22(2), 114-120. https://doi.org/10.1177/0963721412471347

 ⁴⁷ Armstrong-Carter, E., & Telzer, E. H. (2021). Advancing measurement and research on youths' prosocial behavior in the digital age. *Child Development Perspectives*, *15*(1), 31–36. <u>https://doi.org/10.1111/cdep.12396;</u> Newcomb, A. F., & Bagwell, C. L. (1995). Children's friendship relations: A meta-analytic review. *Psychological Bulletin*, *117*(2), 306.

⁴⁸ Nesi, J., & Prinstein, M. J. (2019). In search of likes: Longitudinal associations between adolescents' digital status seeking and health-risk behaviors. Journal of Clinical Child & Adolescent Psychology, 48(5), 740–748. https://doi.org/10.1080/15374416.2018.1437733; Rotondi, V., Stanca, L., & Tomasuolo, M. (2017). Connecting alone: Smartphone use, quality of social interactions and well-being. Journal of Economic Psychology, 63, 17–26. https://doi.org/10.1016/j.joep.2017.09.001.

⁴⁹ Sherman, L. E., Payton, A. A., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2016). The Power of the Like in Adolescence: Effects of Peer Influence on Neural and Behavioral Responses to Social Media. *Psychological Science*, *27*(7), 1027–1035. https://doi.org/10.1177/0956797616645673



cutting or eating-disordered behavior) is associated with increased mental health difficulties among both the targets and witnesses of such content 50 .

The absence of clear and transparent processes for addressing reports of harmful content makes it harder for youth to feel protected or able to get help in the face of harmful content.

Youth Underdeveloped Impulse Control. Youths' developing cortical system (particularly in the brain's inhibitory control network) makes them less capable of resisting impulses or stopping themselves from behavior that may lead to temporary benefit despite negative longer-term consequences⁵¹. This can lead to adolescents making decisions based on short-term gain, lower appreciation of long-term risks, and interference with focus on tasks that require concentration.

Infinite scroll is particularly risky for youth since their ability to monitor and stop engagement on social media is more limited than among adults⁵². This contributes to youths' difficulty disengaging from social media and may contribute to high rates of youth reporting symptoms of clinical dependency on social media⁵³.

The lack of time limits on social media use similarly is challenging for youth, particularly during the school day or at times when they should be doing homework⁵⁴.

⁵⁰ Susi, K., Glover-Ford, F., Stewart, A., Knowles Bevis, R., & Hawton, K. (2023). Research review: viewing selfharm images on the Internet and social media platforms: systematic review of the impact and associated psychological mechanisms. Journal of Child Psychology and Psychiatry, 64(8), 1115-1139.

⁵¹ Hartley, C. A., & Somerville, L. H. (2015). The neuroscience of adolescent decision-making. *Current Opinion in* Behavioral Sciences, 5, 108-115. https://doi.org/10.1016/j.cobeha.2015.09.004

⁵² Atherton, O. E., Lawson, K. M., & Robins, R. W. (2020). The development of effortful control from late childhood to young adulthood. Journal of Personality and Social Psychology, 119(2), 417–456. https://doi.org/10.1037/pspp0000283

⁵³ Boer, M., Stevens, G. W., Finkenauer, C., & Van den Eijnden, R. J. (2022). The course of problematic social media use in young adolescents: A latent class growth analysis. Child Development, 93(2), e168-e187. ⁵⁴ Hall, A. C. G., Lineweaver, T. T., Hogan, E. E., & O'Brien, S. W. (2020). On or off task: The negative influence of laptops on neighboring students' learning depends on how they are used. Computers & Education, 153, 103901. https://doi.org/10.1016/j.compedu.2020.103901; Sana, F., Weston, T., & Cepeda, N. J. (2013). Laptop multitasking



Push notifications capitalize on youths' sensitivity to distraction. Task-shifting is a higher order cognitive ability not fully developed until early adulthood and may interfere with youths' focus during class time and when they should be doing homework⁵⁵.

The use and retention of youths' data without appropriate parental consent, and/or child assent in developmentally appropriate language, capitalizes on youths' relatively poor appreciation for long-term consequences of their actions, permanence of online content, or their ability to weigh the risks of their engagement on social media⁵⁶.

<u>Youth Reliance on Sleep for Healthy Brain Development</u>. Other than the first year of life, puberty is the most important period of brain growth and reorganization in our lifetimes⁵⁷. Sleep is essential for healthy brain development and mental health in adolescence⁵⁸. Sleep delay or disruptions have significant negative effects on youths' attention, behavior, mood, safety, and academic performance.

⁵⁶ Andrews, J. C., Walker, K. L., & Kees, J. (2020). Children and online privacy protection: Empowerment from cognitive defense strategies. Journal of Public Policy & Marketing, 39(2), 205-219. <u>https://doi.org/10.1177/0743915619883638</u>; Romer D. (2010). Adolescent risk taking, impulsivity, and brain development: implications for prevention. *Developmental Psychobiology*, 52(3), 263–276.

https://doi.org/10.1002/dev.20442.

hinders classroom learning for both users and nearby peers. *Computers & Education*, 62(0360-1315), 24–31. https://doi.org/10.1016/j.compedu.2012.10.003.

⁵⁵ von Bastian, C. C., & Druey, M. D. (2017). Shifting between mental sets: An individual differences approach to commonalities and differences of task switching components. *Journal of Experimental Psychology: General*, *146*(9), 1266–1285. https://doi.org/10.1037/xge0000333.

⁵⁷ Orben, A., Przybylski, A. K., Blakemore, S.-J., Kievit, R. A. (2022). Windows of developmental sensitivity to social media. *Nature Communications*, *13*(1649). <u>https://doi.org/10.1038/s41467-022-29296-3</u>.

⁵⁸ Paruthi, S., Brooks, L. J., D'Ambrosio, C., Hall, W. A., Kotagal, S., Lloyd, R. M., Malow, B. A., Maski, K., Nichols, C., Quan, S. F., Rosen, C. L., Troester, M. M., & Wise, M. S. (2016). Recommended amount of sleep for pediatric populations: A consensus statement of the American Academy of Sleep Medicine. *Journal of Clinical Sleep Medicine*, *12*(6), 785–786. <u>https://doi.org/10.5664/jcsm.5866</u>.



A lack of limits on the *time of day* when youth can use social media has been cited as the predominant reason why adolescents are getting less than the recommended amount of sleep, with significant implications for brain and mental health⁵⁹.

<u>Youth Vulnerability to Malicious Actors</u>. Youth are easily deceived by predators and other malicious actors who may attempt to interact with them on social media channels ⁶⁰.

Connection and direct messaging with adult strangers places youth at risk of identity theft and potentially dangerous interactions, including sexploitation.

<u>Youth Need for Parental/Caregiver Partnership</u>. Research indicates that youth benefit from parental support to guide them toward safe decisions and to help them understand and appropriately respond to complex social interactions⁶¹. Granting parents oversight of youths' accounts should be offered in balance with adolescents' needs for autonomy, privacy and independence. However, it should be easier for parents to partner with youth online in a manner that fits their family's needs.

⁵⁹ Perrault, A. A., Bayer, L., Peuvrier, M., Afyouni, A., Ghisletta, P., Brockmann, C., Spiridon, M., Hulo Vesely, S., Haller, D. M., Pichon, S., Perrig, S., Schwartz, S., & Sterpenich, V. (2019). Reducing the use of screen electronic devices in the evening is associated with improved sleep and daytime vigilance in adolescents. *Sleep*, 42(9), zsz125. <u>https://doi.org/10.1093/sleep/zsz125</u>; Telzer EH, Goldenberg D, Fuligni AJ, Lieberman MD, Gálvan A. (2015). Sleep variability in adolescence is associated with altered brain development. *Developmental Cognitive Neuroscience*, 14, 16-22. doi:10.1016/j.dcn.2015.05.007.

⁶⁰ Livingstone, S., & Smith, P. K. (2014). Annual research review: Harms experienced by child users of online and mobile technologies: The nature, prevalence and management of sexual and aggressive risks in the digital age. *Journal of Child Psychology and Psychiatry*, 55(6), 635–654. <u>https://doi.org/10.1111/jcpp.12197</u>; Wolak, J., Finkelhor, D., Mitchell, K. J., & Ybarra, M. L. (2008). Online "predators" and their victims: Myths, realities, and implications for prevention and treatment. *American Psychologist*, 63(2), 111–128. <u>https://doi.org/10.1037/0003-066X.63.2.111</u>.

⁶¹ Wachs, S., Costello, M., Wright, M. F., Flora, K., Daskalou, V., Maziridou, E., Kwon, Y., Na, E.-Y., Sittichai, R., Biswal, R., Singh, R., Almendros, C., Gámez-Guadix, M., Görzig, A., & Hong, J. S. (2021). "DNT LET 'EM H8 U!": Applying the routine activity framework to understand cyberhate victimization among adolescents across eight countries. *Computers & Education*, *160*, Article 104026. <u>https://doi.org/10.1016/j.compedu.2020.104026</u>; Padilla-Walker, L. M., Stockdale, L. A., & McLean, R. D. (2020). Associations between parental media monitoring, media use, and internalizing symptoms during adolescence. *Psychology of Popular Media*, *9*(4), 481. <u>https://doi.org/10.1037/ppm0000256</u>



The absence of transparent and easy-to-use parental/caregiver tools increases parents' or guardians' difficulty in supporting youths' experience on social media⁶².

Psychological Effects of Lost Opportunities While Youth Are Online

Every hour youth spend online is an hour that is not being spent on alternative ("in real life") activities. In some cases, this may protect adolescents' exposure to peer contexts in which substance use and sexually risky behaviors occur. However, youths' online activities also may preclude engagement in activities necessary for successful maturation and psychological adaptation. Perhaps most concerning is the extent to which research has demonstrated that technology and social media use is interfering with youths' sleep.

Research has supported the link between technology use and sleep in several ways. Perhaps most compelling are data from meta-analyses (i.e., a statistical integration of findings from across an entire body of research) indicating that 60% of adolescents report using technology in the hour before bedtime, and more screen time is associated with poorer sleep health and failure to meet sleep duration requirements set by the American Academy of Sleep Medicine, partly due to delayed melatonin release, delayed bedtimes, and increases in overstimulation and difficulty disengaging from online social interactions. Interventions to reduce nighttime screen use are successful in increasing sleep duration ⁶³.

⁶² Dietvorst, E., Hiemstra, M., Hillegers, M.H.J., & Keijsers, L. (2018). Adolescent perceptions of parental privacy invasion and adolescent secrecy: An illustration of Simpson's paradox. *Child Development*, *89*(6), 2081-2090. <u>https://doi.org/10.1111/cdev.13002</u>; Auxier, B. (2020, July 28). Parenting Children in the Age of Screens. Pew Research Center: Internet, Science & Tech; Pew Research Center. <u>https://www.pewresearch.org/internet/2020/07/28/parenting-children-in-the-age-of-screens/</u>.

⁶³ Telzer EH, Goldenberg D, Fuligni AJ, Lieberman MD, Gálvan A. Sleep variability in adolescence is associated with altered brain development. Dev Cogn Neurosci. 2015;14:16-22. doi:10.1016/j.dcn.2015.05.007.



This has critical implications for adolescent development. Research suggests that insufficient sleep is associated with poor school performance, difficulties with attention, stress regulation, and increased risk for automobile accidents. Neuroscientific research has demonstrated that inconsistent sleep schedules are associated with changes in structural brain development in adolescent years. In other words, youths' preoccupation with technology and social media may deleteriously affect the size of their brains ⁶⁴.

In addition, note that youth also engage with online and social media apps *while participating* in other activities. Indeed, early studies show that when youth are engaging in schoolwork, they often are doing so alongside the use of social media platforms, a phenomenon called "media multitasking" ⁶⁵. Research clearly demonstrates that most humans cannot multitask, but rather are rapidly task-shifting – a process associated with poorer memory and comprehension among youth ⁶⁶. Evidence shows that these phenomena only worsen with heavier use of social media, with more common symptoms such as mind wandering and higher levels of impulsivity among young adults who use social media more frequently ⁶⁷.

⁶⁵ Jeong, S.-H., & Hwang, Y. (2012). Does Multitasking Increase or Decrease Persuasion? Effects of Multitasking on Comprehension and Counterarguing. Journal of Communication, 62(4), 571–587. <u>https://doi.org/10.1111/j.1460-2466.2012.01659.x</u>; van der Schuur, W. A., Baumgartner, S. E., Sumter, S. R., & Valkenburg, P. M. (2015). The consequences of media multitasking for youth: A review. Computers in Human Behavior, 53, 204–215. <u>https://doi.org/10.1016/j.chb.2015.06.035</u>; L. Mark Carrier, Larry D. Rosen, Nancy A. Cheever, Alex F. Lim, Causes, effects, and practicalities of everyday multitasking, Developmental Review (2015), doi: 10.1016/j.dr.2014.12.005.

https://doi.org/10.1007/s00426-013-0523-7; Baumgartner, S. E., Weeda, W. D., van der Heijden, L. L., & Huizinga, M. (2014). The Relationship Between Media Multitasking and Executive Function in Early Adolescents. The

Journal of Early Adolescence, 34(8), 1120–1144. <u>https://doi.org/10.1177/0272431614523133</u>; Baumgartner,

⁶⁴ Achterberg M, Becht A, van der Cruijsen R, et al. Longitudinal associations between social media use, mental well-being and structural brain development across adolescence. Dev Cogn Neurosci. 2022;54:101088. doi:10.1016/j.dcn.2022.101088.

⁶⁶ Ralph, B. C., Thomson, D. R., Cheyne, J. A., & Smilek, D. (2014). Media multitasking and failures of attention in everyday life. Psychological research, 78(5), 661–669. <u>https://doi.org/10.1007/s00426-013-0523-7</u>.

⁶⁷ Ophir, E., Nass, C., & Wagner, A. D. (2009). Cognitive control in media multitaskers. Proceedings of the National Academy of Sciences of the United States of America, 106(37), 15583–15587.

https://doi.org/10.1073/pnas.0903620106; Ralph, B. C., Thomson, D. R., Cheyne, J. A., & Smilek, D. (2014). Media multitasking and failures of attention in everyday life. Psychological research, 78(5), 661–669.

Susanne & van der Schuur, Winneke & Lemmens, Jeroen & te Poel, Fam. (2018). The Relationship Between Media Multitasking and Attention Problems in Adolescents: Results of Two Longitudinal Studies. Human Communication Research. 44. 3-30. 10.1093/hcre.12111.



Potential Solutions and Policy Implications

The internet and the introduction of social media platforms have literally changed our species through new forms of social interaction, new rules for discourse, the rapid spread of information, and concomitant changes in the types of relationships that previously had defined the human race for millennia. This is an extraordinarily high priority area for additional scientific research; however, this work has been woefully underfunded. Currently, federal agencies lack both the direction, expertise, and dedicated funding to adequately research both the positive and negative impacts of online platforms. Tech companies responsible for these platforms employ dozens of researchers focused on designing products and observing how users engage with them.

Specific legislation has been proposed across the federal government that would take productive steps in mitigating the known negative impacts of social media. The Kids Online Safety Act (KOSA) is one such piece of legislation. In 2022, APA CEO Arthur C. Evans Jr., PhD, said, "The Kids Online Safety Act is an important first step in reining in the harms caused to children by social media platforms," and "enacting measures that curtail harmful practices while authorizing research to understand additional impacts is a thoughtful strategy"⁶⁸. KOSA and other previously proposed legislative fixes such as updates to the Children Online Privacy and Protection Act represent important steps by Congress and we encourage their debate and adoption.

The federal government must match or exceed this commitment to ensure the public has an adequate understanding of how these platforms work and how users, especially children, are using these platforms and their impact. The research that is needed should be longitudinal to allow for long-term follow-up. Research should capture the experience of diverse samples, utilize the benefits of technology to capture objective measures of behavior, include technology (e.g., fMRI) to study biopsychosocial effects, and importantly, should make use of the data available to social

202.336.5800

⁶⁸ (2023). Apaservices.org. https://www.apaservices.org/advocacy/news/kids-online-safety-legislation



media companies to fully understand the effects of social media and protect the common good. <u>This effort must be paired with required increases in transparency and access to data for researchers</u> <u>to further understand online activity</u>. New transparency and reporting requirements should ensure user privacy, while creating new mechanisms for researchers and policymakers to understand how these online spaces operate.

Recently, Congress allocated \$15M to research on social media and adolescent mental health. This is appreciated, yet barely sufficient to fund more than 3-5 individual studies that would meet the abovementioned specifications. At least \$100M in funds will be needed to reflect a serious commitment to this research area across federal agencies. And, as we are on the precipice of a new digital age with artificial intelligence (AI) and machine learning directly impacting us across the lifespan, it is paramount that our country invest in research to protect future generations.

Such research also might address the role of social media algorithms on users' experience. This requires access to data for independent researchers to understand how algorithms work ⁶⁹. Social media companies employing algorithms to display content to users should take steps to provide explanations on how these technologies work and how they might drive or reward certain types of posts or behavior. Data from algorithms, along with internal research, should also be made public to allow researchers and policymakers to achieve a greater understanding of the impacts of social media on users, particularly children. Federal agencies should prioritize research into the impacts of social media and provide private researchers with grants and other support to ensure findings relating to these platforms are made broadly available.

⁶⁹ Epps-Darling, A., Bouyer, R. T., & Cramer, H. (2020, October). Artist gender representation in music streaming. In Proceedings of the 21st International Society for Music Information Retrieval Conference (Montréal, Canada) (ISMIR 2020). ISMIR (pp. 248-254); Bravo, D. Y., Jefferies, J., Epps, A., & Hill, N. E. (2019). When things go viral: Youth's discrimination exposure in the world of social media. In Handbook of Children and Prejudice (pp. 269-287). Springer, Cham. <u>https://doi.org/10.1007/978-3-030-12228-7_15</u>.



There is much more Congress and federal agencies can do to provide education around how best to use online platforms to mitigate harmful impacts. A coalition of more than 150 organizations, led by APA, have called on the Surgeon General to create and distribute resources dedicated to teaching children and caregivers about online social media use ⁷⁰. There is a clear need for an education campaign that enhances the public's understanding of the potential harms posed by social media and encourages caregivers and children to educate themselves with evidence-informed suggestions for its appropriate use. At the same time, it is important to acknowledge social media's potential to provide children with a healthy space for convening and companionship. While we recognize the need for additional research in this area, the very real harms of social media are impacting our children today, and more must be done to communicate and mitigate the impacts of online social media use. Educating young users and their caregivers about how best to use the platforms to mitigate negative impacts is an essential intervention that can start today. A public education campaign should include information about the specific dangers social media poses to adolescents, how parents and caregivers can best navigate learning more about these dangers, how best to communicate the risks with their children, and ultimately how to educate their children on the best methods for using social media in a safe way.

APA also advocates for Congress and federal agencies to require social media companies to do more to combat this issue. <u>Platforms can create and provide new tools aimed at mitigating the harms associated with platform use</u>. Requiring social media companies to provide children and their caregivers with options to make changes to their social media settings can promote mental health by protecting their information, disabling features that are particularly addictive, and opting out of algorithm processes that serve up problematic or harmful content. Social media companies can also be required to set defaults to address harms to young users.

Warnings on harmful content should also be considered to reduce exposure of young people to content that may negatively impact their mental health or well-being and companies

⁷⁰ (2023). Apaservices.org. https://www.apaservices.org/advocacy/news/surgeon-general-dangers-social-media



should be held accountable for the proliferation of this content. Social medial companies should acknowledge known impacts of their platforms, providing warnings and resources to parents and caregivers of young users, develop plans to mitigate known harms, and determine whether these warnings and plans were effective, with iterative updates based on these findings. Social media platforms must work to prevent and mitigate harmful content, such as promotion of self-harm, suicide, eating disorders, substance use and sexual exploitation. Independent audits can assess risks and determine whether platforms are taking meaningful steps to prevent damage and these must be paired with enforcement actions and accountability mechanisms for when platforms fail to effectively mitigate harms to children.

<u>As discussed throughout this testimony, more must be done to specifically protect those</u> <u>children belonging to traditionally marginalized and minoritized communities</u>. Mental health and other harms can disproportionately fall on LGBTQ+ youth, and resources should be dedicated to ensuring a reduction in these harms. More must be required of platforms to discourage and prevent cyberbullying and other forms of online hate and discrimination. <u>Reporting structures should be</u> <u>more robust to allow for instances to be tracked and discourage</u>. Reforms to platform user experience should be prioritized to ensure members of these communities are protected from disproportionate harm.

Policies will not protect youth unless technology companies are required to reduce the risks embedded within the platforms themselves.

As policymakers at every level assess their approach to this complex issue, it is important to note the limitations of frequently proposed policies, which are often misreported and fall far short of comprehensive safety solutions that will achieve meaningful change.

<u>Limitations in restricting downloads</u>. Restricting application downloads at the device level does not fully restrict youths' access and will not meaningfully improve the safety of social media



platforms. Allowing platforms to delegate responsibility to app stores does not address the vulnerabilities and harms built into the platforms.

Limitations in requiring age restrictions. Focusing only on age restrictions does not improve the platforms or address the biological and psychological vulnerabilities that persist past age 18. While age restriction proposals could offer some benefits if effectively and equitably implemented, they do not represent comprehensive improvements to social media platforms, for at least four reasons: (1) Creating a bright line age limit ignores individual differences in adolescents' maturity and competency; (2) These proposals fail to mitigate the harms for those above the age limit and can lead to a perception that social media is safe for adolescents above the threshold age, though neurological changes continue until age 25; (3) Completely limiting access to social media may disadvantage those who are experiencing psychological benefits from social media platforms, such as community support and access to science-based resources, which particularly impact those in marginalized populations; (4) The process of age-verification requires more thoughtful consideration to ensure that the storage of official identification documents does not systematically exclude subsets of youth, create risks for leaks, or circumvent the ability of young people to maintain anonymity on social platforms.

<u>Limitations in use of parental controls</u>. Granting parents and caregivers greater access to their children's social media accounts will not address risks embedded within platforms themselves. More robust and easy-to-use parental controls would help some younger age groups, but as a sole strategy, this approach ignores the complexities of adolescent development, the importance of childhood autonomy and privacy, and disparities in time or resources available for monitoring across communities ⁷¹. Some parents might be technologically ill-equipped, lack the

⁷¹ Dietvorst, E., Hiemstra, M., Hillegers, M.H.J., & Keijsers, L. (2018). Adolescent perceptions of parental privacy invasion and adolescent secrecy: An illustration of Simpson's paradox. *Child Development*, *89*(6), 2081-2090. <u>https://doi.org/10.1111/cdev.13002</u>.



time or documentation to complete requirements, or simply be unavailable to complete these requirements. Disenfranchising some young people from these platforms creates inequities⁷².

APA is heartened by the focus on mental health in Congress, and eager to work with this committee and its members to develop legislation and enact the bills cited above. Your actions now can make all the difference in how our young people interact with and are impacted by online spaces. Together, psychology, other scientific disciplines, parents, caregivers, teachers, tech companies, and policymakers can work to solve this serious problem. APA is a ready partner and looks forward to working with the committee to put in place critical changes to our current system that improve the lives of our children and the flourishing of online spaces.

Mitch Prinstein, PhD, ABPP Chief Science Officer American Psychological Association

Katherine Burnett McGuire, MS Chief Advocacy Officer American Psychological Association

⁷² Charmaraman, L., Lynch, A. D., Richer, A. M., & Zhai, E. (2022). Examining Early Adolescent Positive and Negative Social Technology Behaviors and Well-Being During the COVID-19 Pandemic. *Technology, Mind, and Behavior, 3*(1: Spring 2022). <u>https://doi.org/10.1037/tmb0000062</u>.



April 16, 2024

The Honorable Gus Bilirakis Chair Subcommittee on Innovation, Data, and Commerce Committee on Energy and Commerce U.S. House of Representatives 2125 Rayburn House Office Building Washington, D.C. 20515 The Honorable Jan Schakowsky Ranking Member Subcommittee on Innovation, Data, and Commerce Committee on Energy and Commerce U.S. House of Representatives 2125 Rayburn House Office Building Washington, D.C. 20515

Re: April 17, 2024, Hearing Entitled Legislative Solutions to Protect Kids Online and Ensure Americans' Data Privacy Rights

Dear Chair Bilirakis, Ranking Member Schakowsky and Members of the House Energy and Commerce Committee Subcommittee on Innovation, Data, and Commerce,

On behalf of the millions of taxpayers and consumers represented by the Taxpayers Protection Alliance (TPA), we write to you in opposition to H.R. 7891, the Kids Online Safety Act (KOSA), and H.R. 7890, the Children and Teens' Online Privacy Act (COPPA 2.0). While we applaud your efforts to improve children's privacy and online safety, these two pieces of legislation fail to achieve these laudable goals and would, in fact, create greater risks for all Americans in the technology age. Further, changes made between the Senate and House versions of these pieces of legislation prior to introduction do not alter the fundamental problems and issues they create.

H.R. 7891, introduced by Reps. Gus Bilirakis (R-Fla.) and Kathy Castor (D-Fla.), would broadly hold online platforms liable if their design and operation of products and services fails to mitigate wide-ranging psychological issues such as mental health, suicide, and addiction. This untenable standard will result in platforms being forced to censor perfectly legal speech, including that of non-minors, fearing the liability repercussions KOSA's Sec. 102 creates. Separately, to ensure platforms' compliance, Sec. 105 of KOSA would require public reporting on age-specific statistics for minor users. Statutorily requiring the mass collection of aggregate minor user data stands in stark contrast to what laws intending to protect children's online activity and privacy should do.

Online platforms provide a valuable space where people of all political persuasions can discuss complex societal and political issues. KOSA's first version awarded state Attorneys General sweeping powers to subjectively determine the criteria for harms to children. Immediately, interested parties on both sides of the aisle have already floated various ways they could weaponize KOSA (or similar proposals) against speech they dislike, making de facto censorship an almost certain result of the bill's passage. The second, and most recent approach, to this bill awards vast decision-making authority to regulators at the Federal Trade Commission (FTC), an agency under heavy scrutiny for blatant partisanship. The FTC has been the subject of dozens of oversight hearings in the 118th Congress. Simply put, changes to KOSA loosely replace a 50-state regulatory patchwork with a partisan regulatory board at a rogue federal agency. Regulating the ways children and teens interact with the internet is entirely different, and in many ways opposite, of protecting them.

TPA also encourages you to oppose H.R. 7890, the Children and Teens' Online Privacy Act (COPPA 2.0), introduced by Reps. Tim Walberg (R-Mich.) and Kathy Castor (D-Fla.). COPPA 2.0 would increase the age of consent for data collection from 13 to 16 and ban targeted advertising to children and teens. By revising parental consent standards, this legislation wrongly assumes that every child has a positive relationship with their parents and their ability to access information through the internet should be predicated upon such a relationship.



Children with estranged parents, foster youth or LGBTQ children seeking to access websites could all see their ability to seek important information barred.

H.R. 7890 would also rescind the "actual knowledge" standard of the original COPPA (P.L. 105-277), which exists to ensure the statute applies only to third parties if they have actual knowledge that the personal information they are collecting is from children. This change would unreasonably expand the number of websites subject to increasingly burdensome regulation. While H.R. 7890 states that age verification is not a mandate, its provisions (like KOSA's) leave operators no other options but to implement this software, even though the Supreme Court ruled that anonymous speech is protected by the First Amendment in *McIntyre v. Ohio Elections Commission* (1995). Thus, these pieces of legislation would not only mandate the mass collection and storage of user information, censor perfectly legal speech, and create subjective lists of harms for America's youth, but also have the effect of ending anonymous speech online.

Protecting children online is a complex and noble endeavor and we applaud your committee for trying to undertake this effort. However, considering legislation that would undo the last 30 years of internet regulation by placing the responsibility for protecting children on partisan bureaucrats and online platforms will fail to protect children and endanger the civil liberties of Americans of all ages. We urge you to reject both H.R. 7891, the Kids Online Safety Act (KOSA), and H.R. 7890, the Children and Teens' Online Privacy Act (COPPA 2.0), and instead focus on ways to enhance law enforcement coordination.

Sincerely,

Patrick Hedger Executive Director



April 17, 2024

The Honorable Cathy McMorris Rodgers Chair Committee on Energy & Commerce U.S. House of Representatives Washington, D.C. 20515

The Honorable Frank Pallone Ranking Member Committee on Energy & Commerce U.S. House of Representatives Washington, D.C. 20515 The Honorable Gus Bilirakis Chair Subcommittee on Innovation, Data, and Commerce U.S. House of Representatives Washington, D.C. 20515

The Honorable Janice Schakowsky Ranking Member Subcommittee on Innovation, Data, and Commerce U.S. House of Representatives Washington, D.C. 20515

Dear Chair McMorris Rodgers, Ranking Member Pallone, Chair Bilirakis, and Ranking Member Schakowsky:

The American Financial Services Association (AFSA)¹ has long supported a federal privacy law that is durable and protects American consumers. However, AFSA has concerns with the *American Privacy Rights Act (APRA) of 2024* and is proposing changes which will protect the ability of financial institutions to best serve their customers, while continuing to provide strong data privacy.

It is important to note that regulated financial institutions are already subject to privacy and data security consumer protection requirements under Title V of the Gramm-Leach Bliley Act (GLBA). The GLBA established stringent data security requirements that financial institutions must comply with in order to safeguard the confidentiality and privacy of their customers. This includes the disclosure of how consumer information is collected or shared. Consumers are also given the option to opt out of third-party data sharing.

The GLBA provides strong privacy and data security provisions that are either duplicated or inconsistent with provisions in the APRA. Therefore, AFSA is asking that the APRA be amended to include a provision which clearly exempts all GLBA regulated institutions at an entity level. This will avoid unnecessary and conflicting requirements, which could lead to an interruption in the consumer data practices which are already in place.

Additionally, the APRA's proposed enforcement system will allow for different judicial interpretations of the law. The private right of action included in the APRA covers both

¹ Founded in 1916, AFSA is the national trade association for the consumer credit industry, protecting access to credit and consumer choice. AFSA members provide consumers with many kinds of credit, including traditional installment loans, mortgages, direct and indirect vehicle financing, payment cards, and retail sales finance.

compensatory damages and attorneys' fees. AFSA is concerned that this will only encourage an increase in trivial lawsuits or time-consuming class action suits. AFSA appreciates the importance of national privacy standards. Under private right of action, however, states will eventually have different privacy protections based on their judicial interpretations. To avoid further fracturing national privacy laws and encouraging time-consuming, inconsequential lawsuits, AFSA is asking that the enforcement provision of APRA should be amended.

AFSA is highly supportive of legislation that creates a federal standard of consumer privacy protection. Such legislation should ensure that financial institutions that already comply with strong data privacy and security requirements under the GLBA have a clear exemption. This will avoid inconsistent requirements and ensure that there is no interruption in data privacy for consumers. It must also have an enforcement system that works with appropriate state or federal regulators and prevents the possibility of improper interpretations of the law. We urge the Committee to address these concerns before moving forward with this legislation.

Thank you for the opportunity to comment, and please feel free to contact me at 202-776-7300 or cwinslow@afsamail.org with any questions.

Sincerely,

MaWinstow

Celia Winslow Senior Vice President American Financial Services Association





April 16, 2024

The Honorable Gus Bilirakis Ranking Member of House Innovation, Data, and Commerce Subcommittee 2125 Rayburn Office Building Washington, DC 20515

The Honorable Jan Schakowsky Ranking Member of House Innovation, Data, and Commerce Subcommittee 2125 Rayburn Office Building Washington, DC 20515

Re: ATA Action Statement for the Record for House Energy and Commerce Innovation, Data, and Commerce Subcommittee Hearing "To Protect Kids Online and Ensure Americans' Data Privacy Rights"

On behalf of ATA Action, the American Telemedicine Associations affiliated trade association focused on advocacy, thank you for holding this critical hearing to examine health data privacy and ensure all patient's data is protected. ATA Action supports efforts to ensure telehealth practices meet standards for patient safety, data privacy, and information security, while advancing patient access and building awareness of telehealth practices. As you contemplate different pieces of privacy legislation, we wanted to share the <u>ATA's Health Data Privacy Principles</u> as a guiding light. These principles include:

- Consistency Across Industries: Nationwide uniformity in data privacy regulations is essential. A
 unified federal approach to data privacy would simplify compliance and reduce costs for
 companies, compared to varying state laws. Federal standards should foster innovation and
 protect personal health information on telehealth and virtual care platforms from misuse.
- Definition of Consumer Health Data: Federal legislation should adopt definitions for consumer health data that align with those used for protected health information under HIPAA to ensure consistency and clarity across platforms and states.
- Alignment with HIPAA: Federal privacy regulations should complement HIPAA standards and provide exemptions for HIPAA-covered entities and their business associates. This avoids redundant regulatory layers that could inhibit service delivery and innovation while escalating compliance costs.
- Consumer Rights: Federal policies should guarantee consumers accessible and practical rights including notice, access, correction, portability, and deletion of their data — aligned with existing medical record laws and legal requirements. Detailed notices should cover all data categories, processors, and third parties involved, with provisions for specific disclosures upon consumer request.
- Consumer Consent and Data Management: Clear disclosures must be made about the collection, use, and rights to opt-out of data use for targeted advertising, sale, or profiling. The definition of 'sale of data' should be precise, and any sharing of sensitive information must require explicit consumer consent. Sensitive data includes details about race, health, sexual orientation, genetic traits, and precise location.





• Enforcement by Federal Authorities: Enforcement responsibilities should rest with designated federal agencies rather than relying on private lawsuits, which often complicate legal landscapes and can discourage compliance due to the potential for frivolous claims.

Thank you for your work on this issue. Please reach out to kzebley@ataaction.org if you have any questions.

hope zury

Kyle Zebley Executive Director ATA Action



April 17, 2024

Committee on Energy and Commerce Subcommittee on Innovation, Data, and Commerce 2125 Rayburn House Office Building Washington, D.C. 20515

VIA EMAIL

Re: Hearing titled "Legislative Solutions To Protect Kids Online And Ensure Americans' Data Privacy Rights."

Honorable Members of the Subcommittee on Innovation, Data, and Commerce:

Engine is a non-profit technology policy, research, and advocacy organization that bridges the gap between policymakers and startups. Engine works with government and a community of thousands of high-technology, growth-oriented startups across the nation to support the development of technology entrepreneurship. Startups are creating new and innovative products that better the lives of users of all ages, improving the way individuals learn, work, and play. As a nonprofit that works to advance a policy environment where startups can succeed, we appreciate your attention to issues important to them, including the experiences of their customers.

Startups take seriously their commitments to their users to create beneficial products and services while protecting their privacy and working to ensure a safe, relevant, and healthy user experience, including by upholding their obligations under current law and employing industry best practices. However, the current regulatory landscape around data privacy is fractured and undermines the competitiveness of startups. We write to call attention to the ways legislation considered in this hearing would exacerbate those problems and to applaud the ways the legislation would solve them.

H.R. ____, American Privacy Rights Act (APRA) discussion draft

Startups have encountered increasing burdens from a growing patchwork of unique state privacy laws,¹ and the uniform national standard to be created by this legislation would be a welcome step. We believe that this draft can continue to be improved to mitigate adverse impacts on U.S. startups.

¹ Patchwork Privacy Problem, Engine (March 2023),

https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/6414a45f5001941e519492ff/1679074400513/Privacy+Patchwork+Problem+Report.pdf.

• Startups are not successfully exempted and small business exemption should be accordingly revised. The draft includes a 3-part definition: (1) have \$40,000,000 or less in annual revenue; (2) collect, process, retain, or transfer the covered data of 200,000 or fewer individuals; and (emphasis added) (3) do not earn revenue from the transfer of covered data to third parties. Part (1) is likely close to a sufficiently high revenue number, almost certainly ruling out startups that are Series B or smaller. Contrastingly, part (2) is too low. Many startups, even some pre-revenue startups may have covered data from more than 200,000 individuals. (Depending on business model, startups can reach 200,000 user accounts before generating much revenue, and some startups use waitlists to understand what features they should develop or to demonstrate consumer interest to investors). (Part (3) is not particularly relevant for startups). This definition will exempt many conventional small businesses but many startups will quickly find themselves in-scope.

Most state laws have thresholds for personal information of 100,000 individuals or more, except a few smaller states that lowered it because of their small populations.² The threshold in the APRA is only twice what most of the states have enacted, but in percentage terms, it is much lower. The average U.S. state has a population of about 5.7 million, and 100,000 is about 1.75 percent of that. The population of the U.S. is about 333.3 Million, and 200,000 is about 0.06 percent. To remain on parity with state exemptions, this threshold would need to be revised upward to well over 5 million.

Most startups will be in scope of the APRA, or otherwise plan to grow to a point where they will be and, should it become law, will build their companies with the APRA in mind. To mitigate the negative impacts of scoping in startups so soon, there are a variety of options: change "and" to "or" in the definition of small business, remove the 200,000 element of the definition, or alternatively revise the individuals' data threshold significantly upward.

• Obligations under the APRA may cause new burdens for startups. While some of the requirements in the draft law may be familiar, several will be new to startups and may alter their business plans, competitiveness, and trajectory. For example, some startups — especially those in the early stages and those that offer free services to consumers — often rely on data-driven advertising revenue or reach consumers through such advertisements. The draft's changes to this type of advertising would impact those companies. Some startups' main product is to provide an algorithm that leads to better or different outcomes for those categories, like credit or employment. It is unclear if startups will be able to facilitate alternatives for those decisions, and not providing them is unlikely to be an option since that could be considered retaliation, which is prohibited. Finally, data minimization may impact future product development for startups, particularly those in data-driven spaces, like AI, or those looking to enhance their current offerings with AI in the future. For example, many startups can order content manually or with a basic algorithm at launch and will look to build machine learning algorithms to personalize ordering of content in the future. Revising the small business exemption or revisiting many

² E.g., lower population states include Montana, New Hampshire, and Delaware.

requirements in the discussion draft with the impact on startups in mind is essential to lessen headwinds to be created for startups.

• Enforcement by private lawsuits is poised to enable bad-faith litigation. Creating a private right of action is particularly concerning for startups, who have few resources and who don't have in-house counsel. The earlier American Data Privacy and Protection Act (H.R.8152 - 117th Congress) also included enforcement by private lawsuits, but that bill had some safeguards (and a longer cure period) that drafters thought could curb abusive or bad-faith litigation. Under that bill, an individual (or class of individuals) that wanted to sue needed to first confer with their state attorney general and the FTC, who had 60 days to determine if their agencies would independently take action. Only if neither enforcer decided to pursue the case, could the individual continue with their lawsuit. That was still somewhat problematic because it would lead to a selection problem where the least meritorious private lawsuits could proceed, but the APRA does not even have these safeguards.

The APRA could set up a "privacy troll" problem impacting startups.³ Private lawsuits — or even the threat of lawsuits — negatively impact startups, which don't have the resources to withstand litigation that can cost hundreds of thousands of dollars. To mitigate the threat of abuse, particularly against startups, enforcement should be left to expert agencies, or, at a minimum, meaningful safeguards should be added to the private method of enforcement.

H.R. 7890, Children and Teens' Online Privacy Protection (COPPA 2.0) Act

This legislation will expand the amount of startups subject to COPPA, create new burdens and exacerbate costs for such operators, and create incentives that either lead to age verification or fewer services for ages newly covered under COPPA.⁴ Startups need clear, bright-line rules that are easily implementable. Actual knowledge is exactly that, enabling startups to more easily comply with the COPPA Rule. This legislation changes and muddies the clarity of the knowledge standard. Knowledge fairly implied amounts to a "you should have known" standard, and a totality of circumstances test is exactly the opposite of a clear, bright line rule. Startups look to predictable, consistent methods of compliance, because they need to focus their limited resources on fundamental business activities. As a consequence, for startups, implementing this standard is likely to involve reliance on age verification technology. In spite of it being explicitly not required by the legislation, it will likely be necessary in practice. That is problematic because age verification is expensive to procure, is time consuming to integrate, reduces services' growth, and poses fundamental problems for individuals' privacy.⁵

³ The Coming Privacy Troll Problem, Engine (May 31, 2019),

https://engineadvocacyfoundation.medium.com/the-coming-privacy-troll-problem-4363695220d6. ⁴ More than just a number: How determining user age impacts startups, Engine (Feb. 2024),

https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/65d8b6ab876bfd5b70f8795e/1708701355604/F INAL+-+2024+More+Than+Just+A+Number.pdf.

This legislation has gone through many iterations in this and previous Congresses in the Senate, and we remain concerned about how the bill would impact content made available online, and introduce new burdens about how to design services and moderate content online. Like concerns about the scope of definitions above, the bill's approach to defining "know" includes a high revenue threshold that scopes out startups of higher obligations, but a 200,000 individuals element that would include many. The bill seems to acknowledge that actual knowledge is important as a clear, implementable standard for startups and small covered platforms. Unfortunately they might be subject to higher standards regardless. Startups performing age verification is problematic for all the reasons outlined above, and the drawbacks of this technology cut against the goals of this bill and startup competitiveness—leaving the large competitors that Members are most worried about as the primary offerings in the marketplace.

We appreciate the committee's work to bolster consumer protections online and strongly support efforts to create uniform federal privacy standards that provide clarity for startups and strong protections for their users of all ages. We encourage the committee to pursue legislation that protects consumers while avoiding the unintended consequences to startups, consumer privacy, data security, and online expression described above, and we look forward to engaging with the committee to improve this legislation impacting startups.

Sincerely,

Engine

Engine Advocacy 700 Pennsylvania Ave. SE Washington D.C. 20003











The Honorable Cathy McMorris Rodgers Chairwoman House Committee on Energy & Commerce 2125 Rayburn House Office Building Washington, D.C. 20515

The Honorable Gus Bilirakis Chairman Subcommittee on Innovation, Data, & Commerce 2125 Rayburn House Office Building Washington, D.C. 20515 The Honorable Frank Pallone Ranking Member House Committee on Energy & Commerce 2322 Rayburn House Office Building Washington, D.C. 20515

The Honorable Jan Schakowsky Ranking Member Subcommittee on Innovation, Data, & Commerce 2322 Rayburn House Office Building Washington, D.C. 20515

April 16, 2024

Dear Chairwoman McMorris Rodgers, Ranking Member Pallone, Chairman Bilirakis, and Ranking Member Schakowsky:

The undersigned insurance trade associations commend the Energy and Commerce Committee for its interest in pursuing comprehensive legislation that will protect the privacy of consumers and establish a national data privacy standard. The insurance industry has a long history of protecting the privacy interests of its consumers and believes that all industries should do so. We commend the committee's recognition of the importance of small business and applaud the exemption included in the draft. There are many sectors of the American economy that are currently subject to little or no nationwide privacy regulation and it is appropriate for the Congress to consider the extent to which consumers in those sectors could benefit from thoughtful and reasonable regulation.

While the committee's consideration of the American Privacy Rights Act (APRA) discussion draft can foster a constructive discussion of many key privacy issues, we have significant concerns about the practical impact the legislation will have on both consumers and businesses. For this reason, the undersigned organizations representing a majority of the property/casualty insurers, reinsurers, agents, and brokers urge the committee to move cautiously and deliberately in its path forward.

The financial services Industry, including the insurance industry, was the first sector of the economy to come under comprehensive nationwide privacy regulation. When the Gramm-Leach-Bliley Act (GLBA) was enacted more than 20 years ago, it established a regulatory framework for protecting the privacy of nonpublic personal information of financial services consumers. That framework is appropriately and effectively enforced for insurers, reinsurers, agents, and brokers by state insurance regulators. While privacy is not an industry-specific issue, state insurance regulators are familiar with the insurance industry and the unique aspects of the sector, how privacy laws impact that model, and the potential unintended consequences for insurance consumers that could result from privacy regulation that is not









appropriately tailored to their needs. It was in recognition of this treatment and expertise that Congress wisely delegated enforcement of the GLBA Title V privacy provisions to state insurance regulators.

Consumer complaints are taken very seriously in the insurance industry and regulatory community. Every state insurance department has a market conduct program that examines and monitors insurers' business practices, including privacy compliance, with any issues resolved promptly in the course of regulatory market conduct examinations. A key tenet of the state-based system of insurance is consumer protection, and compliance with the regulatory framework is strictly enforced by the nearly 11,000 individuals employed by state insurance departments across the country.

For this reason, state legislatures that have recently enacted privacy laws of general applicability have included a form of GLBA exemption. State policymakers have taken this approach because they are primarily focused on businesses and sectors of the economy that are not yet subject to a meaningful privacy framework and because they know insurance regulators, working under the GLBA framework, are actively protecting insurance consumers. In short, state legislatures have decided not to fix what is not broken. We encourage the committee to follow their wise example and clearly exempt insurers, agents, and brokers from the scope of the APRA. We welcome the opportunity to work with the committee in crafting an exemption for entities subject to GLBA that will ensure that the existing, successful insurance privacy regulatory system is not disturbed and that insurance providers are not inadvertently subjected to multiple privacy frameworks.

We are also alarmed about the presence in the bill of a broad and expanded private right of action as well as the elimination of arbitration. In our experience, private rights of action often turn out to be less valuable to consumers than intended. The United States already suffers from being an overly litigious society, and this provision threatens to exacerbate the problem for consumers. The costs of the U.S. tort system to businesses and families currently amounts to approximately \$450 billion per year, which equates to thousands of dollars on an annual per-person basis and over two percent of Gross Domestic Product. This costs consumers, and plaintiffs, much more than it protects them. A private right of action in the APRA will contribute to the already rapidly increasing claims costs for insurers, which in turn could have downstream effects on the economy through higher prices. We believe it is much better for the government to enforce privacy laws; this would mean consistent interpretation and implementation leading to a more stable privacy landscape for businesses and consumers. For this reason, we oppose the passage of any federal privacy bill that contains a broad private right of action such as the one in the APRA.

In addition, we would be remiss if we did not address the thoughtful privacy-related work of the House Financial Services Committee. Chairman Patrick McHenry's Data Privacy Act, H.R. 1165, advanced out of that committee in February 2023. It modernizes GLBA and is largely workable for the insurance industry and, most importantly, for consumers. It contains meaningful preemption, retains enforcement responsibility for the insurance industry in the capable hands of functional state regulators, and excludes a harmful private right of action. We urge the Energy and Commerce Committee to collaborate with



Chair McHenry to appropriately account for his committee's work in this space and any jurisdictional matters.

While there are other aspects of the draft APRA that trouble us, the two we have highlighted above are of the most immediate concern to insurers, agents, and brokers. Again, we commend the committee for its interest in this important issue, and we pledge to be of assistance to help make the bill achieve its intended goal in an appropriately targeted way.

Sincerely,

National Association of Mutual Insurance Companies (NAMIC) American Property Casualty Insurance Association (APCIA) Independent Insurance Agents & Brokers of America (Big "I") Reinsurance Association of America (RAA) The Council of Insurance Agents & Brokers (CIAB)



April 17, 2024

The Honorable Cathy McMorris Rodgers	The Honorable Frank Pallone Jr.
Chair	Ranking Member
U.S. House Committee on Energy and	U.S. House Committee on Energy and
Commerce	Commerce
2188 Rayburn House Office Building	2107 Rayburn House Office Building
Washington, DC 20515	Washington, DC 20515
The Honorable Gus Bilirakis	The Honorable Janice Schakowsky
Chair	Ranking Member
U.S. House Subcommittee on Innovation,	U.S House Subcommittee on Innovation, Data,
Data, and Commerce	and Commerce
2306 Rayburn House Office Building	2408 Rayburn House Office Building
Washington, DC 20515	Washington, DC 20515

Dear Chairs McMorris Rodgers and Bilirakis, Ranking Members Pallone and Schakowsky:

On behalf of the Network Advertising Initiative (NAI), thank you for your leadership in holding this hearing, and for your continued support for a uniform national data privacy and security framework to protect all Americans, regardless of the state they live in.

Founded in 2000, the NAI is the leading non-profit, self-regulatory association for advertising technology companies. For over 20 years, the NAI has promoted strong consumer privacy protections, a free and open internet, and a robust digital advertising industry by maintaining and enforcing the highest voluntary industry standards for the responsible collection and use of consumer data. Our member companies range from small startups to the largest companies in the industry, and they collectively represent a substantial portion of the digital advertising technology ecosystem.

The NAI is committed to promoting responsible data-driven advertising that powers a rich digital media industry and supports free and low-cost digital content for consumers. Our top priority is the establishment of a uniform national privacy framework that protects consumers and provides a level playing field for all companies. With more than a dozen comprehensive state privacy laws recently enacted, in addition to numerous narrower state privacy laws focused on issues like health data, consumers now more than ever need a strong, consistent

data protection standard across the country, and businesses need clarity and certainty in data protection and privacy law to implement clear compliance processes. Neither of these goals are served by the expanding patchwork of disparate state privacy laws.

The NAI welcomes congressional action on a comprehensive national privacy framework that replaces the confusing and inconsistent patchwork of state privacy laws, and we thank you for creating the discussion draft American Privacy Rights Act (APRA) as a starting point. This legislation reflects many widely held priorities of the NAI, such as a strong set of consumer data rights, easy to use opt-out preference signals to facilitate consumer choices, a commitment to preempting conflicting state laws, and promotion of self-regulatory efforts to help companies comply.

However, as currently drafted, the APRA's application to data-driven advertising, and particularly targeted advertising, is not clear. The discussion draft appears to broadly restrict data processing in a way that would severely limit data-driven advertising and other beneficial uses of data that consumers want, and that business can provide responsibly. As the Energy and Commerce Committee considers this critical legislation, I hope the discussion draft can be updated to clearly promote responsible ad-supported media.

Again, the NAI views the discussion draft and this hearing to be a valuable first step, and we look forward to working with you and other members of this Committee to enact a national privacy framework that balances the goals of enhancing consumer rights and protections, while also promoting responsible data-driven advertising and consumer protection.

Sincerely,

Jugto MP Jal

Leigh Freund President & CEO NAI



April 16, 2024

The Honorable Cathy McMorris Rodgers Chair, House Energy and Commerce Committee United States House of Representatives 2125 Rayburn House Office Building Washington, D.C. 20515

The Honorable Frank Pallone, Jr. Ranking Member, House Energy and Commerce Committee United States House of Representatives 2322A Rayburn House Office Building Washington, D.C. 20515

Re: Innovation, Data and Commerce Subcommittee Hearing on "Legislative Solutions to Protect Kids Online and Ensure Americans Data Privacy Rights"

Dear Chair McMorris Rodgers and Ranking Member Pallone,

We write today to add our voice to the chorus that are expressing views on the proposed legislation being heard tomorrow. Our members appreciate the efforts to continue to find consensus to pass preemptive consumer privacy legislation. We wanted to take the opportunity to provide our feedback on three of the bills under consideration during this hearing: **American Privacy Rights Act of 2024 (APRA)**, **Children's Online Privacy Protection Act (COPPA 2.0) and Kids Online Safety Act (KOSA).** We remain hopeful that Congress will work together to move comprehensive legislation across the finish line.

SIIA is the principal trade association for those in the business of information. Our nearly 400 member companies reflecting the broad and diverse landscape of digital content providers and users in academic publishing, education technology, and financial information, along with creators of software and platforms used by millions worldwide, and companies specializing in data analytics and information services. On behalf of our members, we view it as our mission to ensure a healthy information ecosystem: one that fosters its creation, dissemination and productive use.

Privacy is essential to the health of that ecosystem. Our members believe that a comprehensive privacy law is critical to address concerns about the lack of accountability and transparency with how consumer data is collected, processed,

and used. We released a set of principles¹ earlier this year that reflect major areas that need the attention of Congress to effectively protect the privacy and safety of children and teens online. We are gratified to see that many of these principles are reflected in the proposals and applaud the sponsors and cosponsors for their leadership.

American Privacy Rights Act of 2024

We view this as a thoughtful draft and a positive step towards comprehensive federal privacy legislation, as we are pleased to see various improvements to the 2022 bill.

Exemption of Publicly Available Information – For our members, it is imperative that the legislation respect the bounds of the First Amendment. To that end, the bill exempts publicly available information (PAI), as well as inferences derived solely from PAI. The draft clarifies that inferences that reveal sensitive covered data remain protected under the First Amendment unless combined with sensitive data itself. We were also pleased that the new draft avoids removing PAI's public designation when temporarily combined with covered data.

Embraces Privacy-enhancing Technologies – APRA directs the Federal Trade Commission (FTC) to carry out a pilot program to encourage private sector use of privacy-enhancing technologies (PETs) for the purpose of protecting covered data. SIIA has long advocated in favor of PETs, which have the potential to reduce or eliminate privacy risks for consumers while simultaneously enabling the productive use of valuable data sets.

Strong Preemption – We applaud improvements to preemption that works to avoid a confusing and expensive patchwork of state privacy laws and eliminates the carve outs reserved for states that happened to pass privacy laws pre-introduction. **We believe that the preemption provision can be further refined so that states may not use common law or existing statutory law to evade Congress's stated intent. That evasion is of particular concern because of the private right of action provision.**

The following outlines areas of concerns with APRA as currently drafted.

Expanded Definition of Sensitive Data – Rather than addressing the risks of data dissemination according to its uses, the bill expands the definition of sensitive data to include new inflexible categories that are overinclusive of data that may pose little risk, but also under include high-risk uses of data that the definition does not cover.

¹ https://www.siia.net/wp-content/uploads/2024/03/SIIA-Child-Privacy-and-Safety-Principles-.pdf



In our view, the term "sensitive data" should be limited to that information which, by its nature, is intrinsically subject to abuse or the release of which would be offensive to a reasonable person.

• For example, the APRA defines "sensitive data" to include "information *about* a minor under the age of 17." There are two implications of this that we find concerning. First, it places the bill at odds with laws at the federal level and in the states designed to protect children's privacy, wrapping children's data into the "sensitive data" regulatory framework. Second, the word "about" would render this provision seriously overbroad (e.g., a picture of a child).

Application of Data Minimization – The bill imposes a presumption of illegality around a significant amount of productive commercial publishing activity, with little corresponding privacy benefits for consumers. It is also unclear whether the data minimization standards apply even in cases of affirmative opt-in consent, which is required around, for example, "sensitive data."

Private Right of Action – We oppose the inclusion of a private right of action. With that said, we appreciate the efforts made to narrow it and reduce the risk of "sue and settle" lawsuits that have become all too common.

Broad AI Provisions – The definition of "covered algorithms" addresses artificial intelligence tools, defined as a computational process that makes a decision or *facilitates* human decision-making by using covered data. The term "facilitates" dramatically broadens the scope of covered algorithms to include even those that pose minimal risk – rather than only those that pose a risk of consequential harm – and exist well outside the realm of AI as commonly understood. The APRA also applies its AI provisions to "entities," not "covered entities," confusingly expanding the scope of its AI requirements beyond those entities covered by the privacy provisions in the bill.

COPPA 2.0

This legislation is an encouraging step on protecting the privacy and safety of children and teens online while ensuring they are able to connect, learn, and access information online.

We are pleased that COPPA 2.0 includes language that clarifies how COPPA works in public schools. The lack of clarity on how to protect student data subject to protections under both the Family Educational Rights and Privacy Act (FERPA) and COPPA has been unclear since the passage of COPPA over two decades ago. The proposed changes in this legislation will ensure student data is protected without



creating conflicting legal obligations for schools and vendors or rights for students and parents.

The text of COPPA 2.0 also codifies internal operations language that was included in the 2013 rulemaking and has been incorporated into many business practices over the past decade. We are pleased this will allow businesses some predictability in their compliance work going forward.

The legislation also includes language that establishes data minimization rules to prohibit the excessive collection of children and teens' data. This aligns with the <u>Child</u> <u>and Teen Privacy and Safety Principles</u> that SIIA released in late March.

The following outlines areas of concerns with COPPA 2.0 as currently drafted.

Age Verification Requirement – We are concerned that COPPA 2.0 about the change to the existing COPPA knowledge standard from "actual knowledge" to a new standard of "knowledge fairly implied on the basis of objective circumstances." This change could lead operators to require age verification for all visitors, not just children, to an operator's website. This would increase the amount of information collected from visitors, increasing privacy and cybersecurity risks.

Treatment of Contextual Advertising – We are concerned that COPPA 2.0 would, even if unintentionally, prohibit contextual advertising, which could lead operators to charge for access or cut off services. Contextual advertising has played an important role in supporting the creation of free high-quality content for kids. Without the support of contextual advertising revenues, this content may no longer exist. This would have a notable impact on the digital divide.

No Preemption – Lastly, the bill does not offer effective preemption which will lead to a difficult patchwork of laws to comply with leading to different protections and experiences for consumers across the U.S.

Kids Online Safety Act

We are extremely concerned about the introduction of the Kids Online Safety

Act. We believe this bill will require extensive modifications in order to protect the privacy and safety of young Americans. As written, it will require companies to censor content for users, which raises First Amendment concerns. A negligence standard for "duty of care" would create a burdensome risk of liability, leaving online platforms with virtually no choice but to restrict content.

The current text also requires companies to offer different services to users of different ages, effectively requiring age verification, which could be invasive to



privacy. Experts have noted this could require companies to collect more information than necessary on all users, not just kids.

We urge Congress to consider further improvement to KOSA that would meaningfully strengthen privacy protections and uphold Constitutional rights for all Americans.

We stand ready to continue to work with the Committee to ensure the proposals represent balanced and comprehensive federal standards to protect the privacy of all Americans. Thank you for considering our views.

Respectfully,

Christopher A. Mohr

President





The Honorable Cathy McMorris Rodgers Chairwoman House Committee on Energy & Commerce 2125 Rayburn House Office Building Washington, D.C. 20515

The Honorable Gus Bilirakis Chairman Subcommittee on Innovation, Data, & Commerce 2125 Rayburn House Office Building Washington, D.C. 20515 The Honorable Frank Pallone Ranking Member House Committee on Energy & Commerce 2322 Rayburn House Office Building Washington, D.C. 20515

The Honorable Jan Schakowsky Ranking Member Subcommittee on Innovation, Data, & Commerce 2322 Rayburn House Office Building Washington, D.C. 20515

April 15, 2024

Dear Chairwoman McMorris Rodgers, Ranking Member Pallone, Chairman Bilirakis, and Ranking Member Schakowsky:

The American Property Casualty Insurance Association (APCIA) appreciates the bipartisan work performed by the Chairs of the House and Energy Commerce Committee in introducing the *American Privacy Rights Act of 2024* (APRA). However, we would like to meet with you to discuss our concerns about the potential conflicts the legislation would create with the existing unique privacy regime established for the insurance industry under the Gramm-Leach-Bliley Act (GLBA) and state insurance privacy laws.

The Gramm-Leach-Bliley Act established a regulatory framework for protecting the privacy of nonpublic information used by financial services institutions, which for insurance is governed and enforced by state insurance regulators. The state regulators – through the National Association of Insurance Commissioners (NAIC) – have further developed and uniquely evolved comprehensive privacy protections through development of numerous additional model laws and regulations including the Insurance Data Security Model Law, the NAIC Insurance Information and Privacy Protection Model Act, the Privacy of Consumer Financial and Health Information Regulation, and the Standards for Safeguarding Customer Information Model Regulation. The NAIC just last year adopted the Model Bulletin on the Use of Artificial Intelligence Systems by Insurers that the states are rapidly enacting and the NAIC is currently finalizing an updated Privacy Protections Model Act.

The GLBA privacy regime and each of these model laws and the related adopted state laws and regulations provide for extensive privacy regulation of insurance entities by the state insurance departments, who have developed an extensive case history of allowable and prohibited practices reviewed regularly through state insurance market conduct examinations. The state insurance



departments have determined over time what data sharing is necessary for the business of insurance and what additional consumer protections are necessary beyond the unusually extensive state oversight. For insurance specifically, Congress in the McCarran-Ferguson Act delegated insurance regulation to the states, which has been further underscored in subsequent legislation such as GLBA and the Dodd-Frank Act.

The American Privacy Rights Act of 2024 (APRA) creates a new privacy regime for covered entities that are subject to the Federal Trade Commission Act (FTCA), but that is not limited to the activities for which entities are subject to the FTCA. Insurers specifically and uniquely are currently subject to the FTCA for very limited and specific purposes, but not generally. For example, section 6 of the Federal Trade Commission Act provides that the Act shall not apply to the business of insurance except very specific provisions, such as that "the Commission shall have authority to conduct studies and prepare reports relating to the business of insurance" upon the request of certain Congressional committees. Failure to clarify that APRA does not apply to insurance could create a broad and unintended loophole under which the Federal Trade Commission could attempt to assert extensive new jurisdiction over insurance in contravention of the McCarran-Ferguson Act. The provisions would then create significant conflict with the requirements and enforcement of state privacy and AI regulation – much of which is directed by the GLBA privacy regime, particularly since the APRA specifically lists insurance in the impact assessment scope and definition of "consequential decision". APCIA would welcome an opportunity to discuss this further with the Committee to ensure that APRA does not inadvertently unwind portions of the McCarran-Ferguson Act by creating new Federal Trade Commission authority over insurance or impede the GLBAmandated privacy regime.

APCIA also is concerned that APRA would expose our policyholders to greater legal risks by unnecessarily expanding on the already existing and well-established tort system that is currently in place. Section 19 establishes an unnecessary private right of action that may be brought by individuals against an entity for an alleged violation of this new law. The APRA's private right of action goes well beyond current privacy frameworks in the United States, whether the GLBA or nearly all state privacy statutes, which do not permit private actions. Indeed, the APRA's private right of action even surpasses the private right of action in California Consumer Privacy Act and the California Privacy Rights Act, which only permits private actions for breaches of data security requirements. The insurance industry is concerned that parts of the United States already suffer from being overly litigious, and this provision threatens to exacerbate the problem. According to a U.S. Chamber Institute for Legal Reform (ILR) study, tort costs and legal system abuse in the United States in 2020 cost \$443 billion, or \$3,621 per household, as a result of unnecessary and abusive litigation across the country that raises the costs of products and services. According to an APCIA and Munich Re US survey, only 35% of Americans are aware — and 65% are unaware — that every household pays the "tort tax." An increase in the tort tax will further harm consumers and U.S. competitiveness.

APCIA would welcome the opportunity to engage with the Committee to discuss these issues, as well as other elements of the bill. While we understand the APRA will be debated and discussed



over the coming weeks and months, APCIA urges the Committee to work with the various stakeholders and interested partes that may be impacted by this legislation.

Sincerely,

Not Vien

Nathaniel F. Wienecke