Exhibit 1

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

PEOPLE OF THE STATE OF CALIFORNIA, et al., Plaintiffs, v. *META PLATFORMS, INC, Instagram, LLC, Meta Payments, Inc., Meta Platforms Technologies, LLC., et al.,* Defendants IN RE: SOCIAL MEDIA ADOLESCENT ADDICTION/PERSONAL INJURY PRODUCTS LIABILITY LITIGATION THIS DOCUMENT RELATES TO: 4:23-cv-05448	MDL No. 3047 Case No. 4:23-cv-05448-YGR Judge: Hon. Yvonne Gonzalez Rogers Magistrate Judge: Hon. Peter H. Kang

TRIAL REPORT OF ADAM L. ALTER, PH.D.

August 1, 2025

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I. EXECUTIVE SUMMARY OF OPINIONS

1. This report is divided into two Parts: the first Part, labeled **1. DECEPTION**, examines how reasonable consumers would have understood various statements made by Meta personnel; the second Part, labeled **2. CHILD-DIRECTEDNESS OF META PLATFORMS**, examines the extent to which Meta platforms Facebook and Instagram, or portions of those platforms, were directed to children.

2. To understand the effect(s) that Meta's public statements would have had on a reasonable consumer, in **Part 1** I have adopted the social influence analytic framework. This framework considers three relevant dimensions of influence: the context in which the statements were made; the tactics of persuasion used by the communicator and embedded within the statements; and the manner in which consumers process information. Based on this analysis of Meta's public communications and internal documents, statements of Meta employees, as well as relevant academic literature, I have reached the following conclusions:

A. Social media platforms are rapidly-evolving and opaque technology products about which consumers have less information than do the products' manufacturers. Social media platforms are thus "credence goods," meaning that it is difficult or impossible for consumers to evaluate such products or services even after those consumers have used them, because those consumers lack the knowledge or expertise necessary to conduct their own independent evaluations.

B. Companies like Meta use public statements strategically to develop, protect, or repair consumer perceptions of their brands and products. When making public statements, Meta employed tactics of persuasion designed to influence consumer perception, including *drumbeat messaging*, *proof points*, *favorable metrics*, *agenda setting*, and *side-stepping criticism*.

C. In complex decision-making environments, where, like here, the focal issues are highly technical and opaque, even highly motivated consumers are constrained in their ability to perform extensive assessments and to reach comprehensive conclusions about the product. In domains concerning health and safety, as in the present context, consumers reasonably tend to assume that a company's communications are both truthful and complete. Furthermore, consumers may unconsciously rely on certain processing cues (or, *heuristics*) to make sense of company messaging. Consumers also tend to distill

central meanings, or "gists," from a set of statements or claims. Reliance on such implicit assumptions and processing cues is characteristic of reasonable consumers.

D. Meta was aware that consumers had major concerns about the effects of its platforms on the health and safety of the users of those platforms. Its knowledge of those concerns informed its communications strategy. Meta knew that uncertainty or concern about platform safety could hamper the growth of its platforms, engagement with those platforms, and, ultimately, Meta's financial performance. Thus, to protect its brand and long-term viability as a company, Meta disseminated messages that were designed to shape consumer perceptions of the health and safety of its platforms in the company's favor.

E. Meta made a series of misleading public statements that advanced four distinct sets of claims that were relevant to individuals under age 13 ("U13") and individuals of ages 13-17 ("teens"; collectively "young users"):

   a. Claims that Meta prioritized user well-being, health, and safety, particularly for young users, over other interests, including its own business interests. Specifically, Meta claimed that consumer well-being was its "number one priority" or one of its top priorities, that it prioritized well-being over profit, and that it made significant and meaningful investments in well-being efforts.

   b. Claims that Meta's platforms are not addictive. Specifically, Meta claimed that its platforms do not operate to addict, were not designed to be addictive, and touted its time management tools such as Take a Break and other features as proof points to support this sentiment.

   c. Claims that Meta's platforms do not harm users. Specifically, Meta claimed that research shows that the overall effect of its platforms on user well-being is neutral or positive rather than negative; issued public transparency metrics that indicate harmful content and experiences on the platforms are rare; that its internal policies keep platforms safe for users; and that its platforms are suitable for young users.

   d. Claims that Meta effectively prevents U13s from using its platforms. Specifically, Meta claimed that U13s are not allowed to use and do not use the platforms, and that it "especially" invests and engages in various efforts to inhibit U13 use in furtherance of its policy to prohibit U13s from using its platforms.

F. Meta's health and safety claims were meaningful and important to a significant number of consumers. Empirical evidence demonstrates that large numbers of parents and teens worry about the safety of Meta's platforms, and the addictive nature of those platforms.

G. In concluding that the above-referenced public statements by Meta are false, incomplete, or otherwise have the tendency to mislead, I compared the impression that the statements would give a reasonable consumer with assumptions that counsel directed me to make. I asked counsel to provide documents that would help me better understand the basis of these assumptions. There is a stark contrast between the impression that Meta's public statements would give a reasonable consumer, on the one hand, and the facts associated

with the assumptions and documents I was given by counsel, on the other hand. Specifically:

a. Directly inconsistent with its external statements, Meta has made numerous internal decisions that deprioritized well-being and safety efforts, often for reasons related to profits and growth. Meta has also repeatedly failed to invest and fund internally recommended initiatives related to well-being and safety (*see* Section X.A.vi). Accordingly, reasonable consumers would have been misled by Meta's claims that user well-being, health, and safety are its "number one priority" because such audiences would expect Meta to prioritize the welfare of its platforms' consumers over the company's growth and profit when making decisions about those platforms. Further, a reasonable consumer would expect Meta to make significant and meaningful investments to launch and promote products designed to improve well-being, whereas Meta did not in fact do so.

b. Directly inconsistent with its external statements, Meta had internal knowledge that users reported addictive, problematic use of its platforms and internally acknowledged that problematic use consistent with addiction was occurring. In addition, Meta knew its time management tools such as Take a Break and related features were ineffective (*see* Section X.B.vi). As a result, reasonable consumers would have been misled by Meta's public statements disclaiming the addictiveness of its platforms. Such consumers would have understood those statements to mean that Meta was not aware that its products operate to induce problematic and/or addictive use and/or were designed to be addictive. Furthermore, such audiences would have been led to believe that the Take a Break and related features were effective at curbing addictive use, whereas those features were not effective at curbing addictive use.

c. Directly inconsistent with its external statements, Meta had internal data and knowledge of the frequency of harms occurring and/or being experienced on its platform by users, including young users, and knew its policies and procedures were not fully effective in eradicating or preventing such harmful experiences, yet failed to disclose such information (*see* Section X.C.v). Thus, reasonable consumers would have been misled by Meta's claims regarding the capacity for its platforms to harm users. Such consumers would have been misled because they would have been led to believe that Meta had robust procedures for eradicating harmful content, and preventing such content from reaching its platforms, and that young users would have encountered such harmful content only in negligible quantities.

d. Directly inconsistent with its external statements, Meta internally knew meaningful numbers of U13s were on its platform, its lax age-gating and age enforcement enabled underage use, it was underinvested in age assurance, and efforts related to age-gating, age verification, age-detection, and underage removal were ineffective and lagged behind industry standards (*see* Section X.D.iv). Thus, reasonable consumers would have been misled by Meta's claims regarding the company's approach to and effectiveness in preventing children

under the age of 13 from using its platforms. Such consumers would have falsely believed that Meta did not have knowledge that U13s were using its platforms, and that its lax registration process enables such underage use, whereas the company did have such awareness. Furthermore, reasonable consumers would have falsely believed that Meta meaningfully invested in underage enforcement and that its efforts in age-gating, age-enforcement, age-detection, age assurance, and underage removal were effective at inhibiting U13 use, when in fact Meta did not prioritize investment in policing underage use, and knew its efforts were not effective and lagged behind industry standards.

H. There is strong empirical evidence and theoretical justification for concluding that the information conveyed by Meta's statements was transmitted to, and spread further by, consumers. Several factors make the significant diffusion of such statements among consumer audiences likely. These include the importance of the subject matter, the high levels of uncertainty among consumers, the types of audiences receiving Meta's message and their communication styles, and the size of Meta's audience. Meta's own marketing documents acknowledge that it intended its external messaging related to safety and well-being to reach important markets such as Massachusetts, Illinois, New York, and California, among others.[1]

3. In addition, with respect to my assessment of the child-directedness of Meta's platforms (**Part 2** of this report), based on my analysis of Meta's and third parties' internal documents, statements of Meta employees, relevant academic literature, and publicly available sources, I have reached the following conclusions regarding Meta's platforms:

I. Literature in the field of developmental psychology has identified specific characteristics associated with different phases of childhood. Tweens are psychologically distinct because their emerging cognitive and emotional skills are tested by the growing complexities of adolescence. Tweens are also particularly attracted to social media platforms that incorporate social comparison metrics and feedback.

J. During this period, children transition from perceiving adults as aspirational figures to perceiving dominant peers and older teens as aspirational figures. Tweens and young teens are susceptible to peer-influence because they pay close attention to feedback from same-age and older peers and siblings as they balance a drive for conformity with ongoing attempts to explore uniqueness and self-expression. Tweens are therefore

[1] META3047MDL-146-00056954, "Parent Advocacy Network - Pilot Proposal"; META3047MDL-231-00001706, "U.S. Youth Campaign Targeting," June 2024; META3047MDL-047-00659172, "Youth updates for EA team biweekly (3/7)"; META3047MDL-129-00027832, "Re: [tasks] T189402400: Screen Smart Phase 3 Proposal," July 22, 2024; META3047MDL-129-00090614, Screen Smart info; and META3047MDL-146-00057583, "Instagram Teen Accounts Launch - Local Comms Plan."

attracted to activities popular among teens, including usage of Meta's social media platforms.

K. Certain types of content are appealing to children and tweens. Tweens in particular enjoy social entertainment experiences that include other people, and seek out content associated with older teens, influencers, and celebrities—groups that are broadly socially desirable or aspirational. Tweens are interested in content that appeals both to children, such as cartoons, and content appealing to teens, reflecting the developmental characteristics that lead tweenhood to overlap with both childhood and the teenage years.

L. Meta, as an umbrella company overseeing several apps and social media platforms, has long viewed young teens and child users as valuable and important for the company's long-term growth. Meta has attracted and retained child users for over a decade. It has also extracted valuable content from, and established its social relevance by attracting, tween and teen users. Meta frequently studied the needs and interests of children under the age of 13—including children as young as pre-school aged—and developed Messenger Kids to attract such users to the company's family of apps. Meta similarly initiated but ultimately paused the development of a version of Instagram for children.

M. Instagram has long been viewed as an app popular among tweens, and Meta researched tween needs and social media habits as part of Instagram's ongoing development. Instagram executives perceived tweens to be similar to teens, and recognized that an app that appeals to young teens similarly appeals to tweens. Instagram incorporated a series of features and hosts content, that appeals to tweens, including: features from other apps popular with tweens, such as Reels and Stories; creative, playful elements like camera filters and custom stickers; content posted by tween influencers; and entertaining videos. Meta was aware that Instagram attracted and retained users under the age of 13. The Instagram platform as a whole is directed to children.

N. Instagram features accounts that are directed to children, including accounts featuring influencers who are themselves younger than age 13, YouTube celebrities and shows popular with children, and other content popular with tweens. These accounts not only contained content that appeals to a child audience, but also contained comments from users who reported that they were younger than age 13. Meta has encouraged the creation of such content, including by compensating celebrities popular with children for creating content on Instagram.

O. Facebook historically was very popular among child users, which Meta executives both knew and discussed publicly. As Facebook's relative share of tween and young teen users declined during the 2010s, Meta conducted research to examine what it variously defined as a single 11- to 15-year-old demographic in order to improve its ability to attract and retain users who fell within this age group. Facebook incorporated features and hosted content similar to the features and content on Instagram that were intended to attract and retain teen and tween users, including: creative and playful features, including stickers; features from other apps popular with tweens, such as Live, Reels, and Stories; entertaining child- and tween-targeting videos; Groups focused on middle and high school activities; and content from celebrities that appealed to tweens and young teens.

Meta was aware that Facebook attracted and retained users under the age of 13. The Facebook platform as a whole is directed to children.

P. Facebook features accounts that are directed to children, such as pages of under-13 influencers, YouTube celebrities and YouTube shows popular with children, and games popular among children. These accounts not only contained content that appeals to a child audience, but also contained comments from users who reported that they were younger than age 13.

4. **Appendix C** contains a full list of the materials I considered in forming my opinions. I retain the right to amend these opinions if I become aware of new information.

II. QUALIFICATIONS

5. I am a Professor of Marketing and the Stansky Teaching Excellence Faculty Fellow at New York University's Stern School of Business, New York. I also hold an affiliated appointment as a Professor in the New York University psychology department. I have held these positions since 2009. I received my B.Sc. (Honors Class I, University Medal), majoring in psychology, from the University of New South Wales, in Sydney, Australia, in 2004, and an M.A. and Ph.D. in social and cognitive psychology from Princeton University, in 2006 and 2009, respectively. At Princeton University, I held a Fellowship in the Woodrow Wilson Society of Scholars, and the Procter Dissertation Fellowship, awarded to a handful of Princeton graduate students across all disciplines each year. My academic career extends almost twenty-five years, including teaching positions at the University of New South Wales, Princeton University, and New York University's Stern School of Business. I have taught courses at undergraduate, graduate (MBA and executive MBA), and doctoral levels, and delivered dozens of lectures and keynotes at, among other institutions, Harvard University, Yale University, MIT, Stanford University, the University of Pennsylvania, Carnegie Mellon University, and the University of Chicago.

6. Among other topics, my research examines the design, features, and user experience associated with screen-based technologies, including a number of social media platforms. My early research on this topic culminated in the book IRRESISTIBLE, which I published in 2017, and which led to consulting and policymaking engagements on the topic of online engagement and behavior with various federal and state governments around the world, and a position as advisor to the World Economic Forum on Virtual and Augmented Reality, Artificial Intelligence, and Blockchain. During the eight years since the publication of IRRESISTIBLE, I have continued to teach, conduct research, and consult on related topics. Among other products of this work, I delivered a related TED talk at the TED2017 conference in Vancouver, Canada, which has been viewed over five million times, and was voted by TED as among the ten best talks of 2017. I have also written or been featured in various op-eds and popular translations of the ideas in IRRESISTIBLE, and on related topics, at outlets including *The New York Times*, *WIRED*, NPR, *The Washington Post*, *New Yorker*, *Popular Science*, and PBS.

7. Amidst my ongoing examination of screen-based technologies, I have developed a particular expertise in social media platforms. For the past fifteen years, I have examined, written about, and broadly consulted on, among other topics: the evolution of the social media marketplace; the nature of a broad range of social media platforms, including but not limited to Facebook and Instagram; the so-called "attention economy," and the tendency for social media companies to rely on acquiring and retaining the attention of their users to draw in advertisers (their chief form of revenue); and the particular vulnerability of young users to harm on, and overuse of, social media platforms. In the course of this research and consulting period, I have interviewed and discussed the experiences of, among others, numerous parents, young users, school administrators, teachers, and government policymakers. As such, I have more than a

decade of experience directly speaking to, interacting with, and gathering perceptions from a variety of public audiences on social media issues.

8. Much of this expertise in how social media platforms shape the lives of young users is grounded in a two-decade-long focus on childhood and adolescent social and cognitive psychology, including how cultural backgrounds shape childhood cognitive development,[2] how teens and adolescents cope with the intellectual and emotional challenges across athletic[3] and school-based environments,[4] and the relationship between intellectual capacity and the formation of stereotypes and group-based judgments.[5]

9. Particularly relevant to the domain of social media platforms, I have studied the differences between how adults interact with and respond to social media platforms relative to the responses of younger consumers; the extent to which younger consumers are particularly vulnerable to the various "hooks" in social media platforms designed to encourage engagement; and the sensitivity of such younger consumers to online social comparisons, bullying, body-image messaging, and various other psychologically damaging online experiences. This research has involved hundreds of interviews, visits to treatment facilities, and discussions with clinicians across the globe. During that time, I have also consulted with dozens of school districts, schools at all levels, parents, teachers, and administrators, as well as education policymakers and national and international government bodies across the world, including the European Parliament,

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2 Alter, A. L., & Kwan, V. S. (2009), "Cultural sharing in a global village: Evidence for extracultural cognition in European Americans," *Journal of Personality and Social Psychology*, 96(4):742-760.

3 Kappes, H., Alter, A. L., Edwards, G., & Berri, D. (2022), "Difficult training improves team performance: An empirical case study of US college basketball," *Behavioural Public Policy*, 6:554-577.

4 Alter, A. L., Aronson, J., Darley, J. M., Rodriguez, C., & Ruble, D. N. (2010), "Rising to the threat: Reducing stereotype threat by reframing the threat as a challenge," *Journal of Experimental Social Psychology*, 46:166-171.

5 Lick, D. J., Alter, A. L., & Freeman, J. B. (2018), "Superior pattern detectors efficiently learn, activate, apply, and update social stereotypes," *Journal of Experimental Psychology: General*, 147(2):209-227.

Australian Federal Government, and various levels of the U.S. government.

10. In addition to IRRESISTIBLE (Penguin Press, 2017), I am the author of DRUNK TANK PINK (Penguin Press, 2013), and ANATOMY OF A BREAKTHROUGH (Simon and Schuster, 2023), which broadly examine the forces that drive consumer behavior and human decision-making. These books are the culmination of decades of industry and academic research, and consulting engagements with dozens of firms and entrepreneurs.

11. My academic research also focuses on the social and cognitive psychology of human judgment and decision-making, including judgment and decision-making in consumer contexts. In this capacity, I have developed an expertise in behavioral research methodologies and design and have both studied and taught statistical and analytic techniques including, but not limited to, hypothesis testing, statistical comparisons and analysis, and multiple regression. Substantively, for almost two decades I have investigated the concept of cognitive fluency, defined as the ease or difficulty a person experiences when processing or making sense of information.[6] Among

[6] For examples of my published work that examine fluency and communication, see: Alter, A. L. (2013), *Drunk tank pink: And other unexpected forces that shape how we think, feel, and behave,* Penguin Publishing Group; Alter, A. L. (2017), *Irresistible: The rise of addictive technology and the business of keeping us hooked*, Penguin Press; Alter, A. L. (2023), *Anatomy of a breakthrough: How to get unstuck when it matters most*, Simon & Schuster; Oppenheimer, D. M., & Alter, A. L. (2014), "The search for moderators in disfluency research," *Applied Cognitive Psychology*, 28:502-504; Alter, A. L. (2013), "The benefits of cognitive disfluency," *Current Directions in Psychological Science*, 22:437-442; Laham, S. M., Koval, P., & Alter, A. L. (2012), "The name-pronunciation effect: Why people like Mr. Smith more than Mr. Colquhoun," *Journal of Experimental Social Psychology,* 48:752-756; Alter, A. L., & Oppenheimer, D. M. (2009), "Suppressing secrecy through metacognitive ease: Cognitive fluency encourages self-disclosure," *Psychological Science*, 20(11):1414-1420; Alter, A. L., & Oppenheimer, D. M. (2009), "Uniting the tribes of fluency to form a metacognitive nation," *Personality and Social Psychology Review*, 13(3):219-235; Laham, S. M., Alter, A. L., & Goodwin, G. P. (2009), "Easy on the mind, easy on the wrongdoer: Unexpectedly fluent violations are deemed less morally wrong," *Cognition*, 112:462-466; Alter, A. L., & Oppenheimer, D. M. (2008), "Easy on the mind, easy on the wallet: The roles of familiarity and processing fluency in valuation judgments," *Psychonomic Bulletin and Review*, 15(5):985-990; Alter, A. L., & Oppenheimer, D. M. (2008), "Effects of fluency on psychological distance and mental construal (or why New York is a large city, but *New York* is a civilized jungle)," *Psychological Science*, 19(2):161-167; Alter, A. L., Oppenheimer, D. M., Epley, N., & Eyre, R. N. (2007), "Overcoming intuition: Metacognitive difficulty activates analytic reasoning," *Journal of Experimental Psychology: General*, 136(4):569-576.

other issues, my work on fluency has examined how word choice and sentence structure influence communication and message comprehension, and how fluency influences perceptions of risk or safety and judgments of truth or falsity.[7]

12. I have also studied the psychology of deception and communication honesty in numerous contexts. Early in my career, I examined the predictors and behavioral cues associated with manipulative and deceptive communication in forensic settings, ultimately publishing papers that more broadly examined the role of intention, morality, and honesty in shaping judgment and decisions.[8] From this work, I developed a broader interest in the concept of deception and honesty in consumer and business contexts. I have studied, for example, when and why people tend to succumb to deceptive messaging,[9] and the conditions under which humans tend to become more deceptive or dishonest.[10] In the course of teaching thousands of MBA students, I have designed, revised, and taught many case studies that examine deception in corporate communications. Among these are cases focusing on Volkswagen, Coca Cola and Pepsi, Tylenol, and Tiger Woods. I also teach a case on marketing research techniques that are designed

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7 *See* Alter, A. L. (2013), *Drunk tank pink: And other unexpected forces that shape how we think, feel, and behave* (chs. 1-2), Penguin Publishing Group; Alter, A. L. (2023), *Anatomy of a breakthrough: how to get unstuck when it matters most* (chs. 3-5, 8), Simon & Schuster; Alter, A. L., & Oppenheimer, D. M. (2008), "Effects of fluency on psychological distance and mental construal (or why New York is a large city, but *New York* is a civilized jungle)," *Psychological Science*, 19(2):161-167. For a review of relevant literature, see: Alter, A. L., & Oppenheimer, D. M. (2009), "Uniting the tribes of fluency to form a metacognitive nation," *Personality and Social Psychology Review*, 13(3):219-235.

8 Alter, A. L., Kernochan, J., & Darley, J. M. (2007). "Morality influences how people apply the ignorance of the law defense," *Law and Society Review,* 41(4):819-864; Alter, A. L., Kernochan, J., & Darley, J. M. (2007), "Transgression wrongfulness outweighs its harmfulness as a determinant of sentence severity," *Law and Human Behavior*, 31(4):319-335.

9 Alter, A. L., & Oppenheimer, D. M. (2009), "Suppressing secrecy through metacognitive ease: Cognitive fluency encourages self-disclosure," *Psychological Science*, 20(11):1414-1420.

10 Sharma, E., Mazar, N., Alter, A. L., & Ariely, D. (2014), "Financial deprivation selectively shifts moral standards and compromises moral decisions," *Organizational Behavior and Human Decision Processes*, 123:90-100; Laham, S., Alter, A. L., & Goodwin, G. P. (2009), "Easy on the mind, easy on the wrongdoer: Unexpectedly fluent violations are deemed less morally wrong," *Cognition,* 112:462-466.

to weed out deceptive responses from consumers to ensure that companies are developing valid insights about the values, attitudes, and beliefs that drive how their consumers behave.

13. Though corporate communication is often designed for an individual consumer, much of my research, teaching, and consulting also examines the broader targets of such communications. These broader audiences are also capable of influencing the outcomes of companies, and so they are often the targets of corporate communication (whether deceptive or otherwise). Though consumers are sometimes individuals, the term "consumer" also includes businesses, policymakers, legislators, parents, and school district administrators, among others. Much of my research and writing—as well as many of the case studies I teach—have focused on these broader groups of consumers, and the nuances that shape corporate communication and deception as it applies to these audiences.

14. More broadly relevant to the central issues in this case, I have designed and taught courses on consumer psychology and marketing that have included case studies, literature, and theories related to corporate communications, brand management, and the role of language in business contexts. These case studies have focused on individuals and brands including, among others, Elon Musk, Apple, Campbell's, Nike, TimeWarner Cable, Budweiser, Peloton, McDonalds, Chipotle, and Cadbury. Though their subject matter varies, these case studies are united in their focus on image management at the level of individuals, brands, and organizations. I also teach the Product Strategy course for an online education organization called Section, and in that capacity have taught several thousand students. Aspects of that course, too, focus on communication and image management at the level of both individuals and brands.

15. I have received several recognitions for my teaching at NYU, including winning the Stern Distinguished Teaching Award in both 2020 and 2024, and winning the MBA-nominated

Distinguished Teaching Award in 2020. Additionally, I was a finalist for NYU's Distinguished Teaching Award in 2025.

16. I have published more than thirty academic journal articles, including original research and reviews, as well as a similar number of popular translations of academic work for publications including the *New York Times*, *New Yorker*, *Wall Street Journal*, *Washington Post*, *Economist*, *WIRED*, *Popular Science*, and *Atlantic*. I have served as an editor, and on the editorial boards, of several academic journals in the disciplines of marketing, consumer behavior, and psychology, including *Journal of Consumer Research, Journal of Consumer Psychology,* and *Journal of Experimental Social Psychology.* I am a Fellow of the Association for Psychological Science, and on the boards of the Psychology of Technology Institute, the Global Association of Applied Behavioral Scientists, and the Center for Digital Wellbeing.

17. I am also the principal of Moment Consulting, a marketing and business consulting firm. I have consulted, first as a sole proprietor, and more recently on behalf of my firm, for more than twenty years. In my capacity as a consultant, I have applied my academic research to a broad range of contexts across a variety of industries and markets. Among other companies and organizations, I have consulted for or advised Proctor and Gamble, Amazon, Google, Microsoft, Tripadvisor, Robinhood Foundation, DonorsChoose, Calm, Sony, LinkedIn, Citigroup, American Express, Goldman Sachs, TD Bank, Deloitte, Prudential, Fidelity, and J.P. Morgan. Broadly, this work has tended to focus on business and product strategy, and in my capacity as a consultant I have both analyzed and delivered strategic recommendations to a broad range of companies across many industries. As such, over the past two decades I have developed expertise discerning the nature, incentives, and structures of businesses and markets. Many of these consulting ventures inspired case studies that I have taught to thousands of MBA students

at NYU Stern, focusing on, among other topics, consumer communications, consumer behavior, market growth, product strategy, and company-wide strategic decision-making.

18. My complete curriculum vitae, and list of publications, is included as **Appendix A** to this report. I have been employed as an expert witness in approximately twenty legal matters. A list of cases in which I have testified as an expert witness in the last four years is included as **Appendix B**. Many of those cases have involved assignments that overlap substantially with my assignment in this matter. In particular, I have examined consumer deception, and how consumers understand and interpret company communications. As in the present case, the claims at issue were made to an audience that had either little or incomplete knowledge of the truth, and that risked financial and psychological losses, among other forms of loss, when relying on those representations. I have also examined the intended target audiences for various products, mirroring my analysis of the child-directed nature of Meta's platforms in the present case.

19. My compensation for work on this case is at my customary government-discounted rate of $1,170 per hour, and is not dependent on the outcome of this case, or on the opinions I express in this matter. Others at Global Business Experts Group ("GBX"), a litigation expert witness consultancy, performed part of the work for this assignment at my direction and under my supervision. The compensation that GBX receives is also not dependent on the outcome of this case. As part of my arrangement with GBX, I also receive a ten percent share of its billings for this case.

III. PARTIES

A. Plaintiffs: States

20. I understand that this multi-district suit is being prosecuted by a coalition of Attorneys General from 29 U.S. states: Arizona, California, Colorado, Connecticut, Delaware, Hawai'i,

Idaho, Illinois, [redacted] Kansas, Kentucky, Louisiana, Maine, Maryland, Minnesota, Nebraska, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Virginia, Washington, West Virginia and Wisconsin (together "Filing States").

B. Defendant: Meta

21. Meta, Inc. ("Meta") originally Facebook, Inc.[11] (as distinct from "Facebook," which refers to the Facebook social media platform) is a social media technology company incorporated in Delaware with headquarters in Menlo Park, California, that employs nearly 75,000 people.[12] Meta owns several social network platforms, including Facebook, Instagram, and Threads,[13] and messaging apps, such as WhatsApp, Meta Workplace, and Messenger Kids.[14] Meta also acquired Oculus, a virtual reality developer in 2014.[15] Facebook, Inc. changed its company name to Meta in 2021 as part of a company rebranding described as an expansion to "building the metaverse."[16] The company is frequently ranked as one of the most valuable tech companies in the world,[17] and, as of January 2025, is valued at nearly $1.8 trillion.[18] In 2023,

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[11] Throughout this report I use "Meta" to refer to the overarching company even during the period in which it was known as "Facebook" to avoid confusion with the platform "Facebook," as owned and operated by Meta.

[12] Meta, Oct. 28, 2021, "Introducing Meta: A Social Technology Company," *Meta*, https://about.fb.com/news/2021/10/facebook-company-is-now-meta/. Accessed July 14, 2025; Isaac, Mike & Eli, Tan, Jan. 31, 2025, "Meta Set To Explore Incorporating In A Different State," *The New York Times*, https://www.nytimes.com/2025/01/31/technology/meta-incorporation-delaware.html; Meta, Jan. 29, 2025, "Meta Reports Fourth Quarter And Full Year 2024 Results," *Meta*, https://investor.atmeta.com/investor-news/press-release-details/2025/Meta-Reports-Fourth-Quarter-and-Full-Year-2024-Results/default.aspx/. Accessed July 14, 2025.

[13] Isaac, Mike & Eli, Tan, Jan. 31, 2025, "Meta Set To Explore Incorporating In A Different State," *The New York Times,* https://www.nytimes.com/2025/01/31/technology/meta-incorporation-delaware.html.

[14] Meta, https://about.meta.com/company-info/; Meta, https://www.messengerkids.com.

[15] Meta, https://about.meta.com/company-info.

[16] Heath, Alex, Oct. 19, 2021, "Facebook Is Planning To Rebrand With A New Name," *The Verge*, https://www.theverge.com/2021/10/19/22735612/facebook-change-company-name-metaverse/.

[17] *See*, *e.g.*, Walsh, Ben & Randewich, Noel, Oct. 30, 2024, "The Magnificent Seven Monitor," *Reuters*, https://www.reuters.com/data/magnificent-seven-monitor-2024-10-30.

[18] *See*, *e.g.*, Walsh, Ben & Randewich, Noel, Oct. 30, 2024, "The Magnificent Seven Monitor," *Reuters*,

over 99% of Meta's revenue was earned through advertising.[19]

22. Meta was founded under the name "TheFacebook" in 2004, when current chairman and CEO Mark Zuckerberg launched the platform today known as Facebook.[20] Mr. Zuckerberg started TheFacebook as an online platform accessible only to Harvard students,[21] but by late 2004 access was extended to students from most U.S. and Canadian colleges and universities.[22] Within six months access expanded to most high school students as well as employees of Apple and Microsoft,[23] and the platform's name was shortened to "Facebook."[24]

23. By the third quarter of 2010, Facebook had 500 million monthly active users.[25] Its monthly active user count reached one billion in 2012, two billion in 2017, and three billion in 2023.[26] Facebook's mission, as described by Mark Zuckerberg in 2017, is to "[give] people the power to build community and bring the world closer together."[27] Meta's website states that the platform "helps you connect with friends, family, and communities of people who share your

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https://www.reuters.com/data/magnificent-seven-monitor-2024-10-30/; Patnaik, Subrat, Feb. 4, 2025, *Fortune*, https://fortune.com/2025/02/04/meta-adds-235-billion-value-longest-winning-streak-ever/

19 Meta, Feb. 1, 2024, "Meta Reports Fourth Quarter And Full Year 2023 Results; Initiates Quarterly Dividend," *Meta*, https://web.archive.org/web/20240202004957/https://investor.fb.com/investor-news/press-release-details/2024/Meta-Reports-Fourth-Quarter-and-Full-Year-2023-Results-Initiates-Quarterly-Dividend/default.aspx/. Accessed July 14, 2025.

20 https://about.meta.com/media-gallery/executives/mark-zuckerberg/.

21 Brandwatcher, Jan. 25, 2019, "The History Of Facebook: From Basic To Giant," *Brandwatch*, https://www.brandwatch.com/blog/history-of-facebook. Accessed July 14, 2025.

22 Brandwatcher, Jan. 25, 2019, "The History Of Facebook: From Basic To Giant," *Brandwatch*, https://www.brandwatch.com/blog/history-of-facebook. Accessed July 14, 2025.

23 Brandwatcher, Jan. 25, 2019, "The History Of Facebook: From Basic To Giant," *Brandwatch*, https://www.brandwatch.com/blog/history-of-facebook. Accessed July 14, 2025.

24 Brandwatcher, Jan. 25, 2019, "The History Of Facebook: From Basic To Giant," *Brandwatch*, https://www.brandwatch.com/blog/history-of-facebook. Accessed July 14, 2025.

25 Dixon, Stacie Joe, May 21, 2024, "Number of monthly active Facebook users worldwide as of 4th quarter 2023." *Statista*, https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/.

26 Dixon, Stacie Joe, May 21, 2024, "Number of monthly active Facebook users worldwide as of 4th quarter 2023." *Statista*, https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/.

27 Chaykowski, Kathleen, Jun. 22, 2017, "Mark Zukerberg Gives Facebook A New Mission," *Forbes*, https://www.forbes.com/sites/kathleenchaykowski/2017/06/22/mark-zuckerberg-gives-facebook-a-new-mission/.

interests."[28]

24. One of the defining features of Facebook is its central "Feed" (formerly, "News Feed"),[29] which is a "constantly updating list of stories in the middle of your home page" that includes "status updates, photos, videos, links, app activity and Likes from people, Pages and groups that you follow."[30] The contents of any user's feed are determined by an algorithm designed by Facebook that selects content in part on the basis of whether it will likely generate user engagement.[31] Facebook provides users the ability to create and share different kinds of content with each other on these feeds, including through "posts," which can consist of text, photos, videos, locations, friends, and status updates; "Reels," which are short videos; and "Stories," which are posts that are only available for 24 hours.[32] The platform also includes interactive features that allow users to give feedback on content shared by others in the form of "Comments," "Likes," and other emoji-based responses.[33]

25. In 2012, Meta acquired the photo-sharing social media company Instagram for $1 billion.[34] At that time, Instagram had been "one of the most downloaded applications on the

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28 Meta, https://about.meta.com/technologies/facebook-app/.

29 Facebook (@Facebook), "Starting today, our News Feed will now be known as "Feed." Happy scrolling!," Feb. 15, 2022 (11:09 AM), https://x.com/facebook/status/1493633545444675589/. Accessed July 14, 2025.

30 Facebook, "How Feed Works," https://www.facebook.com/help/1155510281178725/. Accessed July 14, 2025.

31 Meta, "How Facebook Distributes Content," *Meta*, https://www.facebook.com/business/help/718033381901819?id=208060977200861/. Accessed July 14, 2025; Facebook, "How Feed Works," *Facebook*, https://www.facebook.com/help/1155510281178725. Accessed July 14, 2025.

32 Facebook, "Share And Manage Posts On Your Profile," *Facebook*, https://www.facebook.com/help/1640261589632787/. Accessed July 14, 2025; Facebook, "Reels," *Facebook*, https://www.facebook.com/help/753046815962474/. Accessed July 14, 2025; and Facebook, "Stories," *Facebook*, https://www.facebook.com/help/862926927385914/. Accessed July 28, 2025.

33 Facebook, "Comment, Like or React," *Facebook*, https://www.facebook.com/help/1624177224568554/. Accessed July 14, 2025.

34 Meta, "Build The Future Of Human Connection And The Technology That Makes It Possible," *Meta*, https://about.meta.com/company-info/. Accessed July 14, 2025; Rusli, [redacted] "Facebook Buys Instagram for $1 Billion," *The New York Times*, https://archive.nytimes.com/dealbook.nytimes.com/2012/04/09/facebook-buys-instagram-for-1-billion/.

iPhone, with some 30 million users."[35] Instagram reached one billion monthly active users in June 2018.[36] Like Facebook, Instagram operates using an algorithm-driven feed, which it describes as:

> …a place where you can share and connect with the people and things you care about… the photos and videos we think you care about most will appear towards the top of your feed. In addition to seeing content from people you follow, you may also see suggested accounts that are relevant to your interests.[37]

Instagram also features short form videos ("Reels") and ephemeral Stories that disappear after 24 hours,[38] and allows its users to like and comment on posts.[39]

26. These apps individually and together attract a very large proportion of all social media users in the United States. In June 2024, Pew Research Center found that 70% of Americans had used Facebook and 50% had used Instagram.[40] Also in 2024, roughly 60% of teens reported using Instagram, while 32% of teens reported using Facebook.[41] Meta's own internal documents confirm this high level of use among teens and suggest that the company achieved roughly 90% "[Monthly Active People] Penetration" with ages 12-18.[42] The company also acknowledges that

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35 Rusli, [redacted] M., Apr. 9. 2012, "Facebook Buys Instagram for $1Billion," *The New York Times*, https://archive.nytimes.com/dealbook.nytimes.com/2012/04/09/facebook-buys-instagram-for-1-billion/.

36 Meta, "Build The Future Of Human Connection And The Technology That Makes It Possible," *Meta* https://about.meta.com/company-info/. Accessed July 14, 2025.

37 Instagram, "How Instagram Feed Works," *Instagram*, https://help.instagram.com/1986234648360433/. Accessed July 14, 2025.

38 Instagram, "Introducing Instagram Reels," *Instagram*, https://about.instagram.com/blog/announcements/introducing-instagram-reels-announcement/. Accessed July 14, 2025; Instagram, "Share Your Everyday Moments," *Instagram*, https://about.instagram.com/features/stories/. Accessed July 14, 2025.

39 Instagram, "Who Can Like Or Comment On Your Instagram Content," *Instagram*, https://help.instagram.com/486923551356292/?helpref=related_articles/. Accessed July 14, 2025.

40 Pew Research Center, Nov. 13, 2024, "Social Media Fact Sheet," *Pew Research Center*, https://www.pewresearch.org/internet/fact-sheet/social-media/.

41 Favaerio, Michelle & Sidoti, Olivia, Dec. 12, 2024, "Teens, Social Media and Technology 2024," *Pew Research Center*, https://www.pewresearch.org/internet/2024/12/12/teens-social-media-and-technology-2024/.

42 META3047MDL-003-00017806, "IG MAP Penetration by Birth Year Cohort." See also, META3047MDL-105-00000055), "Research POV on Revenue <> Growth strategy."

growth across its "Family of Apps" is largely driven by teens joining Instagram.[43] Despite the growth of competitors like Snapchat and TikTok, Facebook and Instagram are among the three most widely used social networks.[44]

[43] META3047MDL-105-00000055, "Research POV on Revenue <> Growth strategy," at slide 2. *See also* Deposition of Arturo Béjar, April 7, 2025, p. 185:6-8, ("…it was common knowledge that there were young kids using Instagram. And, I mean, that was a big reason behind the [acquisition].")

[44] Facebook has the largest, and Instagram the third largest, global monthly active user base among all social media platforms: Dixon. Stacy Jo, Mar 26, 2025, "Most Used Social Networks 2025, By Number Of Users," *Statista*, https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/.

PART 1: DECEPTION

IV. SCOPE OF ASSIGNMENT

A. Assignment

27. Plaintiffs in this case have asked me to assess public statements that Meta made about the health and safety impacts of its products. These statements fall into four general categories:

a. Statements related to Meta's prioritization of health and safety relative to its own business interests;

b. Statements related to the addictive nature (or lack thereof) of Meta's platforms;

c. Statements related to the occurrence of psychological and physical harm, including the prevalence of negative experiences; and

d. Statements related to the presence of U13s (or lack thereof) on Meta's platforms and related underage enforcement efforts.

28. With respect to each of the four categories of statements, I have been asked to determine:

a. the messages that a reasonable consumer would understand Meta to be conveying; and

b. whether these messages, affirmatively and/or through omission, would have the capacity or tendency to mislead a reasonable consumer, based on my consideration of factual assumptions provided by counsel, as well as my own review of internal Meta documents produced in discovery.

29. Additionally, I have been asked to determine whether these statements were likely to reach consumers, thereby affecting the extent to which young users access Meta's products.

B. Meta's statements about its platforms' impact on young users

30. I understand that Plaintiffs' allegations in this case are based on Meta's public statements that concern its platforms' safety, including impacts on young users' mental health and well-being. These public statements were made, for example, on Meta's websites, at congressional hearings, and in the press. For the purposes of my analysis, I have grouped the statements into four categories: (A) statements related to the extent to which Meta prioritized the safety and

well-being of its users; (B) statements related to the "addictive" nature of Meta's platforms (including statements refuting the claim that Meta's platforms are "addictive"); (C) statements related to the frequency of psychological and physical harm, including the prevalence of negative experiences, arising from the use of Meta's platforms; and (D) statements related to the presence (or refuting claims about the presence) of U13s on Meta's Facebook and Instagram platforms and related efforts to inhibit underage use.

V. APPROACH AND METHODOLOGY FOR PART 1 OF THIS REPORT

31. In reviewing and assessing Meta's external statements, including the function of those statements and their likely influence and impact on a reasonable consumer, I have applied a *social influence analysis*.[45] *Social influence* can be defined as the process of changing, directing, coordinating, or affecting the behavior, attitude, beliefs, perceptions, values, or feelings of others.[46] The social influence analytic framework comprises three main elements:

(1) a consideration of the broader context in which the statements were made, including contextual factors related to consumer perception, the industry, and the product type;

(2) an application of scientific research on persuasion techniques to company messaging content and goals, highlighting specific social influence tactics known to increase the effectiveness of persuasive communications;[47] and

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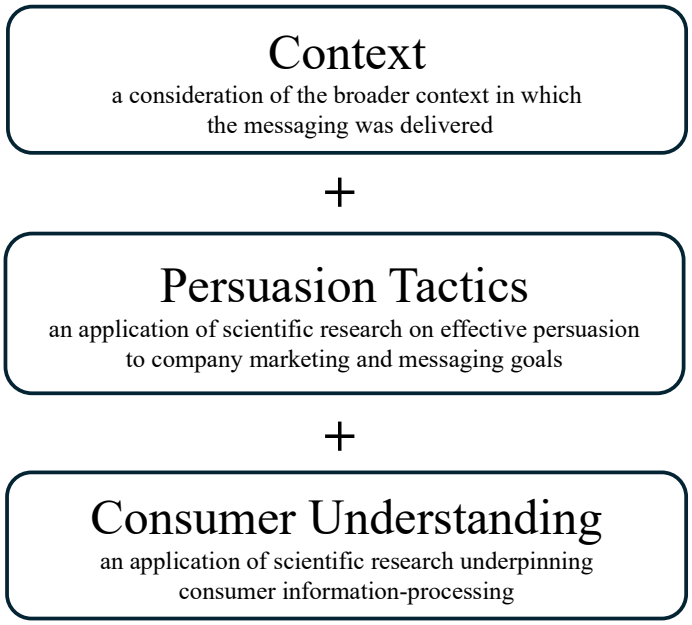
[45] Pratkanis, A. R. (2007), "Social influence analysis: An index of tactics," in Pratkanis, A. R. (Ed.), *The science of social influence: Advances and future progress* (pp. 17–82), Psychology Press.

[46] *See* Kramer, R. M. (2007), "Self-Defeating Leader Behavior," *The science of social influence: Advances and future progress* (pp. 233-252), Psychology Press, p. 234; Pratkanis, A. R. (2007), "Social influence analysis: An index of tactics," in Pratkanis, A. R. (Ed.), *The science of social influence: Advances and future progress* (pp. 17–82), Psychology Press. For discussions on specific influence tactics, see, for example, Cialdini, R.B. (1993), *Influence: Science and practice* (3rd ed.), HarperCollins; W. H. Freeman; Zimbardo, P. G., Ebbensen, E. B., & Maslach, C. (1977), *Influencing attitudes and changing behavior: An introduction to method, theory, and applications of social control and personal power* (2d ed.), Addison Wesley.

[47] Cialdini, R. B., & Goldstein, N. J. (2004), "Social influence: Compliance and conformity," *Annual Review of Psychology*, 55:591-621, https://doi.org/10.1146/annurev.psych.55.090902.142015; Greenwald, A. G., Brock, T. C., & Ostrom, T. M. (1968), *Psychological foundations of attitudes* (Eds.), Academic Press; Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953), *Communication and persuasion: psychological studies of opinion change*, New Haven: Yale University Press.

(3) an application of scientific research related to consumer information processing, as informed by the principles of influence and social influence analysis.

Figure 1. A summary of social influence analysis components



32. This analysis, the prongs of which are summarized in Figure 1, above, constitutes a scientifically grounded framework for analyzing how reasonable consumers[48] are influenced and persuaded by messaging. The three elements of this analysis, and the interplay between those elements, have been studied extensively by social and cognitive psychologists, and by marketing and business researchers. Researchers have documented the importance of all three elements in the analysis for interpreting and examining how people process information.[49] Social influence

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[48] From my perspective as an expert in consumer psychology, the notion of a "reasonable consumer" arises from an assessment of what the modal person might make of a situation—in other words, we try to understand what is descriptively normative (or "usual") given a set of circumstances. See Section VIII.D for more detail on the concept of a "reasonable consumer."

[49] *See, e.g.*, Benoit, W. L. (2015), *Accounts, excuses, and apologies: Image repair theory and research* (2d ed.), State University of New York Press, Chs. 1-3; Froehlich, R. & Rüdiger, B. "Framing political public relations: Measuring success of political communication strategies in Germany," *Public Relations Review*, 32:18-25, pp. 18-19; Granata, G., & Scozzese, G. (2019), "The actions of e-branding and content marketing to improve consumer relationships," *European Scientific Journal*, 15(1):58-72, pp. 61-63; Clarkson, M.B.E.

researchers have also investigated how and when social influence appeals tend to be effective, and the combined body of accumulated scientific knowledge has resulted in a robust set of principles applicable to analyzing a wide range of scenarios.[50] While the details of a given analysis always depend on the specific scenario under consideration, social influence analyses generally seek to examine who is influencing whom, what tools and techniques are employed in the course of exerting such influence, the context and conditions under which the influence occurs, and the intended and/or actual effects of those instances of intended influence.

33. Through the lens of this framework, I considered a wide range of materials in conducting my analysis. In addition to the relevant scientific and academic literature, I reviewed: deposition testimony and exhibits; legal filings relevant to this case; internal documents from Meta including presentations, emails, reports, research, surveys, spreadsheets, meeting notes, announcements, briefings, memos, and other forms of communication produced as part of this litigation; publicly-available sources including external statements from Meta, blog posts from Meta, posts on Meta's, Instagram's, and Facebook's respective help and transparency center websites, and Meta's public investor reports; news articles from sources such as the *Wall Street Journal*, *New York Times*, *BBC*, *The Verge* and others; magazines; other media coverage including interviews featuring Meta executives and other relevant individuals; social media posts

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(1995), "A stakeholder framework for analyzing and evaluating corporate social performance," *The Academy of Management Review*, 20(1):92-117, pp. 108-110; Kahneman, D. (2011), *Thinking, Fast and Slow*, Farrar, Straus and Giroux, Part II; Hassan, A., & Barber, S. J. (2021), "The effects of repetition frequency on the illusory truth effect," *Cognitive Research: Principles and Implications*, 6:38; Alter, A. L., & Oppenheimer, D. M. (2009), "Uniting the tribes of fluency to form a metacognitive nation," *Personality and Social Psychology Review*, 13:219-235.

[50] Cialdini, R. B., & Goldstein, N. J. (2004), "Social influence: Compliance and conformity," *Annual Review of Psychology*, 55:591-621; Tversky, A., & Kahneman, D. (1981), "The framing of decisions and the psychology of choice," *Science*, 211(4481): 453-458; Petty, R. E., & Cacioppo, J. T. (1986), "The elaboration likelihood model of persuasion," *Advances in Experimental Social Psychology*, 19:123-205; Chaiken, S. (1980), "Heuristic versus systematic information processing and the use of source versus message cues in persuasion," *Journal of Personality and Social Psychology*, 39(5), 752-766; Eagly, A. H., & Chaiken, S. (1993), *The psychology of attitudes*, Harcourt Brace Jovanovich College Publishers.

and videos; surveys; miscellaneous websites, including archived websites available on the Internet Archive; and other sources. As delineated in the Qualifications section above, as an expert in consumer psychology, consumer behavior, and marketing, I review and evaluate relevant research and evidence through the lens of my academic training, research, and industry experience.

34. Where I analyzed multiple sources of relevant evidence, my conclusions are based on a consideration of the full matrix of such sources. This approach facilitates what social scientists describe as the principle of *convergent validity*[51]—the ability to bolster conclusions and rule out alternate hypotheses or explanations through overlapping evidence. When researchers are able to study a phenomenon using multiple data sources, and the results from those sources point in the same direction and fail to contradict one another, those researchers are able to establish convergent validity through *triangulation*.[52]

35. As an example of triangulation relevant to my assignment in this matter, I considered evidence from: Meta's internal research, memos, and presentations that speak to the intended strategy and function of Meta's public messages; the contexts in which Meta chose to distribute those messages, and how the messages were likely to be understood by consumers; and I evaluated whether this evidence was consistent with the messages' impact as predicted by the theories that underpin persuasion and consumer information processing. Further, the large

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[51] Campbell, D. T., & Fiske, D. W. (1959), "Convergent and discriminant validation by the multitrait-multimethod matrix." *Psychological Bulletin*, 56(2): 81, p. 81; Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. (1966), *Unobtrusive measures: Nonreactive research in the social sciences*, Rand McNally; Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002), *Experimental and quasi-experimental designs for generalized causal inference*, Houghton Mifflin Company.

[52] Triangulation is the process of using multiple methodologies or data sources to study the same phenomenon. *See, e.g.*, Brender, J. (2006), "Framework for meta-assessment of assessment studies," in Brender, J., *Handbook of evaluation methods for health informatics* (pp. 253-320), Academic Press; Patton, M.Q. (1999), "Enhancing the quality and credibility of qualitative analysis," *Health Services Research*, 34(5):1189-1208.

volume of deposition testimony in this matter, much of which came from Meta's top executives, provided additional insight into the context and function of Meta's statements, their desired impact, the tactics Meta deemed effective, and the trade-offs it recognized in its business decisions. Each of these sources of evidence, and the full combination of those sources, informed my analysis of Meta's statements.

36. I also relied on my 25 years of consumer psychology and marketing experience, my own social science research studying social media platforms and marketplaces (which includes interviews and site visits over a period of approximately 12 years), and a variety of public sources as an additional basis for understanding the history and context of Meta's statements and their effect on the cognitive processing forces at play.

37. Finally, I have also reviewed and considered the Federal Trade Commission's ("FTC") 1983 Policy statement.[53] I understand that the FTC Policy Statement on Deception articulates a widely recognized framework for understanding how consumers interpret advertising. The FTC's guidance aligns with principles in consumer psychology and, where relevant, I have incorporated it into my evaluation of how Meta's statements are likely to impact a reasonable consumer.

38. The FTC observes that "certain categories of information [are] presumptively material…claims or omissions [are] material if they significantly involve health, safety, or other areas with which the reasonable consumer would be concerned."[54, 55] The FTC defines

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53 Federal Trade Commission, Oct. 14, 1983, "FTC Policy Statement on Deception," *FTC.gov*, (Hereafter, "FTC Policy Statement on Deception"). https://www.ftc.gov/system/files/documents/public_statements/410531/831014deceptionstmt.pdf.

54 FTC Policy Statement on Deception, p. 5.

55 With respect to omissions, the Commission states: "Some cases involve omission of material information, the

"material" to mean a "misrepresentation or practice…which is likely to affect a consumer's choice of or conduct regarding a product. In other words, it is information that is important to consumers."[56]

39. I note the FTC's directive that the Commission will examine "the entire mosaic, rather than each tile separately."[57] The theoretical point underlying this directive—namely, that deception may arise from an "entire mosaic" of messages rather than, or in addition to, specific individual messages—is an important and useful principle that aligns with my approach to deception as an expert in marketing and corporate communications. Moreover, my own experience and relevant literature dovetail with the FTC's observation that claims and omissions related to health and safety are presumptively material.

40. Thus, my analysis evaluates the nature of Meta's health and safety statements themselves, including explicit representations as well as omissions; examines the external evidence that speaks to how consumers are likely to interpret Meta's statements; and evaluates the overall

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disclosure of which is necessary to prevent the claim, practice, or sale from being misleading." (FTC Policy Statement on Deception, p. 2, fn. 9, referring to the Cigarette Rule Statement of Basis and Purpose, 29 FR 8324, 8352 (July 2, 1964), "The nature, appearance, or intended use of a product may create an impression on the mind of the consumer . . . and if the impression is false, and if the seller does not take adequate steps to correct it, he is responsible for an unlawful deception.") The Commission further notes that it will "find deception if there is a representation, omission or practice that is likely to mislead the consumer acting reasonably in the circumstances, to the consumer's detriment." In some cases, the Commission will find the representation itself will establish the meaning. "In other situations, the Commission will require extrinsic evidence that reasonable consumers reach the implied claims." (See FTC Policy Statement on Deception, p. 2.)

[56] FTC Policy Statement on Deception, p. 5, referring to The Commission's complaint in *Volkswagen of America*, 99 F.T.C. 446 (1982), which was based on provision of inaccurate instructions for oil filter installation, and American Law Institute, (1977), *Restatement (Second) of Torts*, which defines a material misrepresentation or omission as one which the reasonable person would regard as important in deciding how to act, or one which the maker knows that the recipient, because of his or her own peculiarities, is likely to consider important. (Section 538(2).) The Restatement explains that a material fact does not necessarily have to affect the finances of a transaction. "There are many more-or-less sentimental considerations that the ordinary man regards as important." (Comment on Clause 2(a)(d).)

[57] FTC Policy Statement on Deception, pp. 3-4, fn. 31, referring to *FTC v. Sterling Drug*, 317 F.2d 669, 674 (2d Cir. 1963).

consumer impression of the statements as "the entire mosaic."

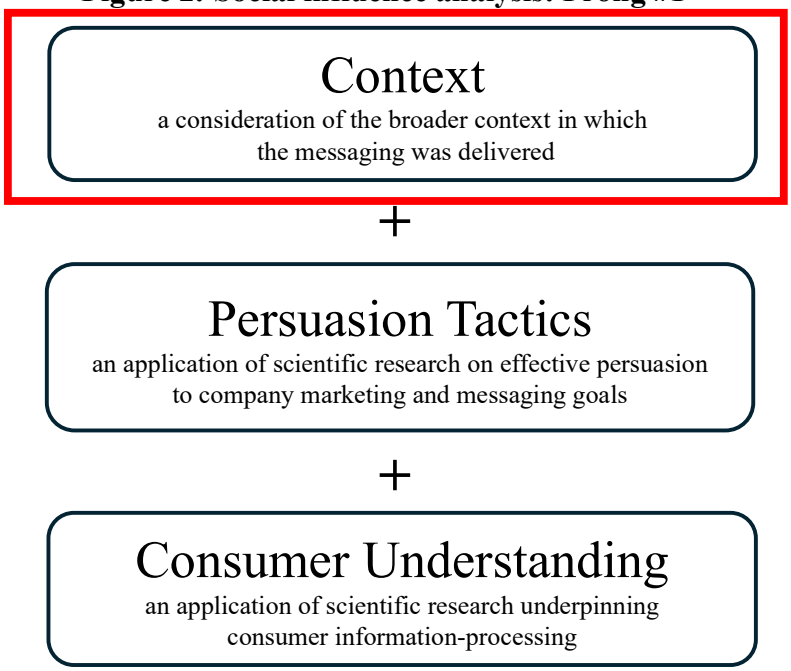
41. The opinions and conclusions I offer are grounded in methods that are widely accepted in the field. I hold these opinions and conclusions with a reasonable degree of scientific certainty.

VI. THE CONTEXT IN WHICH META'S STATEMENTS WERE MADE

42. In this subsection, I assess the broader context in which Meta made statements about its platforms. This assessment requires an understanding of the development of social media as a product category over time, the specific considerations of the social media platform consumer base, the specific traits of social media platforms as consumer products, and the evolving norms that described and continue to describe the use of social media in society. I also outline a model for assessing the various roles that different consumers—including parents and other interested parties—play in influencing social media use among young users, and how public information from social media companies informs these consumers and the decisions they made with respect to social media platforms.

43. As shown in Figure 2, below, assessing the context in which the statements were made comprises the first prong of the three-prong social influence analysis.

Figure 2. Social influence analysis: Prong #1



A. Social media is a rapidly-evolving, opaque product category

44. Social media platforms are rapidly-evolving and opaque technology products about which consumers have less information than do the products' manufacturers.

45. Social media usage grew rapidly and at an increasing pace beginning in the early 2000s, as more U.S. consumers joined, and spent more time using, social media platforms.[58] Facebook contributed to the market's growth, as it significantly outpaced earlier social media sites by gaining over a million users within just one year.[59] Major social media platforms became increasingly user friendly, driven in part by their growing presence on mobile smartphones.[60] Numerous other cultural and technological changes also contributed to the rising ubiquity of

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58 *See* 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.

59 Tidy, Joe, Feb 4, 2024, "Facebook At 20: Four Ways The App Changed The World," *BBC*, https://www.bbc.com/news/technology-68109208/.

60 Boyd, D.M., & Ellison, N. B. (2007), "Social network sites: Definition, history, and scholarship," *Journal of Computer-Mediated Communication*,13:210-230.

social media use among U.S. consumers, including the expansion of high-speed internet,[61] the growing pull of social media platforms as they attracted larger user bases (known broadly as network effects),[62] and the growing impact of online communication on public discourse.[63]

46. Within several years of Meta's acquisition of Instagram, over 50% of U.S. teens aged from 13–17 years, said they used Instagram;[64] by 2017, that number had grown to over 75%.[65] Meta's own records note that by 2019 Instagram had achieved near total (i.e., 90%) U.S. teen market penetration.[66] In a 2024 Pew Research Center survey, Instagram was reported as one of the top three social media platforms used among teens, with half of teens using Instagram daily, and one in five reporting being on the Instagram platform "almost constantly." [67]By 2024, Pew Research Center found that 70% of Americans had used Facebook and 50% had used Instagram.[68] Moreover, surveys indicated that 60% of teens had used Instagram, and 32% had used Facebook.[69] The use of social media is especially popular with teens in the U.S., who, according to Gallup, spend an average of more than 4.5 hours per day using social media

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61 See, for example, the upward trend in broadband access from 2000 to present day documented by Pew Research Center: Pew Research Center, November 13, 2024, "Internet, Broadband Fact Sheet," *Pew Research Center*, https://www.pewresearch.org/internet/fact-sheet/internet-broadband/.

62 See, for example, Belleflamme, P., & Peitz, M. (2018), "Platforms and network effects." In *Handbook of game theory and industrial organization*, volume II, pp. 286-317, Edward Elgar Publishing.

63 See, for example, Kim, R. M., Veselovsky, V., & Anderson, A. (2025), "Capturing dynamics in online public discourse: A case study of universal basic income discussions on reddit," In *Proceedings of the International AAAI Conference on Web and Social Media*, 19: 021-1037.

64 Lenhart, A. (2015) *Teens, Social Media & Technology Overview 2015*, *Pew Research Center.*, https://www.pewresearch.org/internet/2015/04/09/teens-social-media-technology-2015/.

65 The Associated Press, "Instagram and Snapchat are Most Popular Social Networks for Teens; Black Teens are Most Active on Social Media, Messaging Apps," *The Associated Press - NORC at the University of Chicago*, https://apnorc.org/ projects/instagram-and-snapchat-are-most-popular-social-networks-for-teens-black-teens-are-most-active-on-social-media-messaging-apps/.

66 META3047MDL-003-00003840, "Re: IG Growth – Saturation by Market," February 8, 2019, at 840.

67 Faverio, M. and Sidoti, O. (2024). *Teens, Social Media and Technology 2024*, Pew Research Center. https://www.pewresearch.org/internet/2024/12/12/teens-social-media-and-technology-2024/

68 Pew Research Center, "Social Media Fact Sheet," *Pew Research Center*, https://www.pewresearch.org/internet/fact-sheet/social-media/.

69 https://www.pewresearch.org/internet/2024/12/12/teens-social-media-and-technology-2024/arch Center.

platforms.[70]

47. Social media also represents an important source of news, with more than half of U.S. adults stating that they get news from social media at least sometimes.[71] Moreover, social media plays a central role in many domains of modern life, such as, among others, career development (*e.g.,* LinkedIn), customer service (*e.g.,* Facebook support), e-commerce (*e.g.,* influencer marketing), and education (*e.g.,* self-help videos on YouTube).

B. The nature and breadth of social media consumers

48. A comprehensive definition of social media "consumers" in the context of this matter has two components: the young users of social media products, and the audience or audiences of the public messaging that social media companies disseminate in relation to those products. Generally, laypeople tend to assume, implicitly, that purchasing and consumption predominantly involves a single individual buying and then consuming a specific product. In many contexts, however, companies pay attention to and intend to communicate with a far broader range of consumers, including, but not limited to: a) individuals or organizations that choose to pay for the product; b) individuals or organizations that actually use the product; c) individuals or organizations that influence which product is purchased (e.g., by shaping the behavior of buyers and users); d) individuals or organizations that shape the fortunes of firms by making policy decisions or introducing legislation that influences how those firms behave, and what products they can and cannot sell. Though such consumers are sometimes individuals, the term "consumer" can also include businesses, policymakers, legislators, parents, and school district

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[70] Rothwell, J., Oct. 13, 2023, "Teens Spend Average Of 4.8 Hours On Social Media Per Day," *GALLUP*, https://news.gallup.com/poll/512576/teens-spend-average-hours-social-media-per-day.aspx/.

[71] Pew Research Center, Sept. 17, 2024, "Social Media And News fact Sheet," *Pew Research Center*, https://www.pewresearch.org/journalism/fact-sheet/social-media-and-news-fact-sheet.

administrators, among others.

49. A model of consumer decision-making known as the "buying center model"[72] provides the conceptual resources for making this distinction. Originally proposed to explain the dynamics of industrial purchasing, the buying center model outlines a variety of different *roles* relevant to a given purchase or decision in a given market.[73] This set of roles relevantly includes *users*, *deciders,* and *influencers*.[74] In this model, a user actually uses the relevant product, a decider has the authority to make the purchase decision and governs how the user uses the product, and an influencer does not necessarily purchase the product but participates in the purchasing process to affect its outcome and/or how the product is used.[75]

50. Applied to the current case, the users vs. deciders/influencers distinction corresponds to the distinction between the young users of the relevant products (i.e., Facebook and Instagram), and other audiences of Meta's public messaging. Importantly, the full audience of Meta's messaging is much broader than young users alone, extending to include any person or organization with the capacity to make or influence decisions about social media use among young users. These include, for example, parents, educators and school boards, pediatricians and other healthcare professionals, public policy advocates, and government officials.[76] Meta's

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72 Webster, F. E., & Wind, Y. (1972), "A general model for understanding organizational buying behavior," *Journal of Marketing*, 36(2):12-19; Johnston, W. J., & Bonoma, T. V. (1981), "The buying center: Structure and interaction patterns," *Journal of Marketing*, 45(3):143-156.

73 Similar theoretical approaches have also been taken to explain the dynamics of family decision-making. *See, e.g.,* Davis, H. L. (1976), "Decision making within the household," *Journal of Consumer Research*, 2(4):241-260; Belch, M. A., & Willis, L. A. (2002), "Family decision at the turn of the century: Has the changing structure of households impacted the family decision-making process?," *Journal of Consumer Behavior*, 2(2):111-124.

74 Webster, F. E., & Wind, Y. (1972), "A general model for understanding organizational buying behavior," *Journal of Marketing*, 36(2):12-19 (p. 17).

75 Webster, F. E., & Wind, Y. (1972), "A general model for understanding organizational buying behavior," *Journal of Marketing*, 36(2):12-19 (p. 17).

76 These audiences have been identified in internal Meta documents as "US Policy Elites" and "Gen Pop >

public messaging has the capacity to affect the extent to which influencers and decisionmakers exercise caution regarding whether and the extent to which young users access Meta's platforms. Therefore, Meta's public messaging has the capacity to affect young users, even if young users themselves have limited or no direct exposure to those public messages.[77]

51. In this context, a public messaging strategy that is likely to be effective is one that is tailored to a range of different audiences with different interests, the members of many of which are not themselves users of the product at issue. Accordingly, an evaluation of how the "social media consumer" is likely to interpret public messaging from social media companies must include an examination of both direct product users, and a broader range of audience members who may or may not use the products themselves.

C. Social media is a credence good

52. One critical characteristic of the various audiences described above is that they have a limited capacity to establish the truth or accuracy of the claims that social media companies make regarding their platforms. Such products, where consumers cannot independently evaluate company-side claims, are known as credence goods. In contrast to credence goods, many ordinary consumer goods can be evaluated independently by consumers, who have access to and can draw inferences based on the attributes and benefits of those products, and the claims manufacturers make about the health and safety implications of using those products. In the case

Parents > Parents of Teens 13-14," to name two examples. See META3047MDL-019-00057825, "Public Affairs Marketing: U.S. Youth Well-Being Fall Campaign"; META3047MDL-019-00069311, "Parent Sentiment Priorities & Efforts to Align"; and META3047MDL-019-00069399, "Perceptions of Appropriate for Teens Ages 13-15 Years Old: Among Parents of Teens Ages 13-17," December 2022.

[77] See META3047MDL-019-00057825, "Public Affairs Marketing: U.S. Youth Well-Being Fall Campaign"; META3047MDL-019-00069311, "Parent Sentiment Priorities & Efforts to Align"; META3047MDL-019-00069399, "Perceptions of Appropriate for Teens Ages 13-15 Years Old: Among Parents of Teens Ages 13-17," December 2022.

of a *search good*, a consumer can inspect, research, and evaluate the product before the time of purchase, independently verifying product attribute claims made by the producer.[78] For example, a parent deciding on cutlery for his or her toddler can evaluate the safety-related attributes of a plastic knife prior to making a purchase, examining the knife's construction and blade sharpness, thereby vetting any manufacturer claims regarding the product's safety for children. Alternatively, an *experience good* is one that must be evaluated by the consumer after the purchase has been made.[79] For example, a parent purchasing a stepstool for his or her child advertised to support up to 50 lbs. must usually buy the stool in order to evaluate that claim. If the parent takes the stool home and it buckles under the weight of his or her child who weighs 45 lbs., then the parent may disregard future brand messaging from that manufacturer or even avoid the brand altogether.

53. However, for the class of products and services known as *credence goods* (or products with *credence attributes*),[80] it is difficult or impossible for consumers to evaluate the product or service even after they have purchased it, because they lack the knowledge, expertise or information necessary to conduct their own evaluations. Classic examples of credence goods include car repairs and healthcare.[81] Since car mechanics and healthcare providers have

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78 Nelson, P. (1970), "Information and consumer behavior," *Journal of Political Economy*: 78(2):311-329; Darby, M. R., & Karni, E. (1973), "Free competition and the optimal amount of fraud," *The Journal of Law & Economics*, 16(1):67–88.

79 Nelson, P. (1970), "Information and consumer behavior," *Journal of Political Economy*: 78(2):311-329; Darby, M. R., & Karni, E. (1973), "Free competition and the optimal amount of fraud," *The Journal of Law & Economics*, 16(1):67–88.

80 *See, e.g.*, Dulleck, U., & Kerschbamer, R. (2006), "On doctors, mechanics, and computer specialists: The economics of credence goods," *Journal of Economic Literature*, 44(1):5-42; Balafoutas, L., & Kerschbamer, R. (2020), "Credence goods in the literature: What the past fifteen years have taught us about fraud, incentives, and the role of institutions," *Journal of Behavioral and Experimental Finance*, 26:100285; Lassoued, R., & Hobbs, J. E. (2015), "Consumer confidence in credence attributes: The role of brand trust," *Food Policy*, 52:99-107.

81 Dulleck, U., & Kerschbamer, R. (2006), "On doctors, mechanics, and computer specialists: The economics of credence goods," *Journal of Economic Literature*, 44(1):5-42.

information and field-specific knowledge that the recipients of those services usually lack, those recipients are often not in a position to fully evaluate either the service once it is completed, or claims about which specific repairs or procedures were required. Lacking the ability to judge the veracity of a seller's claim, consumers of credence goods are often forced to trust the information provided to them.

54. Social media platforms are characterized by a number of features that make their safety particularly difficult for consumers to ascertain independently, and thus social media platforms qualify as credence goods. Among such features, they: a) have the potential to cause a number of psychological and physiological harms that are either invisible or difficult to perceive;[82] b) have the potential to cause a number of harms that are likely to accumulate over time, but are less likely to present acutely;[83] c) have the potential to cause a number of harms that are difficult for laypeople to diagnose or interpret;[84] d) have the potential to cause a number of harms that might

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[82] *See* Liu, M. et al. (2022), "Time spent on social media and risk of depression in adolescents: A dose-response meta-analysis," *International Journal of Environmental Research and Public Health*, 19(9)51-64; 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 (on the harms associated with social media); Faisal-Cury, A. et al. (2022), "Depression underdiagnosis: Prevalence and associated factors. A population-based study," *Journal of Psychiatric Research*, 151:157-165 (on the underdiagnosis of depression).

[83] *See* Liu, M. et al. (2022), "Time spent on social media and risk of depression in adolescents: A dose-response meta-analysis," *International Journal of Environmental Research and Public Health*, 19(9)51-64; 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 (on the harms associated with social media); Cleveland Clinic Health Library, Nov. 30, 2022, "Clinical depression (major depressive disorder)," https://my.clevelandclinic.org/health/diseases/24481-clinical-depression-major-depressive-disorder (on the chronic nature of depression); Cleveland Clinic Health Library, May 20, 2025, "Generalized anxiety disorder (GAD)," https://my.clevelandclinic.org/health/diseases/23940-generalized-anxiety-disorder-gad (on chronic nature of generalized anxiety).

[84] *See* Liu, M. et al. (2022), "Time spent on social media and risk of depression in adolescents: A dose-response meta-analysis," *International Journal of Environmental Research and Public Health*, 19(9)51-64; 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 (on the harms associated with social media); Jorm, A. F. (2000), "Mental health literacy: Public knowledge and beliefs about mental disorders," *British Journal of Psychiatry*, 177(5):396-401 (on the difficulty of recognizing depression).

be misinterpreted as stemming from other causes;[85] e) are relatively new products that have evolved rapidly, and that are relatively poorly understood by consumers at large;[86] and f) are products that have attracted sufficient ongoing research within social media companies, where only the company has access to the data necessary to evaluate the impacts of its product.[87] As such, consumers are more likely to rely on the statements social media companies make than they might be to rely on the statements from a company whose product is well-understood, has been on the market for many decades or longer, and whose potential harms are visible or otherwise easily gauged by the product's actual or potential consumers.

55. Importantly, any technology whose internal operations are to some extent opaque to the ordinary consumer will qualify as a credence good or as incorporating credence attributes. For example, recent research in this area has identified the outputs of algorithmic technology as credence goods.[88] Because most consumers lack the technical knowledge required to understand fully how complex technology operates, they cannot judge the quality, value, or safety of the technology themselves. In particular, there may be hidden elements of the technology with negative downstream effects that progress over time but which the consumer is unable to foresee. For example, consider an at-home genetic testing kit used to make health-related risk predictions. Because the results provided by such kits are based on several factors not well-understood by

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85 *See* Liu, M. et al. (2022), "Time spent on social media and risk of depression in adolescents: A dose-response meta-analysis," *International Journal of Environmental Research and Public Health*, 19(9)51-64; 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 (on the harms associated with social media); World Health Organization, Oct. 10, 2024, "Mental health of adolescents," https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health (on the many sources of mental health harms for teens).

86 Discussed in detail in Section VI.A, above.

87 Discussed in detail, for Meta, throughout Section X, below.

88 Biermann, J., Horton, J. J., & Walter, J. (2023), "Algorithmic advice as a credence good," *ZEW - Centre for European Economic Research Discussion Paper*, No. 22-071.

consumers, including the particular genetic testing methods and risk-prediction models used,[89] individual healthcare decisions based on those results—e.g., whether or not to schedule regular check-ups to monitor some issue—necessarily involve a significant degree of consumer trust. And since any limitations of the particular methods and models used are opaque to the consumer, there may be long-term consequences of relying on those genetic results that the consumer is unable to predict.

56. Beyond lacking the technical knowledge to fully understand how new or complex technology works, consumers are rarely privy to insights from internal (and undisclosed or unpublished) research and product development, or internal discussions surrounding the provider's goals or priorities. Because of this information asymmetry between the providers and the users of technology products, users must rely heavily on company messaging for their understanding of the technology's functions and full effects. Therefore, when developing and marketing a credence good, to avoid the risk of deception, companies should construct messages that recognize the information asymmetry that characterizes those goods, ensuring that such messages, in particular those related to health and safety, are accurate and transparent.

57. Given the complexity of social media platforms such as Facebook and Instagram and their rapidly evolving nature, there is considerable uncertainty among the consumer public in relation to those products. In particular, parents harbor considerable uncertainty regarding whether or when to permit their children to use social media platforms. In situations where consumers are constrained by uncertainty in this way, corporate messaging can play an

[89] Oh, B. (2019), "Direct-to-consumer genetic testing: advantages and pitfalls," *Genomics & Informatics*, 17(3):e33

especially impactful role in guiding public discourse and consumer decision-making.[90] In such cases, consumers tend to place considerable weight on a company's statements about the safety of its products, particularly when those products are credence goods.[91]

D. Uncertainty regarding the safety of social media platforms hampers consumer decision-making

58. Although social media is a ubiquitous component of U.S. culture today, the social media industry has evolved rapidly and considerably, and remains relatively new in its present form. Modern social media is unlike other major technological advances that have been embedded in society for generations, such as the car, telephone, and radio, and recent and current generations of young users are the first to experience social media as a central driver of their childhood and adolescent development. Consequently, parents today are among the first to decide when and to what extent to allow young users to use social media platforms, a process made more difficult by social media's status as a credence good. The relative novelty of social media platforms as a central component of modern life means that consumers have been hampered by a lack of information in forming sound opinions about the safety of those products.

59. This lack of information, and associated uncertainty among consumers, has had two distinct effects. First, in juggling Meta's own claims with increasing skepticism about the safety of social media platforms, even conscientious parents struggle to make informed decisions about the potential risks and benefits of allowing young users to use social media. Second, issues related to social media safety are more central than ever before to young consumers and their

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90 *See, e.g.*, Lassoued, R., & Hobbs, J. E. (2015), "Consumer confidence in credence attributes: The role of brand trust," *Food Policy*, 52:99-107.

91 Lassoued, R., & Hobbs, J. E. (2015), "Consumer confidence in credence attributes: The role of brand trust," *Food Policy*, 52:99-107.

parents. Both of these are likely to lead consumers to seek out information from sources that are perceived to have expertise related to these issues.

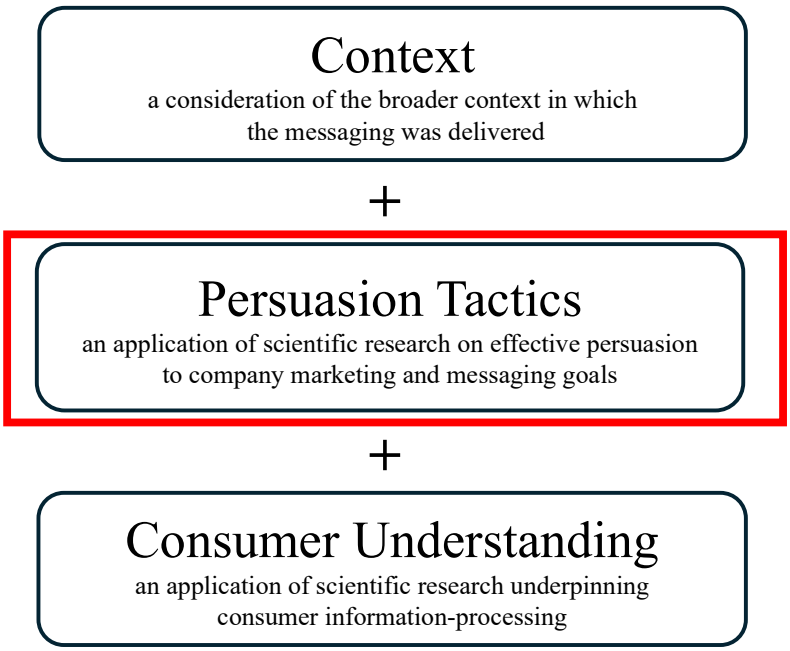
60. In the case of complex and rapidly evolving products, such as social media platforms, consumers typically put additional emphasis on information that is perceived as coming from a source that has relevant expertise on the subject. Examples of "expert" sources of information might include academic researchers, company leadership, and industry experts. In emerging fields, the company offering the relevant products is often perceived to hold the best position to offer information on their safety, as it is presumed to have "inside" information related to the products' effects.[92]

VII. PRINCIPLES OF EFFECTIVE PERSUASION

61. As described in the Approach and Methodology section above, and as shown in Figure 3, below, the second prong of the social influence analysis involves applying scientific research on corporate brand communication to highlight specific tactics that might be used to increase the persuasiveness of a company's messages. Public messaging is one of the most important tools for developing and maintaining a company's reputation and one of the most effective tools for influencing consumer decision-making.

[92] Hermalin, B. (2014), "Uncertainty and imperfect information in markets," *Handbook of the Economics of Risk and Uncertainty*, 1:263-384. See also the discussion of credence goods in the previous subsection.

Figure 3. Social influence analysis: Prong #2



A. Corporate communications play an important role in brand management

62. Fundamentally, a brand's purpose is to help consumers identify, evaluate, and choose among the goods or services available to those consumers in the marketplace.[93] A brand's core features and marketing activities contribute to overall awareness of the brand, as well as the formation of specific "brand associations"— including, among other components, ideas, impressions, and memories—in consumers' minds.[94] In the branding literature, the value to the company provided by the brand itself is referred to as *brand equity*.[95] Companies endeavor to

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93 *See, e.g.*, Kotler, P. (1994), *Marketing Management: Analysis, Planning, Implementation, and Control* (8th ed.), Prentice-Hall, Inc; American Marketing Association, "Branding," *American Marketing Association*, https://www.ama.org/topics/brand-and-branding/.

94 Keller, K. L. (1993), "Conceptualizing, measuring, and managing customer-based brand equity," *Journal of Marketing*, 57(1):1-22.

95 Keller, K. L. (1993), "Conceptualizing, measuring, and managing customer-based brand equity," *Journal of Marketing*, 57(1):1-22.

generate positive brand equity by promoting strong brand associations,[96] but unfavorable associations resulting from negative encounters with a brand or its products can also become attached to a brand in consumers' minds, resulting in *brand dilution.*[97] Because of the importance of maintaining a strong brand and avoiding brand dilution, companies often invest heavily in cultivating and maintaining positive brand associations in the minds of consumers, crafting their public-facing communications deliberately and carefully to project the image they desire.[98]

i. Public statements and brand management

63. In the for-profit marketplace, there is an inherent tension between the financial priorities that motivate companies, and the needs of their consumers. Whereas companies are driven to maximize their profits by extracting as much value as possible from consumers, consumers are driven to derive as much value as possible from the company and its products. Companies use brand imaging to persuade customers that the products manufactured and distributed by those companies are capable of delivering value. Consumers ultimately decide whether and how to engage with brands and the products associated with them, so companies devote considerable attention to crafting and disseminating messages that are designed to both enhance their brand image, and to promote the products themselves based on their underlying features. This messaging broadly includes both traditional marketing—including online and other advertisements—and public relations efforts.[99] Public relations communications include press

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96 Steckel, J. H., Klein, R., & Schussheim, S. (2006), "Dilution through the looking glass: A marketing look at the trademark dilution revision act of 2005," *The Trademark Reporter*, 96(3):616-638.

97 Loken, B., & Roedder John, D. (2010), "When do bad things happen to good brands? Understanding internal and external sources of brand dilution," *Brands and Brand Management: Contemporary Research Perspectives*, 233-270.

98 Kapferer, J. N. (2008), *The new strategic brand management: Creating and sustaining brand equity long term* (pp. 173-175), Kogan Page.

99 Keller, K. L. (2013), *Strategic brand management: Building, measuring, and managing brand equity* (4th ed.) (p. 246), Pearson.

releases, media interviews, newsletters or blog posts, executive statements, statements published on company websites, public testimony, and annual reports.

64. Companies use public statements strategically to develop, protect, or repair how consumers perceive their brands and products.[100] It is well-established that such linguistic communication—the use of language to communicate—is a goal-directed activity: beyond the mere transference of information, communication is often aimed at *doing* certain things such as *promising, requesting*, or *reassuring*. "Identity objectives," defined as attempts to present and preserve a desired self-image, are among the central goals of corporate communication.[101] In this way, a brand's public statements function as a core tool of brand management, with the primary aims of creating or reinforcing positive attitudes, and mitigating or erasing negative attitudes, in the minds of consumers.[102]

ii. Companies use a variety of tools to influence consumers' brand perception

65. Companies employ a range of specific strategies and tools designed to shape consumer perception through brand and product messaging. These include repetition of the company's key intended messages in the form of so-called "product drumbeats" and "proof points"—defined broadly as repeated claims that tout the benefits of the brand and its products—the dissemination of favorable metrics (and suppression of unfavorable metrics), agenda-setting with the aim of influencing media coverage and shaping the broader public discussion, and side-stepping criticism by, for example, deflecting responsibility or shifting responsibility to other parties.

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100 Benoit, W. L. (2015), *Accounts, excuses, and apologies: Image repair theory extended* (2d ed.), State University of New York Press.

101 Benoit, W. L. (2015), *Accounts, excuses, and apologies: Image repair theory extended* (2d ed.), State University of New York Press.

102 Benoit, W. L. (2015), *Accounts, excuses, and apologies: Image repair theory extended* (2d ed.), State University of New York Press.

When employed together to advance a particular narrative, these tactics tend to be persuasive, and can be harnessed to promote the benefits and qualities of a company's products, create positive associations with the company's brand, build credibility in the minds of consumers, and ultimately to shape consumer behavior.

a. Drumbeat messaging

66. Drumbeat messaging refers to a sustained communications strategy that ensures continuous, repeated exposure to key messages over time.[103] Sustained public relations strategies are effective for advertising as well as public health messaging,[104] and they tend to shape the news media cycle by drawing the public's attention to (and away from) certain topics.[105] Drumbeat messaging relies on repetition to increase the believability of relevant messages, which in turn renders those messages more persuasive.[106] Companies also routinely pre-test message options through focus groups and other market research methods, in order to determine how best to frame certain messages, what consumers found most persuasive or objectionable, and so on.[107]

67. A well-known example of the use of drumbeats to shape public interest in a brand and its products is Ford's reliance on its "Built Ford Tough" slogan, which has promoted the reliability and durability of its vehicles for nearly 50 years.[108] Drumbeat messaging can also be applied in

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103 York, Kyle, Feb. 19, 2020, "Drumbeat Marketing: Tell Your Story So Much That You Annoy Yourself," *How Brands Are Built*, https://howbrandsarebuilt.com/drumbeat-marketing-tell-your-story-so-much-that-you-annoy-yourself/. Accessed July 14, 2025.

104 Colston, D. C. et al. (2021), "Anti-smoking media campaigns and disparities in smoking cessation in the United States, 2001-2015," *American Journal of Health Promotion*, 35(5):658–668.

105 Froehlich, R., & Rüdiger, B. (2006), "Framing political public relations: Measuring success of political communication strategies in Germany," *Public Relations Review*, 32:18–25.

106 For a detailed explanation of how repetition increases believability, see Section VIII.B.ii below.

107 See, e.g., Brown, K. M., Lindenberger, J. H., & Bryant, C. A. (2008), "Using pretesting to ensure your messages and materials are on strategy," *Health Promotion Practice*, 9(2): 116-122.

108 Ford, "From The Road," *Ford*, https://media.ford.com/content/fordmedia/fna/us/en/news/2017/07/27/ford-celebrates-100-years-truck-history.html/. Accessed July 14, 2025.

more abstract ways, such as in Nike's famous "Just Do It" tagline, which established the brand as bold, and associated it with winning and dominance.[109] As discussed in more detail throughout Section X below, Meta's public relations strategy centrally involved the use of drumbeat messaging to advance Meta's preferred narrative surrounding health and safety on its platforms.

b. Proof points

68. Drumbeat messaging tends to be particularly effective when it contains apparent evidence used to reinforce company claims—a technique referred to as the use of "proof points."[110] A common example of the use of proof-points in advertising or brand messaging is the touting of crash-test and other safety evidence in automobile marketing.[111] Technology companies also commonly rely on proof-points in advertising (*e.g.,* performance specs for consumer technology products). Section X below outlines numerous instances in which Meta used proof-points to enhance the credibility of its messaging, including its proposal to hide "like" counts (known internally as "Project Daisy"),[112] its ban on cosmetic surgery filters,[113] its cooperation with experts,[114] its publication of community standards violations statistics,[115] the introduction of "well-being tools" (including Private By Default, Time Spent, Quiet Mode, etc.),[116] its

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109 Creative Review, "02: Nike (1987) - Just Do It," *Creative Review*, https://www.creativereview.co.uk/just-do-it-slogan/. Accessed July 14, 2025.

110 Granata, G. & Scozzese, G. (2019), "The actions of e-branding and content marketing to improve consumer relationships," *European Scientific Journal*, 15(1):58-72.

111 *See, e.g.*, Watson, L. et al. (2010), "Message content in Canadian automotive advertising: A role for regulation?," *Canadian Public Policy*, 36:S49-S67.

112 YouTube, "Why Instagram Is Considering Hiding Likes," See, e.g., https://www.youtube.com/watch?v=Dr82g6IYAdw. Accessed July 14, 2025.

113 BBC.com, Oct. 23, 2019, "Instagram Bans 'Cosmetic Surgery' Filters," *BBC.com*, See, e.g., https://www.bbc.com/news/business-50152053; Youtube, "Why Instagram Is Considering Hiding Likes," https://youtu.be/Dr82g6IYAdw?si=3K6lorqmY0_bUY9o&t=175. Accessed July 14, 2025.

114 Montgomery, Elaine, and Koros, Elaina, "Meta's Best Interests Of The Child Framework," See, for example, https://www.ttclabs.net/news/metas-best-interests-of-the-child-framework. Accessed July 14, 2025.

115 Meta, "Community Standards Enforcement Reports," *Meta*, See, e.g., https://transparency.meta.com/reports/community-standards-enforcement. Accessed July 14, 2025.

116 Raychoudhury, Pratiti, Nov. 5, 2021, "The WSJ Report Ignores Our Approach To Well-Being Research,"

investment in safety and security,[117] and others.

c. Favorable metrics

69. When selecting proof points to include in brand messaging, companies sometimes choose to share metrics that show their products, or the brand itself, in the most favorable light possible, while ignoring or omitting metrics that paint an unfavorable picture. For example, a company might tout its status as the fastest growing company in the sector, even if it is still the smallest in absolute terms among its set of competitors.

70. In more objectionable cases, brands may obfuscate or hide problematic evidence. For example, it is well-documented that the tobacco industry engaged in extensive efforts to dispute scientific evidence and create public controversy regarding the addictiveness of, and other harms associated with, cigarette-smoking.[118] For example, RJ Reynolds Tobacco Company CEO James Johnston testified in 1994 that "cigarettes and nicotine clearly do not meet the classic definition of addiction. There is no intoxication." He also testified that cigarettes were only habit-forming in the way one's "favorite foods" were. Five fellow CEOs testified that they also did not believe

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Meta, See, e.g., https://about.fb.com/news/2021/11/wsj-report-ignores-our-approach-to-well-being-research/. Accessed July 14, 2025; Ranadive, Ameet and Ginsberg, David, Aug. 1,2018, "New Tools To Manage Your Time On Facebook And Instagram," *Meta*, https://about.fb.com/news/2018/08/manage-your-time/. Accessed July 14, 2025; Montgomery, Elaine and Koros, Elaina, "Meta's Best Interest Of The Child Framework," *Meta*, https://www.ttclabs.net/news/metas-best-interests-of-the-child-framework. Accessed July 14, 2025; Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, p. 89.

[117] Mark Zukerberg's Post, Feb 4, 2019, *Facebook*, See, e.g., https://www.facebook.com/zuck/posts/10106411140260321. Accessed July 14, 2025; Meta, Sept. 21, 2021, "Our Progress Addressing Challenges And Innovating Responsibility," *Meta*, https://about.fb.com/news/2021/09/our-progress-addressing-challenges-and-innovating-responsibly. Accessed July 14, 2025; *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*: Hearing Before the S. Comm. On Com., Sci., & Transp., 117th Cong. 38-39 (2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf.

[118] *See, e.g.*, Bero, L. A. (2005), "Tobacco industry manipulation of research," *Public Health Reports*, 120(2):200-208. Saloojee, Y., & Dagli, E. (2000), "Tobacco industry tactics for resisting public policy on health," *Bulletin of the World Health Organization*, 78(7):902-910.

nicotine was addictive.[119] Yet, scientific evidence had been building since at least 1971 that cigarette use was addictive, culminating in strong scientific consensus by the 1980s.[120]

71. Researchers have also documented how the pharmaceutical industry misrepresented and misused scientific evidence to deny the addictiveness of opioids, including by widely disseminating a small number of favorable results.[121] As the discussion of Meta's Community Standards Enforcement Reports ("CSERs") and their associated "prevalence" metric in Section X.C shows, Meta's communications strategy regarding harmful experiences on its platforms relied on construing certain highly favorable metrics as key indicators of platform safety.

d. Agenda-setting

72. In addition to advancing specific points or messages through the use of drumbeat messaging, proof points, and favorable metrics, companies frequently attempt to guide public conversation at a high level, shaping public discourse to make it as favorable to their own aims as possible. Research has shown for decades that news media play a significant role in directing the public's attention toward or away from specific issues,[122] shaping the relevance to consumers of specific issues as well as how those issues are understood. By working to advance their own narrative in the news media through interviews, solicited stories, and other methods, companies can set the agenda on what it is and is not the focus of public interest. By controlling public

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119 Regulation of Tobacco Products (Part 1): Hearing before the House Committee on Energy and Commerce, Subcommittee on Health and the Environment, 103rd Cong. (1994), https://heinonline.org/HOL/LandingPage?handle=hein.cbhear/cbhearings12412&div=2&id=&page=www.pbs.org/wgbh/pages/frontline/shows/settlement/timelines/april94.html.

120 Dani, J. A., & Balfour, D. J. (2012), "Historical and current perspective on tobacco use and nicotine addiction," *Trends Neurosci*, 34(7):383-392, https://pmc.ncbi.nlm.nih.gov/articles/PMC3193858/.

121 *See., e.g.*, Gupta, R. et al. (2024), "The opioid industry's use of scientific evidence to advance claims about prescription opioid safety and effectiveness," *Health Affairs Scholar*, 2(10):qxae119.

122 Leonel, R., Lee, J. H., & Perrault, E. (2025), "Of shepherds and sheep: Who sets the agenda for firms' attention to social issues?," *Corporate Social Responsibility and Environmental Management*, 32:647-60.

discourse as much as possible, companies are able to tell the story they want to about their products and brand, increasing the likelihood that consumers will form a favorable perception of the company and be persuaded by the brand's core message.

73. Meta's internal discussions of "core narratives," for example, show a clear effort to set the agenda on well-being issues. As described in more detail in Section IX.C below, Meta developed a narrative centered on "well-being" that avoided addressing explicit concerns about mental health or safety, and instead advanced the message that, "Relationships are essential to our well-being. Meta platforms help people form and maintain relationships." [123] Another core narrative called "Good for the World" similarly emphasized that Meta's products "help build and strengthen connections," while avoiding more nuanced and robust criticisms of the platforms' effects on user's well-being.[124]

e. Side-stepping criticism

74. In order to maintain public focus on their preferred questions or preferred framing of those questions, companies sometimes deflect criticism without directly addressing the core issues raised by that criticism. For example, instead of directly addressing public criticism over layoffs, a company might respond to that criticism by noting that its employees receive excellent benefits and are generally happy in the workplace. Or rather than accept responsibility for a poor record of on-time delivery, a company that has been criticized for its poor product delivery record might respond by highlighting how its competitors are also subject to the same criticism,

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123 META3047MDL-022-00059669, "Brand Strategy: Positioning Meta as an innovative company that the world roots for," at 683; See also META3047MDL-019-00056633, "[DRAFT/WIP] Research Synthesis for Core Supporting Narrative (CSN) on Well-being (#7)".

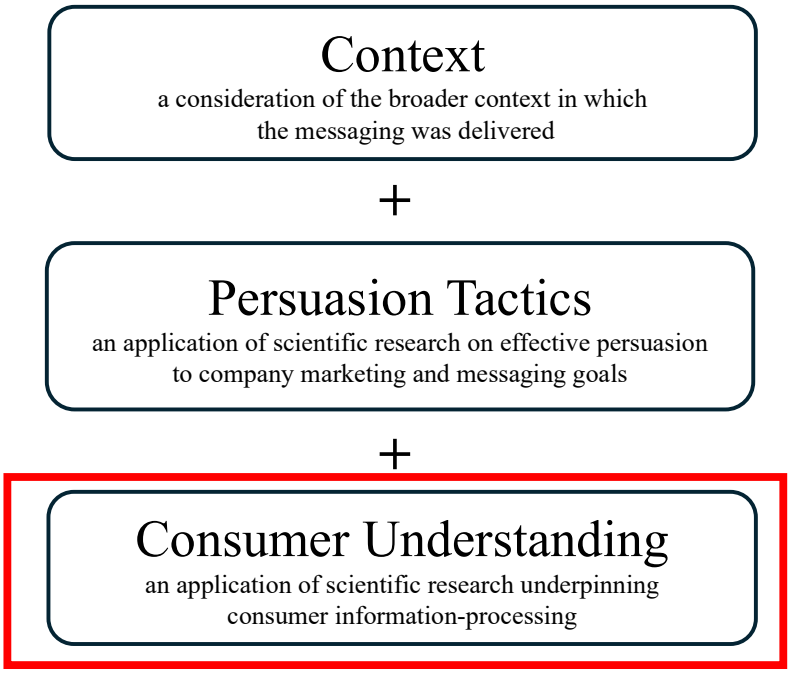
124 META3047MDL-022-00059669, "Brand Strategy: Positioning Meta as an innovative company that the world roots for," at 683.

and that late delivery appears to be an industry-wide problem. As outlined in more detail below, Meta has engaged in side-stepping when responding to public concerns about well-being on its platforms, particularly in public testimony to Congress.[125]

VIII. PRINCIPLES OF CONSUMER INFORMATION PROCESSING

75. The third prong of the social influence framework, as shown below in Figure 4, addresses the consumer perspective. Specifically, the third prong of the analysis is concerned with how consumers process and interpret persuasive communications in complex, uncertain information environments.

Figure 4. Social influence analysis: Prong #3



76. Importantly, while consumers are generally highly motivated to engage carefully with

[125] *See, e.g.,* Antigone Davis's responses to questions about harm on its platform from Senator Luján at *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*: Hearing Before the S. Comm. On Com., Sci., & Transp., 117th Cong. 38-39 (2021).

health and safety information and incorporate it into their decision-making,[126] their ability to do so effectively is often constrained by several factors, including the amount of information made available to them, the way(s) that information is communicated, and the degree of expertise required to understand and process that information fully. An appearance of openness and cooperativeness in corporate communications, a constant drumbeat of persuasive messaging, and high levels of complexity (characteristic of credence goods) all lead consumers to rely on background judgments about the communicative context (implicit assumptions) and processing cues when interpreting a brand's public statements.

A. Implicit assumptions

77. When conveying health and safety information to consumers, companies often try to adopt a communicative approach that casts those companies as transparent, cooperative, and willing to take responsibility for consumer well-being,[127] treating health and safety as a domain in which the company and consumers work together for the sake of mutual benefit and collective well-being. For example, Meta states that "[s]afety is a conversation and a responsibility we all share."[128] Similar language can be found on Instagram's safety website, which states "We collaborate with leading experts, trusted organizations, parents and young people in our shared mission to build positive online experiences for families." [129]

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126 *See, e.g.*, Nie, W., Medina-Lara, A., Williams, H., & Smith, R. (2021), "Do health, environmental and ethical concerns affect purchasing behavior? A meta-analysis and narrative review," *Social Sciences*, 10(11):1-24 (*see* p. 11 for a summary of the relevant primary results; see pp. 12 and 14 for visual representations of effects from the studies included in the meta-analysis); Urala, N., Arvola, A., & Lähteenmäki, L. (2003), "Strength of health-related claims and their perceived advantage," *International Journal of Food Science and Technology*, 38:815-826 (p. 816).

127 *See, e.g.*, discussion of a "proactive" posture towards stakeholders in Clarkson, M. B. E. (1995), "A stakeholder framework for analyzing and evaluating corporate social performance," *The Academy of Management Review*, 20(1):92-117, pp. 108-110.

128 Meta, "Safety Center," *Meta*, https://about.meta.com/actions/safety. Accessed July 14, 2025.

129 Instagram, "Keeping Instagram A Safe And Supportive Place," *Instagram*, https://about.instagram.com/safety. Accessed July 14, 2025.

78. Within social psychology, this type of social-relational structure is known as a "communal sharing" relationship, one of four fundamental relationship structures delineated by Relationship Models Theory.[130] In a communal sharing relationship model—as distinct from "authority ranking," "equality matching," or "market pricing" relationships[131]—there is an emphasis on unity and commonality within a group.[132] Importantly, Relationship Models Theory holds that different models tend to operate in different social contexts, and that parties with more power or legitimacy are often able to select which structure will characterize a particular interaction or relationship with less powerful parties.[133] From the perspective of corporate communications regarding health and safety, a communal sharing posture is effective because it creates the impression of genuine care, trustworthiness, and responsibility on the part of the company in relation to the broader "community" of consumers.

79. By treating health and safety communication as a kind of cooperative exchange between company and consumers, a communal sharing posture leads consumers to rely on certain implicit assumptions regarding what the company is permitted or required to say publicly. Contrasted against a strictly transactional context—including, for example, a transparent sales pitch—a communal sharing posture treats the primary goal of communication as informing, rather than persuading, consumers. Consequently, consumers are led to assume that the company's

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130 *See* Fiske, A. P. (1991), Structures of *social life*: The *four elementary forms of human relations: Communal sharing, authority ranking, equality matching, market pricing*, Free Press; Fiske, A. P. (1992), "The four elementary forms of sociality: Framework for a unified theory of social relations," Psychological Review, 99(4):689-723.

131 Fiske, A. P. (1992), "The four elementary forms of sociality: Framework for a unified theory of social relations," Psychological Review, 99(4):689-723.

132 Rai, T. S., & Fiske, A. P. (2011), "Moral psychology is relationship regulation: Moral motives for unity, hierarchy, equality, and proportionality," *Psychological Review*, 118(1):57-75.

133 Fiske, A. P. (1991), Structures of *social life*: The *four elementary forms of human relations: Communal sharing, authority ranking, equality matching, market pricing*, Free Press; Fiske, A. P. (1992), "The four elementary forms of sociality: Framework for a unified theory of social relations," Psychological Review, 99(4):689-723.

communications are generally both *truthful* and *complete.*

80. In the case of Meta's communications regarding health and safety issues surrounding its platforms, these implicit assumptions on the part of consumers are warranted. First, given social media's status as a credence good, reasonable consumers will expect Meta to share honest and accurate information that addresses any gaps in knowledge that consumers experience because they have limited access to information about the true nature of Meta's products. Second, consumers are generally aware that health and safety communication is subject to legal regulation and oversight aimed at protecting consumers from misinformation, meaning that the context is one in which a communal sharing posture would be a natural approach for a company as it complies with its legal and ethical obligations. Third, characteristic of the "attention economy" within which Meta's business operates,[134] the economic relationship between social media platforms and consumers is not straightforwardly transactional. In particular, consumers do not pay Meta to use Facebook or Instagram; instead, Meta relies on non-paying users to use their platforms enough to entice advertisers to place paid advertisements on those platforms. As such, it is reasonable for consumers to assume that providing truthful and complete health and safety information is also in Meta's own interest, since Meta's ability to generate revenue across time rests on its ability to build trust with and retain its user base.[135]

81. Research demonstrates that consumers tend to assume a product is safe by default, in

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134 *See, e.g.*, The John Hopkins Press; Center for Humane Technology, "The Attention Economy," https://www.humanetech.com/youth/the-attention-economy/. Accessed July 14, 2025.

135 The notion that protecting user safety is aligned with, rather than opposed to, Meta's business interests, is a position that Meta personnel have endorsed. For example, when Dr. Kyle Andrews was asked in deposition whether he agreed that social media companies should prioritize kids' safety over profits, Dr. Andrews responded, "So those two things go hand in hand. I think it's kind of a false dichotomy. If people use the platform, they make more money. And they're not going to use it if it's not a safe, enjoyable place to be." *See* Deposition of Kyle Andrews, November 19, 2024, at 158:10-14.

normal use, unless explicitly told otherwise.[136] Instances in which consumers had assumed no health risks, only to be alarmed by the revelation that there were, in fact, risks, include the widespread recognition of the dangers of asbestos in the 1970s[137] and, more recently, Johnson & Johnson's talc-based Baby Powder, a popular and seemingly safe product that has now been linked to cancer.[138]

82. By communicating false or misleading messages and/or selectively omitting information relevant to consumers' concerns or questions, a company can exploit the audience's implicit assumptions regarding truthfulness and completeness, and instill beliefs about health and safety that are favorable to the brand rather than the consumer. For example, in seeking out information related to how often users on Meta's platforms encounter harmful or violating content, consumers will implicitly assume both that Meta will not lie to them, and that the company will share any information directly relevant to that question. If, in response to that query, Meta informs consumers that it has run a set of surveys on that question and that the survey data shows that it happens infrequently, the natural conclusion for consumers to draw is that Meta has delivered as complete an answer as it is able to deliver, and that harmful or violating content is therefore encountered infrequently. Importantly, even if Meta conducted and faithfully reported the results of one particular survey, its choice to omit the results of other surveys that produced contradictory, damaging conclusions is misleading by omission, and violates the implicit

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136 *See, e.g.,* Levine, T. R. (2014), "Truth-Default Theory: A theory of human deception and deception detection," *Journal of Language and Social Psychology*, 33(4), 378–392.

137 *See, e.g.*, Johnson, Reg, Feb. 28, 1999, "Coming To Grips With A Legacy Of Asbestos," *The New York Times*, https://www.nytimes.com/1999/02/28/nyregion/coming-to-grips-with-a-legacy-of-asbestos.html/.

138 *See, e.g.*, Bendix, Aria, May 18, 2024, "Study Links Talc Use To Ovarian Cancer-A Potential Boon For Thousands Suing J&J," *NBC News*, https://www.nbcnews.com/health/cancer/talc-baby-powder-linked-ovarian-cancer-jj-lawsuit-rcna152493/; Girion, Lisa, Dec.14, 2018, "Johnson & Johnson Knew For Decades That Asbestos Lurked In Its Baby Powder," *Reuters*, https://www.reuters.com/investigates/special-report/johnsonandjohnson-cancer/.

assumption that the company has shared a complete picture of the evidence available to answer the question at issue.[139]

B. Processing cues

83. As discussed above, consumers are generally highly motivated to engage with health and safety information related to social media platforms, and to incorporate that information into their decision-making. The FTC's guidance that claims relating to health and safety are "presumptively material"[140] to consumers also recognizes that consumers find such information important, and are likely to be influenced it by it when making choices in the marketplace.

84. As a general psychological principle, higher levels of motivation tend to lead to more careful and systematic processing. Decades of psychological and behavioral research have established that when people are independently motivated to engage with a piece of persuasive messaging, they pay closer attention to and invest more cognitive effort in considering that information, and tend to integrate it more comprehensively into their pre-existing beliefs and attitudes.[141] Research has also found that motivated engagement with persuasive messaging tends to produce stronger, more enduring attitudes,[142] and that motivation is a crucial component in translating one's beliefs and attitudes into action.[143]

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139 See Section X.C below for further discussion.

140 FTC Policy Statement on Deception, p. 5.

141 *See, e.g.*, Petty, R. E., & Cacioppo, J. T. (1986), "The elaboration likelihood model of persuasion," *Advances in Experimental Social Psychology*, 19:123-205; Chaiken, S. (1980), "Heuristic versus systematic information processing and the use of source versus message cues in persuasion," *Journal of Personality and Social Psychology*, 39(5):752-766; Kahneman, D. (2011), *Thinking, Fast and Slow*, Farrar, Straus and Giroux.

142 Petty, R. E., & Briñol, P. (2012), "The elaboration likelihood model," *Handbook of Theories of Social Psychology*, Sage.

143 For a discussion of the "intention-behavior" gap and the role that motivation plays in bridging it, see, for example: Ajzen, I. (1991), "The theory of planned behavior," *Organizational Behavior and Human Decision Processes*, 50(2):179-211; Ajzen, I. (2012), "The theory of planned behavior," in Van Lange, P. A. M., Kruglanski, A. W., & Higgins, E. T. (Eds.), *Handbook of theories of social psychology* (pp. 438–459), Sage Publications Ltd.

85. However, human reasoners are still subject to cognitive limitations and have limited time to engage with any particular question. Moreover, as the discussion of credence goods in Section VI.C above shows, some products are too complex or opaque in their operations for consumers to understand fully, and may have long-term effects that consumers are not in a position to anticipate or detect independently. Given these constraints, consumers are forced to rely on certain simplifying processing cues (also called *heuristics*) to make sense of the information presented to them and to integrate it into their decision-making. Importantly, the reliance on such processing cues often happens without conscious awareness and thus cannot be discounted by consumers in shaping their judgements.[144]

86. In the case of Meta's public messaging regarding the safety of its platforms, consumers are likely to rely on several such cues in order to guide information-processing and to make decisions in a reasonably efficient way, including the *effort heuristic, fluency cues*, and a sense of *psychological distance* from the well-being implications of using social media platforms, which, in contrast to immediate or acute harms, may occur only gradually. Each of these is described in more detail below.

i. Effort heuristic

87. In numerous instances, Meta's public statements have communicated that the company invests significant effort and resources towards user health and safety initiatives.[145] Lacking the ability to independently evaluate platform safety for themselves, the reassurance that Meta is expending effort to engage with health and safety questions works to persuade consumers that

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144 *See, e.g.*, Nisbett, R. E., & Wilson, T. D. (1977), "Telling more than we can know: Verbal reports on mental processes." *Psychological Review*, *84*(3), 231; Tversky, A., & Kahneman, D. (1974), "Judgment under uncertainty: Heuristics and biases," *Science*, 185(4157):1124–1131; Alter, A. L. (2013), *Drunk tank pink: And other unexpected forces that shape how we think, feel, and behave,* Penguin Publishing Group.

145 *See, e.g.,* Table 3, Table 6.

Facebook and Instagram are safe for young users. In cognitive psychology, the "effort heuristic" describes a processing cue in which one's perception of how much time and effort was involved in producing a product, idea, or other output or outcome is used as an indicator of its quality or value.[146] Research providing initial empirical support for the effort heuristic examined judgments of artworks, and found that the more effort participants believed was involved in producing the artwork, the higher were their judgments of its quality.[147] Importantly, this research also found that the effort heuristic's influence on judgment was stronger in cases where quality was more ambiguous or difficult to judge.[148] Applied to consumer perception of corporate communications, this research suggests that public messaging promising or appearing to show significant effort in addressing some issue can be an effective tool for reassurance and maintaining positive sentiment, especially when consumers are not in a position to judge easily for themselves whether the company's actions are actually likely to lead to improvements.

88. As I will describe in more detail below, communications that appeal to this heuristic have been used by Meta in a variety of cases. For example, representatives from the company have touted the billions of dollars it has expended in the service of platform safety, and the tens of thousands of individuals it has directed to address platform safety and security,[149] and the company's self-described "industry-leading research program."[150] The company has also

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146 Kruger, J., Wirtz, D., Van Boven, L., & Altermatt, T. W. (2004), "The effort heuristic," *Journal of Experimental Social Psychology*, 40(1):91-98.

147 Kruger, J., Wirtz, D., Van Boven, L., & Altermatt, T. W. (2004), "The effort heuristic," *Journal of Experimental Social Psychology*, 40(1):91-98.

148 Kruger, J., Wirtz, D., Van Boven, L., & Altermatt, T. W. (2004), "The effort heuristic," *Journal of Experimental Social Psychology*, 40(1):91-98.

149 Meta, Sept. 21, 2021, "Our Progress Addressing Challenges And Innovating Responsibility," *Meta*, https://about.fb.com/news/2021/09/our-progress-addressing-challenges-and-innovating-responsibly. Accessed July 14, 2025.

150 Zuckerberg, Mark, Oct. 5,2021, "Mark Zukerberg's Post, *Facebook*, https://www.facebook.com/zuck/posts/10113961365418581/. Accessed July 14, 2025.

publicized a description of its method for selecting community guidelines which emphasizes diligence and care:

> These standards are based on feedback from people and the advice of experts in fields like technology, public safety and human rights. To ensure everyone's voice is valued, we take great care to create standards that include different views and beliefs, especially from people and communities that might otherwise be overlooked or marginalized.[151]

ii. Repetition and fluency

89. As internal documents show, Meta has intentionally taken a *drumbeat messaging* approach to disseminating information related to platform health and safety, providing a steady stream of persuasive messaging in order to assuage concerns about user well-being.[152] From an information-processing perspective, drumbeat messaging uses repetition to trigger fluency cues in consumers' minds, increasing the likelihood that Meta's messaging will be believed and remembered.

90. An extensive body of psychological research has established the principle that repetition cements belief: when people are exposed to a claim more than once, they are more likely to perceive that claim as true.[153] This effect of repetition, known in the literature as the "illusory truth effect," is extremely robust, and it has been demonstrated to occur even for highly implausible claims and for claims known to be false.[154] The most common explanation for how

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151 Meta, "Community Standards", *Meta*, https://transparency.meta.com/policies/community-standards/. Accessed July 14, 2025.

152 See Section X below.

153 Udry, J., & Barber, S. J. (2023), "The illusory truth effect: A review of how repetition increases belief in misinformation," *Current Opinion in Psychology*, 56:101736; Hassan, A., & Barber, S. J. (2021), "The effects of repetition frequency on the illusory truth effect," *Cognitive Research: Principles and Implications*, 6(38):1-12; Fazio, L. K. et al. (2015), "Knowledge does not protect against illusory truth," *Journal of Experimental Psychology: General*, 144(5):993-1002; Pennycook, G., Cannon, T. D., & Rand, D. G. (2018), "Prior exposure increases perceived accuracy of fake news," *Journal of Experimental Psychology: General*, 147(12):1865-1880.

154 Hassan, A., & Barber, S. J. (2021), "The effects of repetition frequency on the illusory truth effect," *Cognitive*

this occurs appeals to the notion of *processing fluency*, which refers to a subjective psychological experience of ease or familiarity.[155] Broadly, when information is repeated, it is more likely to feel familiar, which in turn makes it more likely to be interpreted as credible and judged to be true.[156]

91. In addition to whether the message was repeated, characteristics of the message itself can also enhance processing fluency, leading to downstream effects on consumers' perceptions and behavior. For example, a study on scientific communication related to emerging technologies found that messaging that strives to "facilitate an easy processing experience" (by, e.g., reducing jargon) is generally more persuasive, reduces perceptions of risk, and increases adoption of the relevant technology.[157]

iii. Psychological distance

92. In the case of health and safety communications regarding a credence good, such as Meta's public statements regarding the safety of its platforms, consumers' lack of expertise can lead to a sense of *psychological distance*—a felt sense of distance from a given stimulus in "abstract psychological space"[158]— between the consumer and any negative effects associated

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Research: Principles and Implications, 6(38):1-12; Lacassagne, D., Béna, J., & Corneille, O. (2022), "Is Earth a perfect square? Repetition increases the perceived truth of highly implausible statements," *Cognition*, 223:105052; Fazio, L. K. et al. (2015), "Knowledge does not protect against illusory truth," *Journal of Experimental Psychology: General*, 144(5):993-1002.

155 Hassan, A., & Barber, S. J. (2021), "The effects of repetition frequency on the illusory truth effect," *Cognitive Research: Principles and Implications*, 6(38):1-12 (p. 2). For a detailed discussion of processing fluency and a review of research on fluency effects, see: Alter, A. L., & Oppenheimer, D. M. (2009), "Uniting the tribes of fluency to form a metacognitive nation," *Personality and Social Psychology Review*, 13(3):219-235.

156 Alter, A. L., & Oppenheimer, D. M. (2009), "Uniting the tribes of fluency to form a metacognitive nation," *Personality and Social Psychology Review*, 13(3):219-235.

157 Bullock, O. M., Colón Amill, D., Shulman, H. C., & Dixon, G. N. (2019), "Jargon as a barrier to effective science communication: Evidence from metacognition," *Public Understanding of Science*, 28(7):845-853; Oppenheimer, D. M. (2006), "Consequences of erudite vernacular utilized irrespective of necessity: Problems with using long words needlessly." *Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition*, *20*(2), 139-156.

158 Alter, A. L., & Oppenheimer, D. M. (2008), "Effects of fluency on psychological distance and mental

with use of the product. Because consumers do not have the inside knowledge or expertise to predict long-term effects, possible negative outcomes are likely to seem less clear, vivid, and/or pressing. Because of this psychological distance, consumers are more likely to be persuaded by corporate messaging that denies or downplays those outcomes.

93. Research on psychological distance indicates that the more psychological distance is perceived from a stimulus, the more likely individuals are to focus on that stimulus' abstract rather than concrete characteristics or dimensions.[159] In general, *construal theory* holds that people perceive the world as existing along a continuum ranging from concrete (specific and local) to abstract (global and/or distant),[160] and that as individuals experience more distance from a given object, they increasingly focus on its abstract properties.[161] For example, research has found that when participants merely perceive a stimulus to be located far away (even if, as in the case of some studies,[162] the object in question was actually located just in the next room), they tend to describe that stimulus with more abstract language.[163] Importantly, while a sense of psychological distance can emerge from perceptions of *spatial* or *physical* distance—as in the

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construal (or why New York is a large city, but *New York* is a civilized jungle)," *Psychological Science*, 19(2):161-167. *See also* Liberman, N., Trope, Y., & Stephan, E. (2007), "Psychological distance," in Higgins, E. T., & Kruglanski, A. W. (2d ed.), *Social psychology: A handbook of basic principles* (pp. 353-383), The Guilford Press.

159 Alter, A. L., & Oppenheimer, D. M. (2008), "Effects of fluency on psychological distance and mental construal (or why New York is a large city, but *New York* is a civilized jungle)," *Psychological Science*, 19(2):161-167. *See also* Liberman, N., Trope, Y., & Stephan, E. (2007), "Psychological distance," in Higgins, E. T., & Kruglanski, A. W. (2d ed.), *Social psychology: A handbook of basic principles* (pp. 353-383), The Guilford Press.

160 Alter, A. L., & Oppenheimer, D. M. (2008), "Effects of fluency on psychological distance and mental construal (or why New York is a large city, but *New York* is a civilized jungle)," *Psychological Science*, 19(2):161-167. *See also* Trope, Y., & Liberman, N. (2003), "Temporal construal." *Psychological Review*, 110(3): 403-421.

161 Henderson, M. D., Fujita, K., Trope, Y., & Liberman, N. (2006), "Transcending the 'here': The effect of spatial distance on social judgment," *Journal of Personality and Social Psychology*, 91(5):845–856.

162 Fujita, K. et al. (2006), "Spatial distance and mental construal of social events," *Psychological Science*, 17(4):278–282.

163 Fujita, K. et al. (2006), "Spatial distance and mental construal of social events," *Psychological Science*, 17(4):278–282.

example described above—feelings of psychological distance are also associated with perceptions of *temporal*, *social*, or *probabilistic* distance.[164]

94. In the case of threat perception, psychological distance is associated with a perceived lack of immediacy. For example, while most people are aware of and accept the threat of climate change, the actual concrete consequences of global warming remain largely murky and distant, and are certainly not felt as urgent or pressing enough to produce large-scale cooperative action aimed at mitigating those consequences.[165] Humans are much more adept at focusing on the moderate, localized and specific devastation of fires or a major earthquake, and less able to be moved by the comparatively abstract, slower-paced threat of global devastation.[166]

95. Similarly, while there is now increased public discourse surrounding the potential harms associated with social media use, most consumers still lack the expertise to understand the issues fully, and as such these potential harms may still seem far off, murky, or not well-understood. Because these threats appear more abstract, public statements downplaying harm are more likely to be accepted by consumers and used as a reason to dismiss their own or others' possible concerns. Concrete threats require specific solutions and plans of action to resolve, while abstract threats can often be quelled by simple reassurance.

C. Consumer comprehension of message gist

96. Consistent with the guidance provided by the FTC's 1983 Policy Statement that

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164 Alter, A. L., & Oppenheimer, D. M. (2008), "Effects of fluency on psychological distance and mental construal (or why New York is a large city, but *New York* is a civilized jungle)," *Psychological Science*, 19(2):161-167.

165 For a discussion in the popular press of the lack of perceived immediacy associated with the threat of climate change, *see* Alter, Adam, Nov. 21, 2012, "Global Warming: The Psychology Of Ignoring A Superthreat," *The Huffington Post,* https://www.huffpost.com/entry/global-warming-denial-psychology_b_2170419/.

166 Alter, Adam, Nov. 21, 2012, "Global Warming: The Psychology Of Ignoring A Superthreat," *The Huffington Post,* https://www.huffpost.com/entry/global-warming-denial-psychology_b_2170419/.

consumer impressions should be evaluated according to the "entire mosaic" of information conveyed to those consumers,[167] academic research on linguistic processing has shown that individuals tend to distill central messages—a mosaic of meaning—from a set of statements or claims. For example, research shows that syntactic information (i.e., the grammatical structure of a specific sentence) tends to fade in people's minds much more easily than does semantic information (i.e., information about meaning).[168] In general, linguistic comprehension occurs through largely automatic processing in which a network of ideas or propositions activated by the syntax is knit together to form a semantic "gist."[169]

97. Those gists are then liable to be transmitted to other people. Thus, even consumers who were never exposed to the particular form of a given message when it was originally communicated may still be exposed to that message as it diffuses throughout consumer audiences. In the case of Meta's health and safety communications, the gists consumers would have gleaned correspond to several central *claims* Meta representatives have made about the company and its platforms. These include, for example, the claims that Meta prioritizes user well-being over profit (*see* Section X.A), that its platforms are not addictive nor designed to be addictive (*see* Section XB), that the frequency of negative or harmful user experiences is as low as Meta's CSER data suggests (*see* Section X.C), and that U13s are not on the platform and Meta effectively inhibits U13 use (*see* Section X.D).

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[167] Federal Trade Commission. (1983). *FTC Policy Statement on Deception.* See also Section V, above.

[168] *See, e.g.*, Bransford, J. D., & Franks, J. J. (1971), "The abstraction of linguistic ideas," *Cognitive Psychology*, 2(4):331-350; Sachs, J. S. (1967), "Recognition memory for syntactic and semantic aspects of connected discourse," *Perception & Psychophysics*, 2(9):437–442.

[169] Kintsch, W. (1988), "The role of knowledge in discourse comprehension: A construction–integration model," *Psychological Review*, 95(2):163–182.

D. The "reasonable consumer"

98. I understand that the legal test for assessing whether a particular set of corporate communications has the tendency to mislead consumers involves asking how a "reasonable consumer" would process and interpret those communications, and, in some instances, also whether and how that message, so received, would influence that consumer's decision-making processes.[170]

99. While the term "reasonable consumer" is not typically used in psychological or behavioral research, reliance on the kinds of implicit assumptions and processing cues described above *is* characteristic of the behavior of reasonable consumers, especially in response to the kind of complex, uncertain information environment within which Meta's users find themselves. A "reasonable consumer," from an information-processing perspective, is one who interprets corporate communications in a manner consistent with the principles of social and cognitive psychology, and who does not have the time or cognitive capacity to closely examine every message in detail for obfuscations or possible omissions. A reasonable consumer will also likely retain only the gist of a message or set of messages, rather than the specific syntax of individual messages. Because of this, consumers do not need to be exposed to precisely the same constellation of messages in order to derive the same general gist of meaning from a set of public statements.

100. Moreover, the academic literature in social and cognitive behavioral science is devoted to describing how the median or modal individual might behave under a given set of circumstances. The statistical techniques used in those fields are described as measures of central tendency, and

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170 "Federal Trade Commission Act Section 5: Unfair or Deceptive Acts or Practices" in *Consumer Compliance Handbook*, accessed at https://www.federalreserve.gov/boarddocs/supmanual/cch/200806/ftca.pdf, p. 9.

they are designed to capture how typical members of the sample population behave. The insights gleaned from these bodies of research are valuable in forensic contexts precisely because they illuminate how reasonable people think, decide, or behave in response to specific messages or other stimuli.

IX. THE FUNCTION AND GOALS OF META'S HEALTH AND SAFETY STATEMENTS

101. In this and the following sections, I apply the considerations and principles from the three-part social influence analysis described above, drawing conclusions regarding the function and goals of Meta's public statements as well as how those statements were likely to have been understood by consumers. More specifically, I analyze Meta's public relations strategy and external communications from a perspective that integrates an understanding of social context, corporate persuasion tactics, and principles of consumer information processing. On the basis of this analysis, I explain the overall messages conveyed by Meta's statements as well as whether those messages had the tendency to mislead reasonable consumers. The conclusions produced by this analysis are grounded in a wide array of sources and evidence, including internal Meta documents and discussion, deposition testimony, scientific research and principles, personal knowledge and experience, and a variety of other publicly available sources.

102. First, in this section, I consider the function and goals of Meta's public communications related to health and safety. In particular, I explain that Meta was aware that potential negative impacts on the health and safety of its platforms' users were major concerns for parents and teens, and its knowledge of those concerns informed its communications strategy. Meta knew that uncertainty or concern among parents and teens about platform safety could hamper its platforms' user growth, engagement, and, ultimately, Meta's bottom line. Thus, to protect its

brand and long-term viability as a company, Meta sought to disseminate messaging that would shape consumer perceptions of its platforms' health and safety in the company's favor.

A. Meta was aware of consumers' concerns regarding platform safety

103. Within the broader context of the rise of social media, Meta was aware of the growing concerns consumers harbored about the overall safety and suitability of the platforms for teens. It studiously researched and tracked safety concerns, as well as the overall brand sentiment towards its platforms among teens and parents.[171] Results from this research appeared in slide decks such as Instagram's "Youth & Well-Being Narrative Research" deck from 2022, which claimed to build upon the company's research on well-being, offered insights into different audiences (including teens, parents, and news-informed individuals), and was "designed to build a messaging strategy on top of those learnings to progress [the company's] corporate and IG marketing and comms goals…"[172] Further, Meta routinely considered these concerns when making corporate decisions about external messaging, product design, product marketing, and the overall positioning of its platforms with the public.

i. Public data demonstrate parents' and teens' concerns about social media

104. In recent years, public surveys have indicated that parents are concerned about their children's social media and technology use. For example, a 2016 survey from Common Sense Media that collected responses from 1,786 parents of children aged 8 to 18 years found that "56 percent of parents are concerned that their children may become addicted to technology."[173] A 2018 survey from the Pew Research Center based on a sample of 1,058 parents who have a teen

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171 See, for example, META3047MDL-047-00006936, "Youth and Well-Being Narrative," February 17, 2022, at slide 8.

172 Deposition of Wendy Gross, PhD, January 28, 2025, 208:2-21, Exhibit 18, p. 4.

173 META3047MDL-037-00052143, "The Common Sense Census: Plugged-in Parents of Tweens and Teens," 2016, at 168.

found a "majority of parents are concerned about the types of experiences their teen might encounter online. Roughly two-thirds of parents of teens (65%) say they worry at least some about their teen spending too much time in front of screens, including a third who worry a lot about this."[174]

105. As to social media more specifically, a 2022 Pew Research Center survey collected data from 1,316 parents of teens, and found that 46% of those parents reported being extremely or very concerned that their teens would encounter explicit content, while nearly a third were extremely or very worried that their teens would be bullied or harassed or experience problems with anxiety or depression.[175] A follow-up Pew survey of 1,391 parents and their teens conducted in 2024 similarly found that, among parents who are at least somewhat concerned about teen mental health, "44% say social media has the biggest negative impact on teens today."[176]

106. A poll conducted by Ipsos in 2023 found even higher levels of concern. This poll, which was based on a nationally representative sample of 684 adults in the United States, found that 78% of parents reported being very or somewhat concerned about children using video and image-sharing apps. The poll also found that 66% of parents (two in three) said their children had experienced a negative effect of social media, with 25% reporting their children had experienced "addiction to social media," 24% reporting their children had experienced "sleep

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174 Anderson, Monica, Mar. 22, 2019, "How parents feel about – and manage – their teens' online behavior and screen time," *Pew Research Center*, https://www.pewresearch.org/short-reads/2019/03/22/how-parents-feel-about-and-manage-their-teens-online-behavior-and-screen-time/.

175 Gelles-Watnick, Risa, Dec. 15, 2022, "Explicit Content, Time-Wasting Are Key Social Media Worries For Parents Of U.S. Teens," *Pew Research Center*, https://www.pewresearch.org/short-reads/2022/12/15/explicit-content-time-wasting-are-key-social-media-worries-for-parents-of-u-s-teens/.

176 Faverio, Michelle, Anderson, Monica, and Park, Eugene, Apr. 22, 2025, "Teens, Social Media And Mental Health," *Pew Research Center*, https://www.pewresearch.org/wp-content/uploads/sites/20/2025/04/PI_2025.04.22_teens-social-media-mental-health_REPORT.pdf/.

deprivation," and 15% reporting their children had experienced "feeling anxious or depressed."[177]

107. Two recent reports published by Harris Poll show similarly high concerns from parents about the suitability of social media for their children. A June 2024 survey of 1,088 U.S. adults found that "more than 4 in 5 (84%) American adults worry about the effect of social media on the mental health of today's young people."[178] A related 2025 poll of 1,013 U.S. parents aged 18+ with a child under the age of 18 found that "29% of parents thought their children began using social media too young" and "73% said they want to delay social media until at least age 16."[179]

108. Many young users also express concern about the amount of time they are spending on social media, as well as social media's addictive quality and associated harms. In a 2018 survey conducted by the Pew Research Center, roughly "half of those ages 13 to 17 are themselves worried they spend too much time on their cellphones." Roughly half (57%) of U.S. teens also reported taking steps to limit their use of social media, and 41% say they spend too much time on social media.[180] A follow-up survey conducted by the Pew Research Center in 2022, found roughly the same percentages with 36% of teens saying they thought they spent too much time

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177 Ipsos, Sept. 14, 2023, "About eight in ten parents with children under 18 on 'traditional' social media apps worry about their children using video/image-sharing apps," Ipsos, https://www.ipsos.com/en-us/about-eight-ten-parents-children-under-18-traditional-social-media-apps-worry-about-their-children/.

178 Skiera, AJ, Jun. 24, 2024, "How Americans Assess The Impact Of Smartphones And Social Media On Their Health," *The Harris Poll*, https://theharrispoll.com/briefs/technology-health/.

179 The Harris Poll, Jun. 18, 2025, "What Parents Think About Their Kids Social Media and Smartphone Usage," *The Harris Poll*, https://theharrispoll.com/briefs/what-parents-think-about-their-kids-social-media-and-smartphone-usage/.

180 Jiang, Jingjing, Aug. 22, 2018, "How Teens and Parents Navigate Screen Time and Device Distractions," Pew Research Center, https://www.pewresearch.org/internet/2018/08/22/how-teens-and-parents-navigate-screen-time-and-device-distractions/.

on social media.[181]

109. Likewise, in a survey administered by researchers at the University of Michigan and the University of Wisconsin in 2020, over 40% of individuals aged 14-24 indicated a desire to limit time spent when asked if they ever felt the need to change their own social media use.[182] Respondents often noted that this desire was linked to the potential negative consequences associated with excessive social media use.[183] The respondents were asked to answer three questions: 1) "What advice would you give to young people who are new to social media," 2) "Have you ever felt like you need to change your social media use (what you view, time spent, etc.)? Why?" and 3) "Have you ever deleted or thought about deleting your social media account(s)? Why?" In response to these questions, some young respondents warned of the addictive quality of social media, stating "Social media addiction is no joke," "I'm addicted to Instagram and its forced my life into an uncomfortable direction that I wish I could have avoided," and "I have thought about deleting [social media accounts] because of my dependence on them."[184] Meta had cited such studies in its announcements[185] and internal documents on well-being issues,[186] and even reached out to the University of Wisconsin in 2018 and Ipsos in July 2022 to conduct surveys.[187]

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181 Emily A. Vogels et al., Aug. 10, 2022, "Teens, Social Media and Technology 2022," Pew Research Center, https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/.

182 Harness, J., Fitzgerald, K., Sullivan, H., & Selkie, E. (2022), "Youth insight about social media effects on well/ill-being and self-modulating efforts," *Journal of Adolescent Health*, 71(3):324-333.

183 Harness, J., Fitzgerald, K., Sullivan, H., & Selkie, E. (2022), "Youth insight about social media effects on well/ill-being and self-modulating efforts," *Journal of Adolescent Health*, 71(3):324-333.

184 Harness, J., Fitzgerald, K., Sullivan, H., & Selkie, E. (2022), "Youth insight about social media effects on well/ill-being and self-modulating efforts," *Journal of Adolescent Health*, 71(3):324-333.

185 See, for example., Deposition of Pratiti Raychoudhury, December 12, 2024, Ex. 28 at 3.

186 See, for example., META3047MDL-019-00042308, "Research Analysis," at 2311; META3047MDL-020-00228200, "Core App Strategy Process: Phase One: What's Changed in the World," June 4, 2018, at slide 3; META3047MDL-019-00117916, "Problem Focus Recommendation: H1 2020," 2020, at slide 37.

187 META3047MDL-074-00105399, "Youth Team [Deprecated]," November 12, 2018; META3047MDL-047-00484798, "Fw: Meta Well-being Messaging Survey," August 17, 2022.

110. These studies also comport with my own experiences. I began speaking to parents and teachers about the effects of social media use on young people in late 2013. My role then was to present a balanced view of the pros and cons of using social media use, though I tended to devote more attention to its potential downsides, as the majority of the audiences I encountered were largely unaware that social media use might impose such costs on its users. Some parents were concerned that their children seemed to be spending extended periods of time on social media platforms, but they were generally naïve about the costs associated with such patterns of engagement. Over time, parents have become increasingly concerned about how social media platforms influence well-being, and over the past several years I have also detected a dramatic shift in how teens themselves balance and understand the costs and benefits of social media use. A decade ago, teens were largely silent when I asked them about the downsides of social media, whereas more recently they have become concerned about how much time they, their peers, and their parents devote to social media platforms, and about the potential harms associated with social media use.

ii. Internal Meta research provides evidence of the same concerns among parents and young users

111. Meta's own internal surveys similarly revealed that parents were concerned about their children's use of its platforms. According to a survey completed in May 2019 by Meta's Marketing Insights team, titled "Talking about Safety on Instagram," the company found that parents "had the most safety concerns about Instagram [of the individuals surveyed], particularly in relation to the safety of their teens."[188] The survey noted that parents were particularly concerned about teens being contacted by strangers.[189] It also found that nearly all the parents

[188] Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 17, at 390.
[189] Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 17, at 365.

that had been surveyed "had joined Instagram to monitor their kids."[190]

112. Similarly, a 2020 study focusing on the parents of children aged 6-13 found that 55% of parents worried about whether "too much time spent on [social media or other] apps can be unhealthy or addictive" and 41% worried about "potential damage to emotional health and wellbeing."[191] Another internal study conducted in 2021, Instagram's Household Ecosystem survey, found that "[g]roup chats, especially ephemeral ones, scare parents. They're often unable to monitor them and assume they contain inappropriate exchanges."[192] One employee summarized Meta's research by saying "[w]e have a year's worth of IG understand work [sic] on Mental Health that shows mental health concerns are top of mind for people."[193, 194]

113. Research on teenage users conducted or commissioned by Meta also raised concerns regarding the addictiveness of the company's platforms. In a qualitative survey conducted for Meta in 2019 by an external research partner, Creatures of Habit, results indicated that, for teens, "Instagram is addictive, and time-spend on platform is having a negative impact on mental health."[195] The study also found that young people were "acutely aware that Instagram is bad for their mental health, yet are compelled to spend time on the app for fear of missing out."[196] Another internal research study found that teens "have an addicts' narrative about their use."[197] Yet another 2020 study concluded that "[t]eens are really well versed in the potential dangers of

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190 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 17, at 390.
191 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" Sep 2022, at 462.
192 META3047MDL-003-00020827, "Beyond the Individual User: Understanding Products through the Household Ecosystem," March 2021, at 847.
193 META3047MDL-014-00335627, "Message summary [{"otherUserFbld":null,"threadFbld":3585854348100930}]" [redacted], August 20, 2020.
194 More internal and external studies demonstrating parents' concern about the addicting nature and potential harms of the platforms can be found in Appendix C.
195 META3047MDL-003-00091414, "Teen Mental Health," Sept. 2019, at 428.
196 META3047MDL-003-00091414, "Teen Mental Health," Sept. 2019, at 442.
197 META3047MDL-003-00048779, "Teen Mental Health Deep Dive," at 826.

social media (addictive/time suck, mental health risks, and bullying or safety concerns)."[198] Multiple other internal studies acknowledge and corroborate that teens are addicted to the Facebook[199] and Instagram[200] apps and/or that problematic use is prevalent.[201] Meta further discovered that online safety and harm have become ever present topics for U13s and their parents. In a 2020 study of children aged 6 to 13, Meta's researchers found that "[k]ids of all ages have regular conversations with their parent(s) about online safety, with little variation by age."[202] When asked how frequently parents talk to them about safety, 69% of children 6-13 responded either "all the time" or "a lot."[203] [204]

B. Emphasizing safety of its platform was important to Meta

114. Internal Meta documents indicate that Meta's research into health and safety concerns reflected an internal understanding that public concern could produce negative consequences for Meta. In emails, presentations, drafts, and instant message chats, Meta's employees articulated an ongoing need to develop reassuring external narratives apparently designed to distract and minimize health and safety concerns while protecting Meta's brand. For example, a 2023 presentation from Chief Marketing Officer Alex Schultz and Vice President of Global Communications & Public Affairs David Ginsberg described one of the primary goals driving

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198 META3047MDL-020-00089789, "New Users' First 14 Days on Instagram," H2 2020, at 803.

199 META3047MDL-087-00030017, "Problematic Use of Facebook: User Journey, Personas & Opportunity Mapping," March 2020, at 043; META3047MDL-074-00027496, "Problematic Use On-Platform Measurement: Concentration survey results for IG," December 2022-January 2023, at 2 (produced natively).

200 META3047MDL-074-00027496, "Problematic Use On-Platform Measurement: Concentration survey results for IG," December 2022-January 2023, at 2, 10, 13-14 (produced natively); META3047MDL-136-00013164, "IG Mental Well-being: Multi-half Strategy," November 17, 2022, at 172.

201 META3047MDL-019-00032957, "Problematic Use Note (Draft)," 2018, at 958; META3047MDL-087-00030017, "Problematic Use of Facebook: User Journey, Personas & Opportunity Mapping," March 2020, at 041; META3047MDL-020-00563113, "Facebook Addiction": A response to the public narrative based on clinical and neuroscience research," June 2018, at 116.

202 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" Sept 2022, at 454.

203 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" Sept 2022, at 454.

204 More internal and external studies demonstrating young users' concern over the addicting nature and potential harms of the platforms can be found in Appendix C.

Meta's well-being communications as "[m]inimiz[ing] the negative perception of Meta's impact on well-being."[205] Similarly, a 2019 document outlining Meta's well-being outreach strategy for the first half of 2020 stated that external communications were partly designed to "shield our brand from future criticisms."[206] In the aftermath of T*he Wall Street Journal*'s 2021 publication of leaked internal Facebook documents that exposed concerns about young users' well-being, Instagram's Marketing Insights team compiled a presentation on "Youth & Well-Being Narrative Research" that identified the goal of "articulat[ing] a positive story that can be flexed to Teens, Parents and the News-informed."[207]

115. Among other issues, internal documents reveal that Meta was particularly concerned about losing traction among young users and attempted to gear its communications strategy towards growing its base of young users. According to Meta's former Head of Marketing and Insights for Creators and Threads, Wendy Gross, Instagram had focused on teens as a strategic target audience since at least 2018, when she started with the company.[208] Other internal documents indicate that Meta had been focused on acquiring and keeping teens on its platforms significantly earlier than Gross's arrival in 2018.[209] Through numerous slide decks and internal emails, Meta outlined efforts to substantially grow their reach with young users. For example, in 2018, Meta emphasized several marketing objectives aimed at getting teens to use its platforms

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205 META3047MDL-022-00059669, "Brand Strategy: Positioning Meta as an innovative company that the world roots for." Jan. 12, 2023, at 684.

206 META3047MDL-037-00068000, "H1 2020 Well-being Integrated Outreach Plan," March 5, 2020.

207 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, at slide 3.

208 Deposition of Wendy Gross, PhD, January 28, 2025, 36:8-16.

209 *See, e.g.,* META3047MDL-014-00127822, "Re: Wired: Is tbh, Facebook's new teen app, as healthy as its founders claim?" Oct. 20, 2017, at 823, 824, 825; META3047MDL-047-00299978, "IG Growth 101," Sept. 1, 2016; META3047MDL-047-00457985, "Teen Feed Strategy and Experiment Review," Oct. 29, 2016; META3047MDL-047-00476863, "US Teens & Growth," Oct. 6, 2016; META3047MDL-047-00730463, "Teen Outreach XFN H1 2017 Goals [draft]," Jan. 23, 2017; META3047MDL-047-00756765, "The State of US Teens," Nov. 13, 2015.

more. These objectives included: "[g]et teens to share more everyday moments;" "[g]et teens to message their friends more everyday [sic];" and "[g]et teens to view more content on IGTV."[210] A July 2021 slide deck titled "Youth Landscape and Opportunities for IG" stated: "As Instagram is seeing weakening signs with Gen Z and Gen Alphas (born 2010+) who are turning into teens in the next 2 years, we would like to strategically plan for the long term and understand how youth grow up and explore new opportunities to better cater to their needs and lives."[211] This was reiterated again in 2022, in a slide deck that stated, "[w]e are on a journey to reclaim and strengthen Instagram's relevance with teens."[212]

116. Internal documents also show that Meta believed emphasizing health and safety was important for the company's overall communications strategy to appeal to teens and their parents. This emphasis appears to have emerged, in part, via internal research that found that health and safety was a top priority among these consumers. For example, in its 2021 Household Ecosystem Study, Instagram found that parents appreciated social media platforms that supported "learning, skill acquisition, and hobby pursuit."[213] However, this study revealed that parents did not perceive Instagram as a platform provided those benefits. Instead, when discussing Instagram, parents "highlighted well-being concerns, fueled by teens' usage of beautification filters and engagement metrics."[214]

117. From at least 2021-2022, Meta heavily marketed to the public and other stakeholder groups its use of a "Best Interests of the Child Framework" that highlighted that its product

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210 META3047MDL-003-00141446, "2019 Marketing Budget," Oct. 18, 2018, at 448.
211 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021, at 726.
212 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, at slide 3.
213 META3047MDL-003-00020827, "Beyond the Individual User: Understanding Products through the Household Ecosystem," Mar. 2021, at 830.
214 META3047MDL-003-00020827, "Beyond the Individual User: Understanding Products through the Household Ecosystem," Mar. 2021, at 830.

development teams prioritized youth and well-being over business interests and profit when developing products.[215]

118. Meta's communications, public affairs, marketing and public policy teams specifically relied on an external parent sentiment tracker survey to determine teen parents' top concerns to prioritize addressing through its external communications and messaging.[216] It's internal research specifically found that "[p]arents do not think that IG is appropriate/safe for their children," and Meta proposed using "product proof points, campaigns, cross-industry alliance, [and] reactive messaging" to "[i]mprov[e] parent sentiment" to "help unblock new teens to join IG."[217]

119. Findings like these are likely to have fueled Meta's perception of parents as obstacles in the company's pursuit of teen users. As Ms. Gross stated in her deposition, Meta had hypothesized that parental and guardian gatekeeping was a significant reason why teens weren't joining Instagram.[218] In fact, an internal slide deck identified "Parent Gatekeeping [as the] #1 reason early teens do not join IG," calling it a "[p]roblem to be solved."[219] Another slide deck concluded that "parental permission is [a] key barrier for teens."[220] This hypothesis was also asserted by Miki Rothschild, a member of Meta's Public Affairs team,[221] who stated that, "the top barrier for early teens to join IG is their parents being worried about well-being."[222]

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215 Deposition 30(b)(6) of Liza Crenshaw, July 16, 2025, Exhibit 4.
216 META3047MDL-019-00069311, "Parent Sentiment Priorities & Efforts to Align.".
217 META3047MDL-019-00069311, "Parent Sentiment Priorities & Efforts to Align," at slide 2.
218 Deposition of Wendy Gross, PhD, January 28, 2025, 229:2-230:13.
219 META3047MDL-047-00067276, "IGMI Parent Sentiment Tracking," January 2023, at slide 4; *see also* META3047MDL-019-00069399, "Perceptions of Appropriate for Teens Ages 13-15 Years Old: Among Parents of Teens Ages 13-17," December 2022.
220 META3047MDL-020-00089789, "New Users' First 14 Days on Instagram," H2 2020, at 892; see also, META3047MDL-019-00017593, "The role of IG (and household) to prevent problematic usage," 2020, at 593, ("Through unlocking parents as a barrier we hope to acquire new users").
221 Deposition of Antigone Davis, March 4, 2025, 45:1-5.
222 META3047MDL-014-00331733, "Message summary [{"otherUserFbld":null,"threadFbld":4887964077902367}]" Karina Newton, January 20, 2022.

120. In addition to preventing new teen users from joining Meta's platforms, the company's documents also indicate an understanding that health and safety concerns were both driving users away from its platforms and decreasing engagement among those who remained, ultimately harming Meta's bottom line. For example, a 2020 review of both internal and external studies investigating why a growing number of users were deleting social media accounts found that well-being concerns were a significant driver of their decision to abandon those platforms.[223] One recommendation from the researchers as it pertained to users who quit because of negative well-being concerns was to invest in remedial "marketing efforts."[224] Another research study examined connections between "sentiment" toward Meta and user engagement. While only tangentially related to Meta's well-being efforts, the researcher concluded that the study's "[r]esults suggest[ed] that improved sentiment metrics significantly impact revenue,"[225] proposing a causal chain such that "Sentiment → User sessions/time spent → Ad views → Ad revenue."[226] In other words, getting users to trust, believe, and feel better about Meta and its platforms resulted in additional usage and revenue.

121. Meta's emphasis on well-being was also seemingly designed to counter public criticism and persuade people of the positive impact of its platforms. In one document outlining the company's H2 2018 Communications Plan, Meta identified the need to "[d]emonstrate how Facebook is a force for good and cares about people's well-being, specifically mental health, personal safety, security, physical health."[227] This strategy was reiterated in Meta's H1 2019

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223 META3047MDL-037-00028427, "[WIP] A Review of Why People Stop Using Facebook," 2020, at 434; META3047MDL-047-00374241, "Why People Stop Using Facebook," 2020.
224 META3047MDL-037-00028427, "[WIP] A Review of Why People Stop Using Facebook," at 418.
225 META3047MDL-047-00064906, "Marketing Metrics Causality and Believability," Feb. 2022, at slide 10.
226 META3047MDL-047-00064906, "Marketing Metrics Causality and Believability," Feb. 2022, at slide 10.
227 META3047MDL-034-00012951, "H2 2018 Communications Plan: Well-being," at 951.

Global Integrated Plan[228] and the company's 2019 Marketing Budget, which outlined as one of the company's marketing objectives the need to "[g]et teens parents, educators, and policy makers to believe Instagram is a safe and kind platform through well-being features and programs."[229] A "pre-read" sent by Instagram's Chief Marketing Officer, Clifford Hopkins, in conjunction with the 2019 Marketing Budget connected this effort to a desire to "protect against brand hits we're starting to feel" from negative media stories which Meta "need[ed] to get ahead of."[230]

122. Similarly, following Mark Zuckerberg's Senate hearing in 2020, Meta developed a "Disrupting the Narrative" framework designed to answer critics and reclaim its story.[231] This framework proposed "[t]aking a more front-footed approach answering our critics" by "advancing the work and creating the narrative and delivery mechanisms to disrupt the negative narrative (campaigns, white papers, policy initiatives, recruitment of third party advocates, etc.)."[232]

123. Following the *Wall Street Journal*'s release of the "Facebook Files" in 2021, Meta similarly conducted research that measured reactions to its youth well-being messages. This research specifically examined the reactions of lawmakers and mothers.[233] In a presentation prepared by Instagram's Marketing Insights team from 2022 titled "Youth & Well-Being Narrative Research," Meta explained that "[f]ollowing a difficult year of leaks and press focus

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228 Deposition of Nick Clegg, March 20, 2025, Exhibit 49.
229 META3047MDL-003-00141446, "2019 Marketing Budget," Oct.18, 2018, at 448.
230 META3047MDL-020-00635783, "pre-read for 10am: 2019 IG Consumer Marketing budget v1 Oct 12, 2018," Oct. 16, 2018, at 783.
231 META3047MDL-047-00017209, "Disrupting the Narrative Framework + some words," Nov. 19, 2020.
232 META3047MDL-047-00017209, "Disrupting the Narrative Framework + some words," November 19, 2020, at 210.
233 META3047MDL-034-00098896, "Reactions to youth well-being messages post-FB Files/Papers."

on teen mental health, we know how important it is to build trust with our audiences." [234] As mentioned in paragraph 114 above, this presentation outlined Meta's goal to "articulate a positive story that can be flexed to Teens, Parents and the News-informed."[235]

124. Some Meta employees also appeared to think that its well-being narratives might stave off regulation and governmental oversight. In an email outlining the "Disrupting the Narrative" framework referenced above (which included Meta executives such as VP of Global Affairs Nick Clegg), John Pinette, Meta's Global Head of Communications reporting to Mr. Clegg,[236] also claimed that an overall negative narrative had emerged, and that it had been accepted by key audiences such as elites in government, civic life, and tech. [237] He stated that this negative narrative could lead to "all manner of regulatory regimes that will harm or diminish the [company]."[238] Mr. Pinette identified one of the main criticisms of Facebook as "Anti-Well-Being." In all, Meta believed that it needed to broadly "[e]xpand the narrative of how we tackle safety problems and proactively communicate to policy makers, businesses, press and media on our latest efforts to keep Instagram safe and reduce harm on the platform."[239]

C. Meta researched and sought to understand how to best communicate these messages

125. Meta repeatedly tested how best to convey its safety and well-being messages to parents, teens, and policy elites. The company sought to carefully craft these messages to make sure that

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234 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, at 3.
235 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, at 3.
236 Deposition of Nick Clegg, March 20, 2025, 94:1-10.
237 Deposition of Nick Clegg, March 20, 2025, Exhibit 11.
238 Deposition of Nick Clegg, March 20, 2025, Exhibit 11, at 1; A draft of Meta's H1 2022 Youth Planning document was even more explicit. In a section entitled "Overall Goals for 2022," the Meta employee wrote "if we want to 'win on youth,' we must avoid more restrictive regulations…" META3047MDL-019-00055932, "[DEPRECATED] H1 2022 Planning: Youth," at 933.
239 META3047MDL-037-00068000, "H1 2020 Well-being Integrated Outreach Plan," March 5, 2020, at 005.

they resonated with multiple audiences and used the most convincing words and phrasing.[240] For example, a 2019 presentation entitled "Instagram Safety Narrative: US, UK, FR, DE, JP" shows that Meta used both qualitative and quantitative research methods to understand what did and did not appeal to teens by testing phrases such as "Instagram is proactively working to keep people safe on the app," "Instagram is proactively working to reduce bad experiences on the app," and "I feel safe on Instagram."[241] Another messaging study from 2022 even examined the constituent parts of phrases such as "Unfortunately, teens sometimes might have negative experiences on these [Meta] products" to determine what portions of the sentences worked and didn't work for parents and "DC Insiders."[242]

126. Meta also undertook concerted efforts to align the company on its preferred external narratives. In 2021, for example, Meta prepared a "Company Narrative Audit" for the purpose of creating a unified external narrative.[243] This audit provided suggestions for responding to various well-being-oriented criticisms, such as "Facebook makes people addicted, depressed and lonely." Some of the company's suggestions included asserting that it has "rolled out tools and features that give people more control over the time they spend on our services and… work[ed] with mental health experts to better understand the impact of social media."[244] The audit also identified a key narrative that Meta could reference in response to well-being concerns. This narrative focused on the aborted but internally-recommended default version of Project Daisy, stating that "[i]n 2019, Instagram began testing the idea of hiding likes to better understand the

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240 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 17.
241 META3047MDL-014-00257112, "Instagram Safety Narrative: US, UK, FR, DE, JP," March 2019 at slides 39-45.
242 META3047MDL-047-00645572, "CSN Teen Well-being Focus Groups," June 28, 2022, at slides 2, 32.
243 Deposition of Nick Clegg, March 20, 2025, Exhibit 14.
244 Deposition of Nick Clegg, March 20, 2025, Exhibit 14 at 14.

impact on people's well-being."[245]

127. After identifying a lack of consistency across the company, Meta developed a communications strategy consisting of Core Supporting Narratives (CSNs) in 2022. CSNs were defined as "eight critical narratives that represent the beliefs and positions" the company held, and included specific "research-backed, cross-audience narratives" focused on well-being. [246] Of these, several were dedicated to addressing concerns related to safety and health. One narrative was centered on "Well-being," and stated that, "Relationships are essential to our well-being. Meta platforms help people form and maintain relationships." [247] Another, called "Good for the World," similarly emphasized that "Meta's products help build and strengthen connections."[248]

128. Meta tested various methods for conveying these health and safety CSNs to its key consumers. Results from these tests were reported in slide decks. One such slide deck, called "CSN-7 Messages Tested," outlined market research that consisted of focus groups of teens who regularly used Instagram and other social media.[249] It recommended using "messaging that anchors on product proof points," and further reasoned that "[m]essages highlighting product proof points related to safety and control over content are unlikely to backfire with teens."[250] Another deck prepared by Instagram's Marketing Insights team titled "Youth & Well-Being Narrative Research" also summarized market research with key audiences, including teens,

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245 Deposition of Nick Clegg, March 20, 2025, Exhibit 14 at 14.

246 META3047MDL-022-00059669, "Brand Strategy: Positioning Meta as an innovative company that the world roots for," at 682, 683.

247 META3047MDL-022-00059669, "Brand Strategy: Positioning Meta as an innovative company that the world roots for," at 683; *See also* META3047MDL-019-00056633, "[DRAFT/WIP] Research Synthesis for Core Supporting Narrative (CSN) on Well-being (#7)," May 31, 2022.

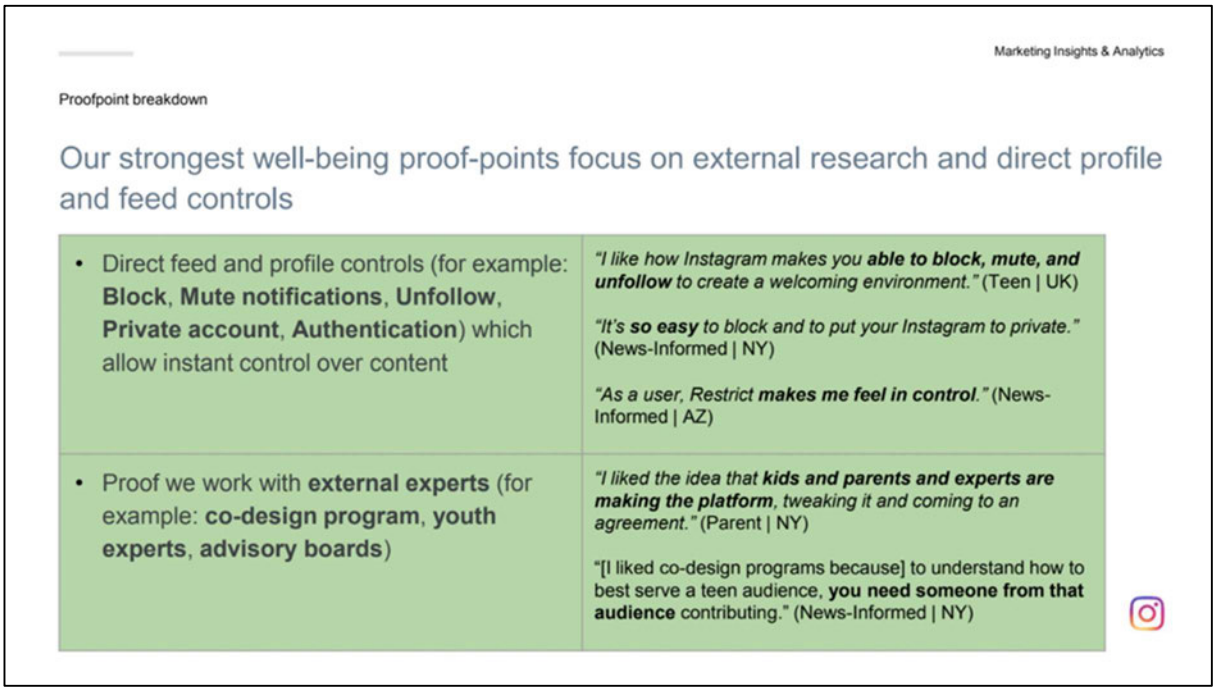
248 META3047MDL-022-00059669, "Brand Strategy: Positioning Meta as an innovative company that the world roots for," at 683.

249 META3047MDL-019-00057877, "CSN-7 Messages Tested."

250 META3047MDL-019-00057877, at 2, "CSN-7 Messages Tested."

parents, and news-informed individuals.[251] The Marketing Insights team explained that it "crafted messages… and tested these messages with core audiences in the US & UK. The narrative will be used to inform all Youth + Well-Being consumer outreach in 2022 and beyond (e.g. campaigns, marketing in-product, blogs, etc.)."[252] This slide deck, as with the one above, commented on effective proof points, and included a section titled "Proofpoint Breakdown." [253] In this section, the team noted that its strongest "well-being proof-points" consisted of "direct profile and feed controls," including "Block, Mute notifications, Unfollow, Private account, Authentication," and "external research," such as "co-design program, youth experts, and advisory boards."[254] A screenshot of this slide is shown in Figure 5 below.

Figure 5. Screenshot from "Youth & Well-Being Narrative Research" Presentation[255]



251 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, at 3.
252 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, at 3.
253 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, at 84-91.
254 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, at 89.
255 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, at 89.

129. Importantly, one key position Meta appears to have adopted based on this research was that the best way to reassure consumers that its platforms were safe was not to confront the issues head-on, but rather to issue a steady drumbeat of product proof points and general statements regarding the importance of well-being and connection. In particular, Meta avoided directly contradicting negative press, knowing that that strategy was likely to be counterproductive. For example, a CSN-7 draft research deck from October 2022 titled "Bad Science Rebuttals Mixed-Methods Study," shows that Meta tested four rebuttal messages to critical claims blaming social media for poor mental health among teens. [256] Through the study, Meta determined that rebuttal messages are unpersuasive to consumers.[257] Instead, the company developed and tested a communications strategy that appeared to respond to consumer concerns, and employed communications tactics that it knew would resonate with and persuade its audience. Meta used influencers to convey health and safety messages, lending external credibility to its claims

130. Meta also commissioned influencers on its platforms to convey messages about the safety of its platforms and continues to use promoted influencer messaging as of the spring of 2025.[258] Influencer-delivered messages are particularly compelling because influencers tend to be trusted and admired by the audiences that elect to follow them. Any messages those influencers

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256 META3047MDL-035-00001376, "[DRAFT] Bad Science Rebuttals Mixed-Methods Study," October 2022, at slide 2.

257 META3047MDL-035-00001376 at 2, "[DRAFT] Bad Science Rebuttals Mixed-Methods Study," October 2022, at slide 2.

258 *See, e.g.,* Instagram posts from early 2025: @momsoftampa (Moms of Tampa), Apr. 17, 2025, *Instagram*, https://www.instagram.com/reel/DIj8LpMxPcL/. Accessed July 14, 2025; @monicaplus_2 (Monica Villa), Mar. 21, 2025, *Instagram*, https://www.instagram.com/monicaplus_2/reel/DHeqYYgyycA. Accessed July 14, 2025/; @ashleeknichols (Ashlee Nichols), Apr. 9, 2025, *Instagram*, https://www.instagram.com/reel/DIO8MZqPhnH/. Accessed July 14, 2025; @ilanawiles (Ilana Wiles), Mar. 24, 2025, *Instagram*, https://www.instagram.com/mommyshorts/reel/DHmFiQmRNMq/. Accessed July 21, 2025; @mollybsims (Molly Sims), Apr. 12, 2025, *Instagram*, https://www.instagram.com/reel/DIWwZvwv4g7/. Accessed July 14, 2025.

promote, then, are likely to be seen as trustworthy and authentic, and are capable of materially affecting the behavior, attitudes, or opinions of the audiences that perceived them.[259] In outreach plans—including one such plan developed for the first half of 2020—the company noted the importance of cooperation with "partners" and "top accounts" to communicate its well-being message.[260] In an internal email from 2023, the company celebrated the success of its work with influencers through an event series meant to educate "parent creators" about the company's "tools to keep [] teens safe on our apps." This campaign generated "49.3M impressions from earned and paid content[.]"[261] The messages communicated by influencers are similar in nature to the statements made in other venues, such as congressional hearings and in blog posts, but posted directly on Instagram in promoted posts intended to reach Meta's users, furthering the reach of the messages about its platforms' health and safety and offering proof points, side-stepping criticism, and setting the agenda.

131. Meta continues to employ influencers in this way. One recent post, shown in Figure 6 below, is addressed to mothers of young users, and emphasizes the safety tools available. The influencer, Ms. Nichols, talks about her children, aged 11, 9, and 6. Ms. Nichols goes on to explain that she is "encouraged by the enhanced safety features and protections of teen accounts," identifying screen time limits as one such feature. She notes in the Reel caption, "I love that @Instagram offers safety features."[262] As of May 2025, Ms. Nichols' account has

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259 Brooks, G., Drenten, J., & Piskorski, M. J. (2021), "Influencer celebrification: How social media influencers acquire celebrity capital," *Journal of Advertising*, 50(5):528-547; Kay, S., Mulcahy, R., & Parkinson, J. (2020), "When less is more: the impact of macro and micro social media influencers' disclosure," *Journal of Marketing Management*. 36:1-31; Audrezet, A., de Kerviler, G., & Moulard, J. (2018), "Authenticity under threat: When social media influencers need to go beyond self-presentation," *Journal of Business Research*, 117:557-569.

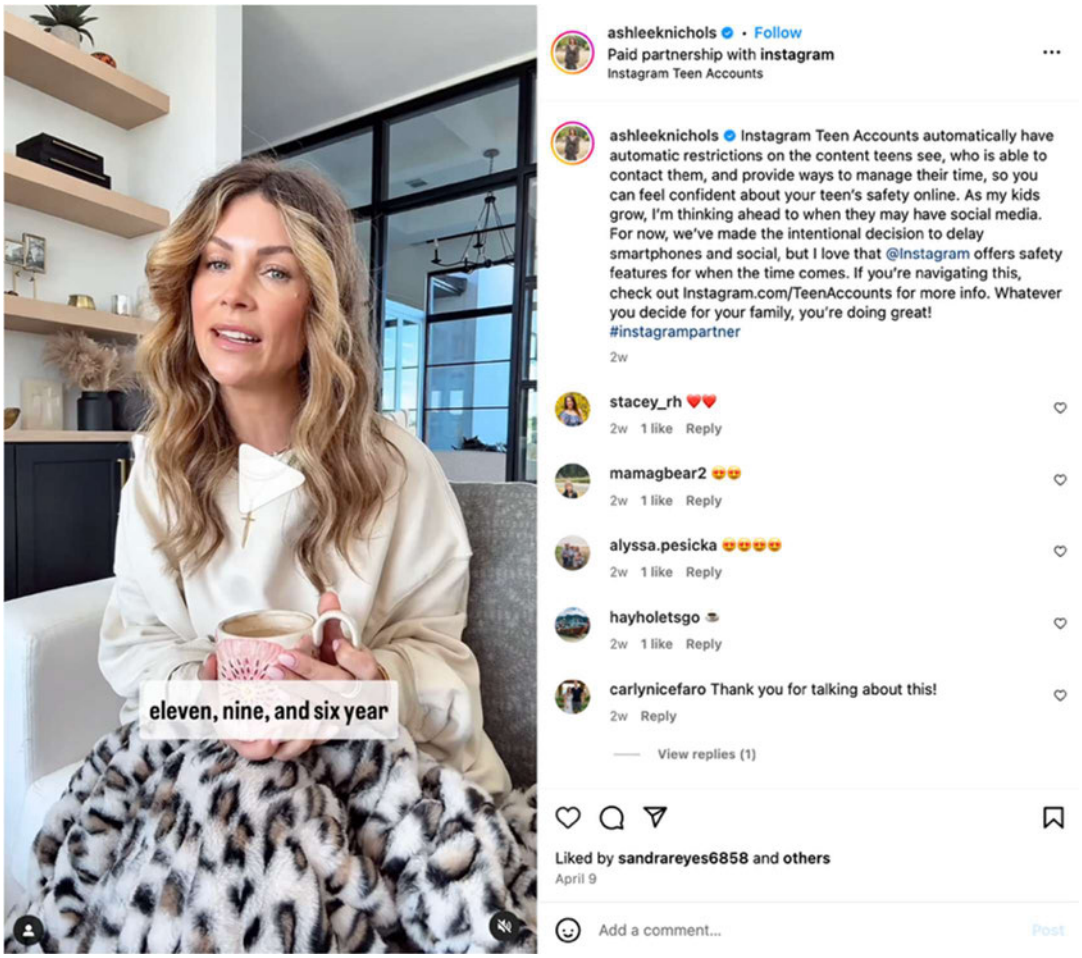
260 META3047MDL-019-00118434, "H1 2020 Well-being Integrated Outreach Plan," at 435, 436.

261 META3047MDL-040-00498308,"no subject" email, December 18, 2023.

262 @ashleeknichols (Ashlee Nichols), Apr. 9, 2025, *Instagram*, https://www.instagram.com/reel/DIO8MZqPhnH/?hl=en/. Accessed July 14, 2025.

646,000 followers and the promoted Reel in Figure 6 has been viewed 7.2 million times.

Figure 6. Post from Influencer account Ashlee Nichols[263]



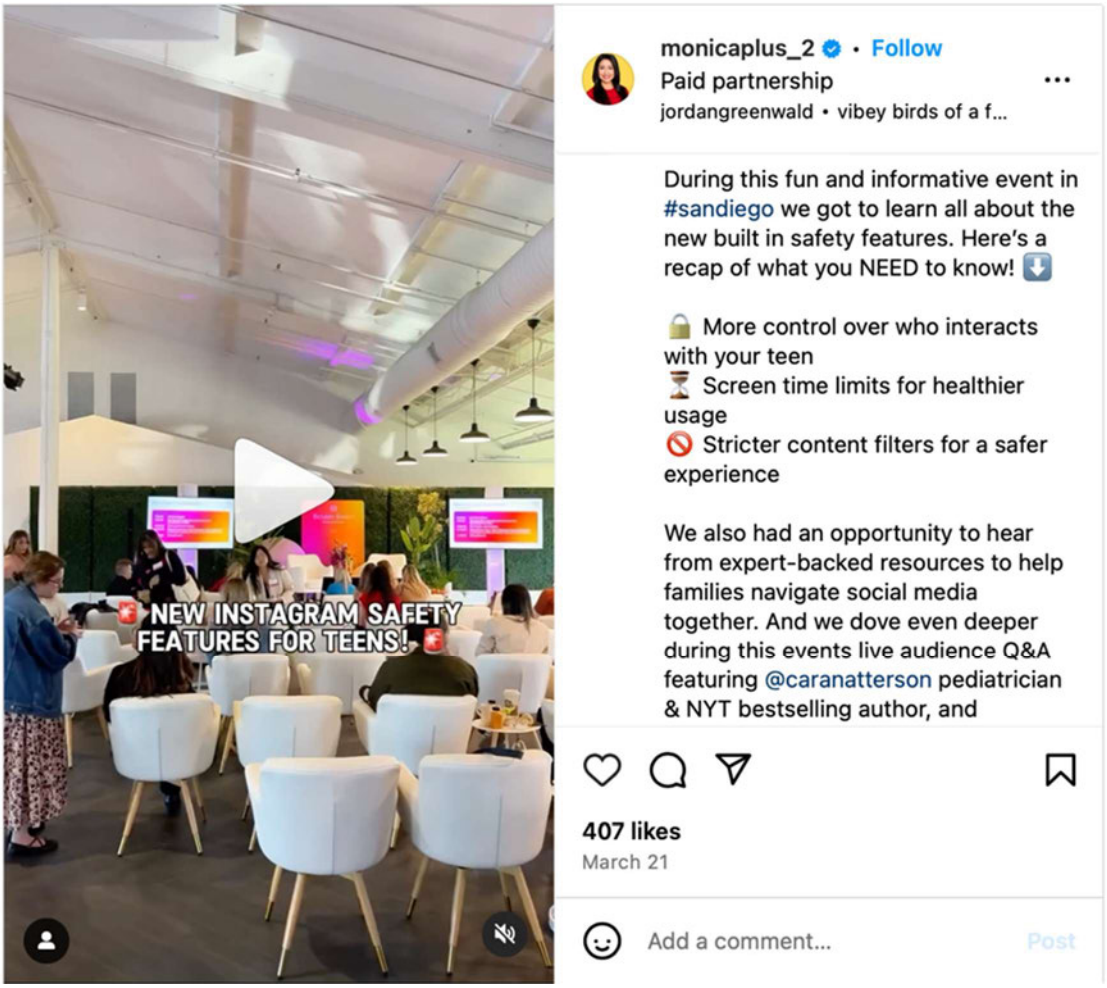
132. Another post, shown in Figure 7 below, hit on many of the proof points outlined in Meta's consumer-tested communication strategy, commenting on tools that offer more "control over who interacts with your teen," "[s]creen time limits for healthier usage," and "content filters for a safer experience," while also emphasizing "expert-backed" resources.[264] The repetition of these messages through trusted influencers further increased the believability and credibility of

263 @momsoftampa (Moms of Tampa), *Instagram*, https://www.instagram.com/momsoftampa/. Accessed July 14, 2025.

264 @ashleeknichols (Ashlee Nichols), Apr. 9, 2025, *Instagram*, https://www.instagram.com/reel/DIO8MZqPhnH/. Accessed July 14, 2025.

the statements, and the broad impression that the platforms both prioritize well-being and are, in fact, safe for teen users.

Figure 7. Post from Influencer account monicaplus_2[265]



133. Because Meta's own "research show[ed] that consumers parents have low awareness of Meta's features and tools…to support teens and families," in 2023, Meta launched a "Screen Smart" in-person series of workshops around the U.S. to tout its well-being features and tools to

265 This account has 42,000 followers: @monicaplus_2 (Monica Villa), *Instagram*, https://www.instagram.com/monicaplus_2. Accessed July 14, 2025.

parents as proof points of the company's emphasis on well-being. [266] As noted in the caption of the post above, this influencer attended an in-person Instagram "Screen Smart" event in early 2025, which Meta claimed would feature "academics and clinicians," and "help parents navigate conversations with their families about using devices safely and learn more about Meta's parental supervision tools."[267] Meta brought together parent influencers and content creators for this event, and several of them made posts similar to the one above.[268]

134. In 2023, Screen Smart events were held in Washington, Illinois, and Tennessee among other states.[269] In 2024, Screen Smart events that featured some of Meta's top executives, including Adam Mosseri and Antigone Davis, were held in Massachusetts and California, among other states that were "mapped as priority markets" for Instagram.[270]

135. Meta paid influential accounts to post and promote these messages about health and safety, which facilitated the company's goal of positioning its platforms as safe for teens.[271] These user-oriented messages also reiterate statements that Meta personnel and spokespeople have made in other venues, augmenting and cementing those messages by soliciting third parties to echo the same claims and sentiments. The statements made by those Meta personnel are discussed in more detail throughout Section X, below.

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266 META3047MDL-111-00194148, "YWB 'Screen Smart' 2023 Series: Recap," 2023-2024, at 148; *see also* META3047MDL-146-00056954, "Parent Advocacy Network - Pilot Proposal."

267 Meta, Apr. 17, 2024, "Supporting Parents Online With Our Screen Smart Program," *Meta*, https://about.fb.com/news/2024/04/supporting-parents-with-screen-smart-program/. Accessed July 14, 2025.

268 *See, e.g.,* @momsoftampa (Moms of Tampa), Apr. 17, 2025, *Instagram*, https://www.instagram.com/reel/DIj8LpMxPcL/. Accessed July 14, 2025; Posts tagged with "Instagramscreensmart" on Instagram.com, https://www.instagram.com/explore/search/keyword/?q=%23instagramscreensmart. Accessed July 14, 2025.

269 META3047MDL-111-00194148, "YWB 'Screen Smart' 2023 Series: Recap," 2023-2024.

270 META3047MDL-047-00659172, "Youth updates for EA team biweekly (3/7)"; META3047MDL-129-00090617, "Antigone Davis Prep Doc: Boston 'Screen Smart'" May 2024.

271 See, for example, Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18; META3047MDL-034-00012951, "H2 2018 Communications Plan: Well-being," at 951; and META3047MDL-003-00141446, "2019 Marketing Budget," Oct. 18, 2018, at 448.

136. In sum, Meta devoted considerable resources to drafting and disseminating statements that were designed to convince the public that Facebook and Instagram did not compromise the health and safety of their young users. It recognized that the public harbored such concerns, both because external research bodies had documented those concerns, and because its own internal evidence demonstrated that parents and other stakeholders were motivated to understand how Meta's platforms might be affecting the welfare of their users. Considerable evidence demonstrates that Meta responded to such internal and external research by investigating related threats to the growth of its young user bases, and by recruiting both internal and external spokespeople, including social media influencers, to spread the message that Facebook and Instagram were not a threat to user welfare.

X. ANALYSIS OF META'S STATEMENTS ABOUT THE HEALTH AND SAFETY IMPACTS OF ITS PRODUCTS

137. In this section, I analyze Meta's public statements to assess how a reasonable consumer would understand them. I have grouped Meta's public statements into four categories, and discuss each one in turn. Those categories are: A) statements related to Meta's prioritization of health and safety, including over its own business interests, B) statements related to the addictive nature (or lack thereof) of Meta's platforms, C) statements related to the occurrence of psychological and physical harm, including the prevalence of negative experiences, and D) statements related to the presence of U13s (or lack thereof) on Meta's Facebook and Instagram platforms and related efforts to inhibit such underage use.

138. In doing so, I apply my industry expertise and training, and the principles of social influence analysis delineated above, to determine what message or messages the statements convey, how a reasonable consumer would interpret the statements, and whether the statements

have the capacity and tendency to mislead.

A. Meta conveyed to consumers that it prioritizes health and safety over its own business interests

139. In this section I address Meta's public statements regarding the extent to which it prioritizes consumer well-being, how these statements are likely to shape consumer perceptions of Meta's platforms, and how evidence from Meta employees and documents reveals an internal narrative about Meta's platforms which is in stark contrast to the narrative presented publicly. A summary of this section is presented below.

140. Meta, or high-ranking Meta personnel including Meta's CEO, the Head of Instagram, Meta's Global Head of Safety, the Head of Fashion Partnerships at Instagram, or Director of Policy Communications at Meta have made public statements that fall into one of the three following categories:

a. Meta's statements claiming consumer well-being and safety is the company's "number one" priority or one of its top priorities;

b. Meta's statements claiming the company prioritizes well-being and safety over profit; and

c. Meta's statements discussing the company's investments in its well-being and safety efforts.

141. The above statements have a tendency to mislead because:

a. A reasonable consumer would expect consumer well-being and safety to outrank growth and profit when Meta made decisions about its platforms, but Meta did not in fact do so;

b. A reasonable consumer would expect Meta to make internally recommended investments in teams and initiatives aiming to both understand and launch products to improve well-being, but Meta did not in fact do so.

142. Below, I focus my analysis on nine illustrative statements that I identified through a review of the operative complaints and my own independent investigation. I selected the statements based on several factors, including the nature of the deception, their likelihood of reaching consumers, and the ease of grouping them together for purposes of discussion. The list is not exhaustive. The absence of a particular statement from the tables below should not be taken to imply that the absent statement is not potentially deceptive.

143. I then analyze each grouping of statements to identify the tactics that Meta deployed and relied on to bolster the persuasiveness of its public narrative. Finally, I demonstrate how these statements were false or misleading using examples from Meta's own internal documents and employee testimony.

i. Analysis of individual statements: *Top Priority*

144. The first grouping of statements is shown in Table 1 below:

Table 1. Meta's claims that consumer well-being is its "number one" priority or one of its top priorities

No.	Date	Speaker	Statement	Context
A1	June 26, 2019	Adam Mosseri, Head of Instagram	A: "We've been focused on well-being broadly, like I said, it's our number one priority… We will do things that mean people use Instagram less if we think that they keep people safe or generally create a healthier environment." Q: "Even though it could affect your bottom line?" A: "100%"[272]	Mr. Mosseri made these claims during an interview on CBS's morning news broadcast, "CBS This Morning," hosted by Gayle King.[273]
A2	April 17, 2018	Eva Chen, Head of Fashion Partnerships at Instagram	"Instagram has a whole team, I think it's called the well-being team, and they basically—their entire focus is focusing on the well-being of the community. Making the community a safer place, a place where people feel good is a huge priority for Instagram. I would say one of the top priorities for the company."[274]	Ms. Chen made these claims during an interview titled "Instagram and the Art of Influence" at Bloomberg News' Cornell Tech Series.[275] This event is part of a monthly speaker series that features figures in global technology and invites Bloomberg employees, members of the Cornell Tech community, and members of the New York's tech community.[276]

272 CBS Mornings, Jun. 6, 2019, "Instagram Head Says They're 'Rethinking The Whole Experience' Of The Platform," *CBS News*, https://www.cbsnews.com/news/adam-mosseri-instagram-is-seriously-considering-hiding-likes-apps-head-reveals/.

273 CBS This Morning, Jan. 15, 2019, "Gayle King," *CBS News*, https://web.archive.org/web/20190623033349/https://www.cbsnews.com/team/gayle-king/.

274 Inside Bloomberg, "Bloomberg Cornell Tech Series: A Conversation w/Instagram's Eva Chen - Full Interview," *YouTube*, https://youtu.be/JZSpoCYijfA?si=RDvmZC4IpO6AlrwL&t=1925/. Accessed July 14, 2025.

275 Inside Bloomberg, "Bloomberg Cornell Tech Series: A Conversation w/Instagram's Eva Chen - Full Interview," YouTube, https://www.youtube.com/watch?v=JZSpoCYijfA&t=1925s/. Accessed July 14, 2025.

276 Tech At Bloomberg, "Cornell Tech @ Bloomberg Speaker Series," *Bloomberg*, https://www.bloomberg.com/company/values/tech-at-bloomberg/features/cornell-tech-at-bloomberg-livestream/.

145. In Statement A1, Adam Mosseri, Head of Instagram, stated during a 2019 interview with CBS, that well-being was the company's "number one priority," and further asserted that "[w]e will do things that mean people use Instagram less if we think they keep people safe or generally create a healthier environment."[277] To demonstrate the company's level of commitment to well-being, Mr. Mosseri deployed persuasive tactics in the form of proof points. First, he offered CBS viewers a proposal that seemed to introduce a foundational change to the way Instagram works: hiding like counts.[278] He stated, "[o]ne of the ideas we're currently experimenting with is making like counts private" because likes "can make the experience feel a bit tense. They can pressurize Instagram, and we want to depressurize it."[279] This proof point was presented as a significant step for the company, with interviewer Gayle King identifying it as "a big change."[280] In fact, Ms. King noted the significant risk this proposal seemed to present to Instagram from a user engagement standpoint, stating, "We talked to a group of teenagers the other day, and when we mentioned [hiding like counts] was a possibility… I don't want to say they freaked out, but they freaked out. They said, 'I don't know if I want to use it anymore.'"[281] Still, Mr. Mosseri claimed he was "100%" willing to make these kinds of changes even if it could affect the company's bottom line.[282] This statement, and the proof point embedded in the statement, convey the idea

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277 CBS Mornings, Jun. 26, 2019, "Instagram Head Says They're 'Rethinking The Whole Experience' Of The Platform," *CBS News*, https://www.cbsnews.com/news/adam-mosseri-instagram-is-seriously-considering-hiding-likes-apps-head-reveals/.

278 CBS Mornings, "Why Instagram Is Considering Hiding Likes," *YouTube,* https://www.youtube.com/watch?v=Dr82g6IYAdw/. Accessed July 14, 2025. Note, this initiative was referred to internally as "Project Daisy."

279 CBS Mornings, "Why Instagram Is Considering Hiding Likes," *YouTube*, https://www.youtube.com/watch?v=Dr82g6IYAdw/. Accessed July 14, 2025.

280 CBS Mornings, "Why Instagram Is Considering Hiding Likes," *YouTube*, https://www.youtube.com/watch?v=Dr82g6IYAdw/. Accessed July 14, 2025.

281 CBS Mornings, "Why Instagram Is Considering Hiding Likes," *YouTube,* https://youtu.be/Dr82g6IYAdw?si=U-gDQ787jRJUFiQv&t=42/. Accessed July 14, 2025.

282 CBS Mornings, "Why Instagram Is Considering Hiding Likes," *YouTube,* https://youtu.be/Dr82g6IYAdw?si=jjdvXWyHhPYW_1kS&t=78/. Accessed July 14, 2025.

that the company would rather change one of its platform's core features than let its users be exposed to harm.

146. Later in the interview, Mr. Mosseri also alluded to Meta's cosmetic surgery filter ban when confronted with the issue of negative social comparison. In the interview, Ms. King asked, "Part of the other thing about Instagram is these young girls were telling us that they look at it and they don't feel good about themselves… Do you do anything about photoshopping? Or do you encourage photoshopping? Do you want them to use the platform that way?" [283] Mr. Mosseri responded, "for face filters… we have a bunch of rules about what we will and will not do. We won't distort the face unless it's like a fantastic… you know, you make me into an astronaut or to an ogre, or to… a bee."[284] Given the context, Mr. Mosseri's reply suggests that Meta was directly addressing concerns regarding the use of photoshop and cosmetic surgery filters and the negative impact Instagram can have on people's feelings about their appearance. In each of these instances, Mr. Mosseri's responses conveyed the message that the company was aware of a variety of well-being concerns and prioritized addressing those concerns.

147. An internal email chain among Instagram employees praised Mr. Mosseri's performance during this interview, noting that he came across as "genuine."[285] The email noted that his interview with Ms. King was part of a "positive, high volume moment that demonstrated [the company's] commitment to leading the industry in the fight against online bullying." [286] Specifically, it was part of Instagram's "broadcast strategy which allowed [it] to reach a large

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283 CBS Mornings, "Why Instagram Is Considering Hiding Likes," *YouTube,* https://youtu.be/Dr82g6IYAdw?si=3K6lorqmY0_bUY9o&t=175/. Accessed July 14, 2025.

284 CBS Mornings, "Why Instagram Is Considering Hiding Likes," *YouTube,* https://youtu.be/Dr82g6IYAdw?si=3K6lorqmY0_bUY9o&t=175/. Accessed July 14, 2025.

285 META3047MDL-014-00312830, "Re: Instagram bullying moment: coverage report," Aug. 1, 2019, at 830.

286 META3047MDL-014-00312830, "Re: Instagram bullying moment: coverage report," Aug. 1, 2019, at 830.

consumer audience and parents."[287] The email concluded with a commitment to this communications strategy, noting that the team will "continue to keep momentum here to convince critics and stakeholders alike that [the company is] determined to lead." [288]

148. In Statement A2, similar claims drawing on similar persuasive tactics were made by Instagram's Head of Fashion Partnerships, Eva Chen, at a tech event in 2018. At the event, Ms. Chen was asked by reporter, Scarlet Fu, from Bloomberg News, the following: "There's an observation that Facebook can make people feel bad about themselves, and this is something that Mark Zuckerberg has addressed. Does Instagram consciously try to move in another direction?"[289] Ms. Chen did not directly address the concerns about Facebook or Instagram's negative impact, instead responding with a company proof point. She stated that "Instagram has a whole team, I think it's called the—it's the well-being team… their entire focus is to focus on the well-being of the community."[290] Ms. Chen then followed up with several other proof points, mentioning "a campaign called 'Kind Comments,' encouraging people to leave kind comments," "a campaign called 'Perfectly Me' with *Seventeen* magazine where we want people to feel good in their own skin," and "a hashtag called 'Acne is Normal.'"[291] Within her response, she asserted that "making the community a safer place, a place where people feel good, is a huge priority for Instagram… I would say one of the top priorities."[292] Ms. Chen's statements effectively side-step

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287 META3047MDL-014-00312830, "Re: Instagram bullying moment: coverage report," Aug. 1, 2019, at 830.

288 META3047MDL-014-00312830, "Re: Instagram bullying moment: coverage report," Aug.1, 2019, at 831.

289 Inside Bloomberg, "Bloomberg Cornell Tech Series: A Conversation w/Instagram's Eva Chen - Full Interview," *YouTube*, https://youtu.be/JZSpoCYijfA?si=RDvmZC4IpO6AlrwL&t=1925/. Accessed July 14, 2025.

290 Inside Bloomberg, "Bloomberg Cornell Tech Series: A Conversation w/Instagram's Eva Chen - Full Interview," *YouTube*, https://youtu.be/JZSpoCYijfA?si=RDvmZC4IpO6AlrwL&t=1925/. Accessed July 14, 2025.

291 Inside Bloomberg, "Bloomberg Cornell Tech Series: A Conversation w/Instagram's Eva Chen - Full Interview," *YouTube,* https://youtu.be/JZSpoCYijfA?si=RDvmZC4IpO6AlrwL&t=1925/. Accessed July 14, 2025.

292 https://qz.com/quartzy/1238074/instagrams-new-wellbeing-team-will-address-its-effect-on-mental-health; *see also* MDL Compl. ¶ 125.

the more nuanced topic of harm on Meta's platforms and instead tout particular efforts and specific campaigns. As a response to the reporter's initial question and taken alongside her claim that well-being and safety is a "top priority," Ms. Chen's statements suggest that Instagram was, in fact, "consciously moving in another direction" with regards to harm, and that it did prioritize safety on its platform. Along with Mr. Mosseri's statements, these statements present consumers with a general message that well-being is either the top or one of the top priorities for Meta.

149. In summary, the understanding a reasonable consumer would derive from Statements A1-A2 is that consumer well-being was either the top priority or one of the top priorities for Meta, outranking other factors in decisions about Meta's platforms' features. This hierarchy would extend to, among other feature decisions, whether to hide like counts or implement appearance filters, both of which were specifically referenced by Mr. Mosseri. As discussed below in paragraphs 167-168, I have assumed that other considerations, including profit and growth, outranked user safety and well-being when Meta made internal decisions about whether to ban Augmented Reality features, hide like counts, and implement a Private By Default setting for teens, and I have also reviewed internal documents that support the same conclusions. Therefore, my opinion is that Statements A1-A2 have a tendency to mislead.

ii. Analysis of individual statements: *Well-Being Over Profit*

150. In several instances, Meta executives and spokespeople have represented "well-being" as a priority that supersedes its profit-centered and other business interests.

Table 2. Meta's claims that it prioritizes well-being over profit

No.	Date	Speaker	Statement	Context
A3	October 5, 2021	Mark Zuckerberg, CEO of Meta	"At the heart of these accusations is this idea that we prioritize profit over safety and well-being. That's just not true."[293]	Mr. Zuckerberg made this statement in a public Facebook post from his personal Facebook account.[294]
A4	October 3, 2021	Lena Pietsch, Director of Policy Communications at Meta	"Protecting our community is more important than maximizing our profits."[295]	Ms. Pietsch made this claim in a statement to CNN Business following the interview of Frances Haugen on "60 Minutes."[296]
A5	November 8, 2019	Adam Mosseri, Head of Instagram	"We will make decisions that hurt the business if they're good for people's well-being and health because it has to be good for the business over the long run."[297]	Mr. Mosseri made this claim at WIRED's second annual WIRED25 conference in San Francisco.[298] Members of the public could pay to attend the conference, and it was live-streamed on WIRED.com and social platforms, including Facebook, Instagram, and Twitter.[299]

293 Zukerberg, Mark, Oct. 5, 2021, "Mark Zuckerberg's Post," *Facebook*, https://www.facebook.com/zuck/posts/10113961365418581. Accessed July 14, 2025; Rodriguez, Salvador, Oct. 5, 2021, "Zukerberg Rejects Claims That Facebook Prioritizes Profits Over User Safety," https://www.cnbc.com/2021/10/05/zuckerberg-denies-that-facebook-prioritizes-profits-over-user-safety.html/.

294 Zukerberg, Mark, Oct. 5, 2021, "Mark Zuckerberg's Post," *Facebook,* https://www.facebook.com/zuck/posts/10113961365418581/. Accessed July 14, 2025.

295 Duffy, Clare, Oct. 4, 2021, "Facebook Whistleblower Revealed on '60 Minutes,' Says The Company Prioritized Profit Over Public Good," *CNN*, https://www.cnn.com/2021/10/03/tech/facebook-whistleblower-60-minutes/index/.

296 Duffy, Clare, Oct. 4, 2021, "Facebook Whistleblower Revealed on '60 Minutes,' Says The Company Prioritized Profit Over Public Good," *CNN*, https://www.cnn.com/2021/10/03/tech/facebook-whistleblower-60-minutes/index/.

297 Wired, Nov. 9, 2019, "Adam Mosseri And Tracee Ellis Ross In Conversation With Arielle Pardes," *Wired*, https://www.wired.com/video/watch/adam-mosseri-and-tracee-ellis-ross-in-conversation-with-arielle-pardes/.

298 Wired, Nov. 9, 2019, "Adam Mosseri And Tracee Ellis Ross In Conversation With Arielle Pardes," *Wired*, https://www.wired.com/video/watch/adam-mosseri-and-tracee-ellis-ross-in-conversation-with-arielle-pardes/; Wired, Nov. 8, 2019, "Wired 25: Watch The Future Unfold Here," *Wired*, https://web.archive.org/web/20191112063234/https://www.wired.com/story/wired25-livestream-2019/

299 WIRED25, Nov. 7-10, 2019, *Wired*, https://web.archive.org/web/20190829162353/https://xp.wired.com/; Ashworth, Boone, Nov. 8, 2019, "WIRED25: Watch the Future Unfold Here," Wired, https://web.archive.org/web/20191112063234/https://www.wired.com/story/wired25-livestream-2019/.

No.	Date	Speaker	Statement	Context
A6	No date	Elaine Montgomery, Product Design Director at Meta & Co-Lead of TTC Labs, Meta Elaina Koros, Content Design Manager, Meta	Meta's "Best Interests of the Child Framework" includes the principle "Prioritize youth well-being and safety over business goals and interests."[300]	This claim was posted in a blog post on Meta's Trust, Transparency & Control Labs website, an "online resource to explore, develop and share practices and resources for new design patterns and templates."[301]

300 Montgomery, Elaine and Koros, Elaina, "Meta's Best Interest Of The Child Framework," *Meta*, https://www.ttclabs.net/news/metas-best-interests-of-the-child-framework/. Accessed July 14, 2025.

301 Meta, "About TTC Labs," *Meta*, https://www.ttclabs.net/about/.

151. In Statement A3, Meta represented that "well-being" concerns supersede the platforms' profit motives in 2021, when it faced strong criticism of its platforms' impact on user well-being from Frances Haugen, a whistleblower who leaked documents to *The Wall Street Journal* and filed complaints with federal law enforcement.[302] Shortly after Ms. Haugen testified to Congress on the harms of the platforms, Mr. Zuckerberg issued a public statement on Facebook, declaring, "At the heart of these accusations is this idea that we prioritize profit over safety and well-being. That's just not true."[303]

152. Mr. Zuckerberg's post containing Statement A3 repeated claims from Statement A4, a formal statement issued by a Meta spokesperson, Lena Pietsch, to 60 Minutes just days earlier. In Statement A4, she stated, "Protecting our community is more important than maximizing our profits."[304] Ms. Pietsch's claim repeated, verbatim, a claim Mr. Zuckerberg had made years earlier in 2017 during a company earnings call that was later picked up by media outlets, including *The Guardian* and *Inc*.[305]

153. Throughout the 2021 Facebook post, Mr. Zuckerberg implemented psychological tactics of influence, including proof points, to support his claims. He touted Meta's research team—a

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302 Pelley, Scott, Oct. 4, 2021, "Whistleblower: Facebook Is Misleading The Public On Progress Against Hate Speech, Violence, Misinformation," *CBS News*, https://www.cbsnews.com/news/facebook-whistleblower-frances-haugen-misinformation-public-60-minutes-2021-10-03/; Horwitz, Jeff, "The Facebook Files," *The Wall Street Journal.com*, https://www.wsj.com/articles/the-facebook-files-11631713039/.

303 Zuckerberg, Mark, "Mark Zuckerberg's Post," *Facebook*, https://www.facebook.com/zuck/posts/10113961365418581. Accessed July 14, 2025; Rodriguez, Salvator, Oct. 5, 2021, "Zuckerberg Rejects Claims That Facebook Prioritizes Profits Over Public Safety," *CNBC*, https://www.cnbc.com/2021/10/05/zuckerberg-denies-that-facebook-prioritizes-profits-over-user-safety.html/.

304 h Duffy, Clare, Oct. 4, 2021, "Facebook Whistleblower Revealed on '60 Minutes' Says The Company Prioritized Profit Over Public Safety, *CNN*, https://www.cnn.com/2021/10/03/tech/facebook-whistleblower-60-minutes/index/.

305 Mautz, Scott, Nov. 7, 2017, "Facebook's Mark Zuckerberg Just Reminded Us About Importance Of Profits And Purpose, *INC*, https://www.inc.com/scott-mautz/facebooks-mark-zuckerberg-just-reminded-us-about-importance-of-profits-purpose.html/; Solon, Olivia, Nov. 1, 2017, "Facebook Quarterly Revenue Up 47% On 2016 As Company Faces Senate Scrutiny," *The Guardian*, https://www.theguardian.com/technology/2017/nov/01/facebook-quarterly-revenue-profits-russia/.

proof point identified in Meta's Company Narrative Audit[306]— writing, "If we wanted to ignore research, why would we create an industry-leading research program to understand these important issues in the first place? … If we wanted to hide our results, why would we have established an industry-leading standard for transparency and reporting on what we're doing?" He also pointed to changes the company made to its News Feed which "showed fewer viral videos and more content from friends and family—which we did knowing it would mean people spent less time on Facebook, but that research suggested it was the right thing for people's well-being."[307] In this way, Mr. Zuckerberg's statements contributed to the company's drumbeat of statements suggesting that it prioritized well-being over other business interests.

154. In fact, Meta officials had advanced similar claims many years before Mr. Zuckerberg published his post in 2021. Mr. Mosseri made such claims in his statements to CBS, described above (Statement A1), and he continued to do so with Statement A5, during an interview at WIRED's annual conference in 2019 following his CBS appearance. In Statement A5, Mr. Mosseri stated that Instagram, "will make decisions that hurt the business if they're good for people's well-being and health."[308] As with his CBS interview, Mr. Mosseri supplemented these claims by reviving the proof point that Instagram was working on an initiative to hide like counts.[309] As such, Mr. Mosseri relied on drumbeat messaging tactics to indicate that Meta prioritized well-being over perceived business interests.

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306 *See*, for example, Deposition of Nick Clegg, March 20, 2025, Exhibit 14 at 674. ("We have some of the world's top experts in wellbeing and partner with other researchers around the world to identify and address impacts of our products on well-being.").

307 Zuckerberg, Mark, Oct. 5, 2021, "Mark Zuckerberg's Post," *Facebook*, https://www.facebook.com/zuck/posts/10113961365418581/. Accessed July 14, 2025.

308 Wired, Nov. 8, 2019, "Adam Mosseri And Tracee Ellis Ross In Conversation With Arielle Pardes," *Wired*, https://www.wired.com/video/watch/adam-mosseri-and-tracee-ellis-ross-in-conversation-with-arielle-pardes/.

309 Wired, Nov. 8, 2019, "Adam Mosseri And Tracee Ellis Ross In Conversation With Arielle Pardes," *Wired*, https://www.wired.com/video/watch/adam-mosseri-and-tracee-ellis-ross-in-conversation-with-arielle-pardes/.

155. These claims were also made with Statement A6, in an undated Meta blog post written by Elaine Montgomery, Product Design Director at Meta & Co-Lead of TTC Labs, and Elaina Koros, Content Design Manager at Meta. According to Statement A6, the company "Prioritize[s] youth well-being and safety over business goals and interests."[310] Once again, the company relied on tested messages and proof points to support this claim. The post stated that, "Research and expert consultation play a major role in Meta's product development process," appealing to third party expertise, which was identified as one of the company's "strongest" tested proof-points in the context of well-being claims.[311] The post offered additional support for the claim that Meta prioritizes well-being over profit by noting that, when someone under 16 joins Instagram, "their account is automatically set to private,"[312] thereby protecting the privacy and safety of the user. Additionally, the company said it urges teens already on Instagram to consider making their accounts private. It similarly advertised its new "Take a Break" tool that "support[ed] young people's well-being, encouraging them to set reminders when they've spent over a certain amount of time on the app."[313] However, as I explain below in paragraph 252, while this tool was a useful proof point for the company, its value was compromised because users had to opt in to use it, Meta acknowledged it was "easy to dismiss," and, contrary to Meta's claims, it was therefore not a meaningful well-being tool.[314]

156. There were also other instances in which Meta relied on the features discussed above—

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310 Montgomery, Elaine, and Koros, Elaina, "Meta's Best Interest Of The Child Framework," *Meta*, https://www.ttclabs.net/news/metas-best-interests-of-the-child-framework/. Accessed July 14, 2025.

311 See, for example, Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 18, at 89; META3047MDL-014-00057418, "Narrative Leadership Sync: Bi-Weekly Workstream Update," April 2021, at 425; Deposition of Nick Clegg, March 20, 2025, Exhibit 14 at 674.

312 Montgomery, Elaine, and Koros, Elaina, "Meta's Best Interest Of The Child Framework," *Meta*, https://www.ttclabs.net/news/metas-best-interests-of-the-child-framework/. Accessed July 14, 2025.

313 Montgomery, Elaine, and Koros, Elaina, "Meta's Best Interest Of The Child Framework," *Meta*, https://www.ttclabs.net/news/metas-best-interests-of-the-child-framework/. Accessed July 14, 2025.

314 META3047MDL-034-00161639, "Take a Break/Nudges GTM," at slide 6.

banning or restricting Augmented Reality filters, hiding like counts, and making accounts private by default—as proof points to demonstrate the company's focus on user well-being. Meta promoted these tools repeatedly, even when they were still under development. For example, in an October 2019 statement to the BBC about its ban on cosmetic surgery filters, Meta claimed that it was "re-evaluating our policies—we want our filters to be a positive experience for people."[315] Mr. Mosseri also gave an interview in the New York Times in 2020 in which he portrayed the company as "carefully considering" hiding likes in "different variations" to reduce the "potentially corrosive impact of social media."[316]

157. In summary, as with Statements A1-A2, a reasonable consumer would understand from Statements A3-A6 that consumers' well-being and safety would outrank other business considerations, including growth and profit, when Meta made decisions about its platforms, including with respect to Augmented Reality features, hiding like counts, and implementing a Private by Default setting for teens. As discussed below in paragraphs 167-168, I have assumed that Meta did not weigh user well-being and safety over other business considerations when it made internal decisions about whether to ban Augmented Reality features, hide like counts, and implement a Private By Default setting for teens, and I have also reviewed internal documents that appear to support these assumptions. Therefore, my opinion is that the Statements A3-A6 have a tendency to mislead.

iii. Analysis of individual statements: *Investments*

158. Spokespeople from the company have also made statements regarding Meta's investments to promote well-being on the platform, as shown below in Table 3.

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315 https://www.bbc.com/news/business-50152053/.

316 https://www.nytimes.com/2020/01/17/business/instagram-likes.html/; META3047MDL-065-00371797, "Re: FYI – IG leadership piece in NYT Sunday Business" email, Jan. 18, 2020.

Table 3. Meta's discussions of investments in its well-being efforts

No.	Date	Speaker	Statement	Context
A7	February 4, 2019	Mark Zuckerberg, CEO of Meta	"This year we plan to spend more on safety and security than our whole revenue at the time of our IPO …"[317]	Mr. Zuckerberg made this statement in a public Facebook post from his personal Facebook account.[318]
A8	September 21, 2021	Meta Blog Post	"Today we have 40,000 people working on safety and security, and have invested more than $13 billion in teams and technology in this area since 2016."[319]	This claim was made in a blog post on Meta's "Newsroom" page.[320]
A9	September 30, 2021	Antigone Davis, Meta's Global Head of Safety	Senator Lujan: "Yes or no, has Facebook ever found a change to its platform would potentially inflict harm on users, but moved forward because the change would also grow users or increase revenue?" Davis: "That has not been my experience at all at Facebook. We care deeply about the safety and security of the people on our platform. We have invested $12 billion in it. We have thousands and thousands of people working on this issue. That is just not how we would approach it."[321]	Ms. Davis made this claim before the Senate Subcommittee on Consumer Protection, Product Safety, and Data Security, which is part of the Committee on Commerce, Science, and Transporation.[322] This hearing was live-streamed on the Senate Committee's website, and recorded versions are available on the Committee's website and CSPAN.[323]

317 Zuckerberg, Mark, Feb. 4, 2019, "Mark Zuckerberg's Post," *Facebook*, https://www.facebook.com/zuck/posts/10106411140260321/. Accessed July 14, 2025.

318 Zuckerberg, Mark, Feb. 4, 2019, "Mark Zuckerberg's Post," *Facebook*, https://www.facebook.com/zuck/posts/10106411140260321/. Accessed July 14, 2025.

319 Meta, Sept. 21, 2021, "Our Progress Addressing Challenges And Innovating Responsibility," *Meta*, https://about.fb.com/news/2021/09/our-progress-addressing-challenges-and-innovating-responsibly/. Accessed July 14, 2025.

320 Meta, Sept. 21, 2021, "Our Progress Addressing Challenges And Innovating Responsibility," *Meta*, https://about.fb.com/news/2021/09/our-progress-addressing-challenges-and-innovating-responsibly/. Accessed July 14, 2025.

321 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*: Hearing Before the S. Comm. On Com., Sci., & Transp., 117th Cong. 38-39 (2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf/.

322 https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf.

323 Davis, Antigone, *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*, S. Hrg. 117-719, Subcomm. on Consumer Protection, Product Safety, & Data Security, Comm. on Commerce, Sci., & Transp., U.S. Senate, Sept. 30, 2021, https://www.commerce.senate.gov/2021/9/protecting-kids-online-facebook-instagram-and-mental-health-harms; C-SPAN, Sept. 30, 2021, "Hearing On Protecting Children Online," *C-SPAN,* https://www.c-span.org/program/senate-committee/hearing-on-protecting-children-online/603309/.

159. The above statements act as drumbeats, collectively introducing and reiterating data and other proof points to support Meta's claims that it prioritizes well-being. For example, Statement A7 appears in a 2019 Facebook post, in which Mark Zuckerberg laid out his vision for the future of the platform, and broadly described Meta's next steps related to "social and ethical issues," including "how to improve health and well-being when we're always connected."[324] With Statement A7, he claimed that, "This year we plan to spend more on safety and security than our whole revenue at the time of our IPO . . ."[325] This statement suggests the company is making a large investment on well-being initiatives, further supporting Meta's claim to prioritize well-being.

160. This drumbeat claim about resource allocation was repeated several times, such as in Statement A8. In September 2021, Meta stated in a blog post, "Today we have 40,000 people working on safety and security, and have invested more than $13 billion in teams and technology in this area since 2016."[326] And with Statement A9, later that month, Antigone Davis, Meta's Global Head of Safety, repeated these claims before Congress. During the hearing, Ms. Davis was asked by Senator Lujan, "Yes or no, has Facebook ever found a change to its platform would potentially inflict harm on users, but moved forward because the change would also grow users or increase revenue?" Ms. Davis stated, "That has not been my experience at all at Facebook. We care deeply about the safety and security of the people on our platform. We have invested $12 billion in it. We have thousands and thousands of people working on this issue.

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324 Zuckerberg, Mark, Feb. 4, 2019, "Mark Zuckerberg's Post," *Facebook*, https://www.facebook.com/zuck/posts/10106411140260321/. Accessed July 14, 2025.

325 Zuckerberg, Mark, Feb. 4, 2019, "Mark Zuckerberg's Post," *Facebook*, https://www.facebook.com/zuck/posts/10106411140260321/. Accessed July 14, 2025.

326 Meta, Sept. 21, 2021, "Our Progress Addressing Challenges and Innovating Responsibly," *Meta*, https://about.fb.com/news/2021/09/our-progress-addressing-challenges-and-innovating-responsibly/. Accessed July 14, 2025.

That is just not how we would approach it."[327]

161. This drumbeat was repeated by Mark Zuckerberg in his January 31, 2024 testimony to the Senate Judiciary Committee.[328] Here, Mr. Zuckerberg stated, "I'm proud of the work our teams have done to improve online child safety… We have around 40,000 people overall working on safety and security, and we have invested over $20 billion since 2016."[329]

162. A reasonable consumer would understand from Statements A7-A9 that Meta made would take seriously internally-recommended investments in teams and initiatives to understand and promote consumer well-being. As discussed below in paragraphs 167-168, I have assumed that Meta frequently declined to provide resources internally-recommended and requested by employees to promote consumer well-being, and also shut down internally-recommended teams and initiatives that would have studied and attempted to promote consumer well-being. I have also reviewed internal documents that support the same conclusions. Therefore, my opinion is that Statements A7-A9 have the tendency to mislead.

iv. Summary of evaluation of statements

163. Statements A1-A9 indicate that Meta regarded well-being as one of the company's top priorities whenever it considered and made business decisions. In fact, these statements go as far as indicating that user well-being was a priority that superseded the company's business interests

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327 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*: Hearing Before the S. Comm. On Com., Sci., & Transp., 117th Cong. 38-39 (2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf/.

328 Zuckerberg, Mark, Jan. 31, 2024, *Senate Judiciary Committee Hearing on Big Tech and the Online Child Sexual Exploitation Crisis*, Hearing before the U.S. Senate Judiciary Comm., https://www.judiciary.senate.gov/imo/media/doc/2024-01-31_-_testimony_-_zuckerberg.pdf/.

329 Zuckerberg, Mark, Jan. 31, 2024, *Senate Judiciary Committee Hearing on Big Tech and the Online Child Sexual Exploitation Crisis*, Hearing before the U.S. Senate Judiciary Comm., https://www.judiciary.senate.gov/imo/media/doc/2024-01-31_-_testimony_-_zuckerberg.pdf/.

in the form of user engagement and profit.[330] In other words, Meta conveyed to consumers that, when making decisions, it would prioritize making changes that would protect user—particularly teen user—safety and well-being, design its products to protect users and to keep them safe, and expend the necessary resources to fully understand and ameliorate known problems to the best of its ability. Meta's statements sought to *side-step criticism* from whistleblowers and to engage in *agenda setting* and *drumbeat messaging* by repeating the notion that Meta prioritized user well-being rather than engaging with accusations related to specific harms. Meta also utilized *proof points* by discussing specific features and policy changes that conveyed focus on consumer well-being.

v. Evaluation of consumer understanding

164. Consumers have limited capacity to assess a company's product decisions because they generally have access to the final product, but not to the internal process that generated that product. As such, the veracity of statements about company priorities are difficult for consumers to evaluate, weigh, and incorporate into their decisions. This is particularly true for credence goods, including social media platforms, because consumers cannot independently identify the relevant product features that have or have not been shaped by company priorities.[331] Given this difficulty, consumers are forced to anchor on Meta's statements that it prioritized safety and well-being both in an absolute sense, and compared to competing business concerns.

165. Moreover, as described above, consumers in this context reasonably assume that the information they have received about Meta's platforms is truthful and complete, and therefore

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330 *See* Table 1, Table 2.

331 Darby, M. R., & Karni, E. (1973), "Free competition and the optimal amount of fraud," *The Journal of Law & Economics*, 16(1):67-88. See Section VI.C of this report on why social media is a credence good.

sufficient to inform their decisions about social media use.[332] Consequently, consumers are unlikely to question the effectiveness of Meta's stated safety features and tools, nor the specific way the company frames the platform's well-being challenges, instead interpreting public statements regarding those tools to indicate that, generally speaking, the platforms are safe unless otherwise indicated.

166. Finally, Meta's repeated insistence that the company was doing all it could to prioritize user well-being when making decisions is likely to be understood by consumers as credible and believable. As detailed above, research shows that the repetition of a message enhances its perceived validity,[333] and mere exposure to a brand improves consumer favorability.[334] As such, the consistent and repetitive nature of Meta's brand messages takes advantage of the cognitive limitations of consumers and increases the likelihood that consumers will believe Meta.

vi. Examination of assumptions underpinning consumer deception

167. In evaluating whether Statements A1-A9 have a tendency to mislead,[335] counsel has asked me to assume:

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332 Grice, H. P. (1989), *Studies in the way of words*, Harvard University Press.

333 Udry, J., & Barber, S. J. (2023), "The illusory truth effect: A review of how repetition increases belief in misinformation," *Current Opinion in Psychology*, 56:101736; Hassan, A., & Barber, S. J. (2021), "The effects of repetition frequency on the illusory truth effect," *Cognitive Research: Principles and Implications*, 6(38):1-12; Fazio, L. K. et al. (2015), "Knowledge does not protect against illusory truth," *Journal of Experimental Psychology: General*, 144(5):993-1002; Pennycook, G., Cannon, T. D., & Rand, D. G. (2018), "Prior exposure increases perceived accuracy of fake news," *Journal of Experimental Psychology: General*, 147(12):1865-1880.

334 Zajonc, R. B. (1968), "Attitudinal effects of mere exposure," *Journal of Personality and Social Psychology, Monograph Supplement*, 9(2, Pt. 2):1-27.

335 Throughout this section, I use the words "mislead" and "deceive" in a psychological sense, involving manipulation of others' beliefs, attitudes, or behaviors through the distortion or omission of information. Misleading and deceptive statements also encompass outright falsity where statements are not factual or, as occurred here, external public statements are directly contrary to internal company actions or knowledge.

a. Other factors and business considerations outweighed and/or outranked user well-being and safety when Meta made internal decisions about whether to ban Augmented Reality features;[336]

b. Other factors and business considerations outweighed and/or outranked user well-being and safety when Meta made internal decisions about whether to hide like counts;[337]

c. Other factors and business considerations outweighed and/or outranked user well-being and safety when Meta made internal decisions about whether to implement a Private By Default setting for teens;[338]

d. Despite repeated requests and internal recommendations from high-ranking executives and employees for more resources to promote user well-being, Meta leadership frequently declined to provide the recommended resources and allocated them elsewhere; and

e. Meta "deprioritized," under-funded, or shut down teams and initiatives designed to understand and improve user well-being particularly as it pertained to problematic use and negative appearance comparison.

168. As with other sections of this report, I have assessed many of Meta's internal documents to understand the basis of these assumptions, and to further contrast Meta's external statements with its internal knowledge. Given the difference between what Meta knew or discussed internally, and what it communicated externally, its external statements have a tendency to mislead consumers.

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336 Specifically, I was asked to assume Meta knew that its Augmented Reality filters posed substantial risk of causing or exacerbating anxiety, depression, body dysmorphia, and eating disorders in children and teenagers. Meta could have eliminated such filters from use by minors but chose not to do so because it believed the filters would improve growth/profits.

337 Specifically, I was asked to assume Meta knew that showing like counts on Instagram and Facebook caused substantial rates of "negative social comparison" on the platforms. Meta could have eliminated this feature but chose not to because it believed that showing like counts would improve growth/profits. Meta also knew that its opt-in feature to allow users to hide like counts would not result in many users adopting the feature.

338 Specifically, I was asked to assume Meta knew that applying its Private By Default setting to all teen accounts would substantially reduce the rates of bullying on its platforms. Meta did not have evidence that its decision to implement the Private By Default setting to only a small subset of teen accounts would substantially reduce the rates of bullying.

a. Internal evidence that Meta lifted a ban on Augmented Reality filters despite recommendations from health and safety experts

169. Between October 2019 and May 2020, Meta banned Augmented Reality (AR) filters that mimicked the effects of cosmetic surgical procedures. In May 2020, Meta demonstrably allowed business interests to dominate health and safety concerns when Mr. Zuckerberg decided to lift the ban on such filters.[339] This ban had specifically targeted filters that "change[d] people's [faces] in a way that must be achieved by plastic surgery," and included alterations "such as enlarging eyes or lips, changing the position of eyes or changing the shape of [the] nose or chin."[340] The ban did not seek to restrict filters that changed people's appearances in ways that could "be achieved by ordinary makeup techniques," and allowed exceptions for some filters that did change people's facial structure, so long as "the result [was] an exaggerated or humorous transformation (e.g., rapid aging, babyface, character transformation)."[341] The ban specifically targeted two types of filters. The first, which it described as "Cosmetic Surgery Effects," included filters that changed the size or shape of facial features. The second, which it described as "Cosmetic Surgery Effects + Decorations," included filters that changed the size or shape of facial features PLUS added one or more decorations.[342]

170. The ban was originally instituted in October 2019 "in response to expert and press concerns about potential negative wellbeing impacts (especially on minors),"[343] including a link between cosmetic surgery filters and negative mental health and body dysmorphia for teens,

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339 Deposition of Margaret Gould Stewart, October 21, 2025, 51:21–57:6, 82; *see also* META3047MDL-003-00180242, "Re: Pre-read on Cosmetic Surgery AR Effects (next Thursday)" May 12, 2020. Augmented Reality filters are camera effects that can digitally modify the contents of an image or video.

340 META3047MDL-003-00179481, "Cosmetic Surgery Effects (a/c priv)," 2020, at 481.

341 META3047MDL-003-00179481, "Cosmetic Surgery Effects (a/c priv)," 2020, at 481.

342 META3047MDL-003-00179481, "Cosmetic Surgery Effects (a/c priv)," 2020, at 483.

343 META3047MDL-003-00179481, "Cosmetic Surgery Effects (a/c priv)," 2020, at 481.

especially teen girls.[344] A literature review from November 2018 on "selfie manipulation" conducted by a specialist in eating disorders and body image, and shared within Meta,[345] noted that when it came to "editing selfies and viewing manipulated photos," "the risks far outweigh the benefits."[346] This review noted that selfie manipulation "exacerbate[s] risk and maintenance of several mental health concerns including body dissatisfaction, eating disorders and body dysmorphic disorder, among vulnerable populations."[347]

171. The original October 2019 ban was reviewed in November 2019 through the company's regular policymaking process, and "was provisionally passed, pending…additional outreach to experts, and additional literature review." [348] During this time, Meta researched safety risks and consulted with 21 independent experts to better understand the impact they may have.[349]

172. The company's consultation with experts resulted in several findings, including that "extreme cosmetic surgery effects can have severe impacts on both the individuals using the effects and those viewing the images," and "[c]hildren are particularly vulnerable… [as are] those with a history of mental health challenges, eating disorders."[350]

173. Ms. Gould Stewart understood this research to show a credible connection between these

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344 META3047MDL-003-00179481, "Cosmetic Surgery Effects (a/c priv)," 2020, at 486.

345 META3047MDL-014-00376297, "Consequences and Implications of Selfie Manipulation: Literature Review," November 2018; Deposition of Margaret Gould Stewart, October 21, 2024, 66:6–73:1.

346 META3047MDL-014-00376297, "Consequences and Implications of Selfie Manipulation: Literature Review," November 2018, at 305.

347 META3047MDL-014-00376297, "Consequences and Implications of Selfie Manipulation: Literature Review," November 2018, at 305.

348 META3047MDL-003-00179481, "Cosmetic Surgery Effects (a/c priv)," 2020, at 486.

349 META3047MDL-003-00179481, "Cosmetic Surgery Effects (a/c priv)," 2020, at 487.

350 META3047MDL-003-00179481, "Cosmetic Surgery Effects (a/c priv)," 2020, at 487. *See also* META3047MDL-003-152749, "Re: [Feedback needed] Plastic Surgery AR Effects + Camera Settings Policies," November 18, 2019, at 487, "[It]'s been our strong recommendation from comms, marketing, policy, and engagement with nearly 20 outside experts and academics that we pass this policy which codifies a more refined and pressure tested version of our temporary policy … which disallows effects that mimic plastic surgery." (Emphasis added); META3047MDL-003-96018 beginning at 10 (further discussing recommendations); *see also* Deposition of Karina Newton, February 27, 2025, 46:23-71:2.

effects and experiences of anxiety, depression, body dysmorphia, and eating disorders.[351] Ms. Gould Stewart further noted that her own experience as a parent of two teenage girls, one of whom had been hospitalized twice for body dysmorphia, provided first-hand knowledge of the seriousness of the issues outlined in the research.[352] As such, she supported the continuation of the ban, noting that when it came to these effects and their use by young users, Meta should be prioritizing safety and well-being.[353]

174. Ms. Gould Stewart was joined in her support of continuing the ban by other senior personnel at Meta, including Sheryl Sandberg, Meta's Chief Operating Officer, Nick Clegg, Meta's President of Global Affairs, and Monika Bickert, one of Meta's heads of policy.[354] In expressing his support, Mr. Clegg emphasized the seriousness and complexity surrounding the issue of "young women's body image and the dangers of cosmetic surgery."[355] Mr. Clegg warned: "I think there are multiple reasons – of principle and of practice – why reversing our ban on surgical cosmetic features would be a very unwise thing to do. **We would – rightly – be accused of putting growth over responsibility.**" [bolding added for emphasis][356]

175. In fact, Ms. Gould Stewart's pre-read explicitly noted this trade-off between growth and mental health based on the possible restrictions of these tools. It weighed the pros and cons of 1) continuing the ban, 2) lifting the ban but removing the effects from Meta's "recommendation

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351 META3047MDL-014-00358698, "Re: Body-enhancing filters & Well-Being Lit Review request" email, Nov. 5, 2018, at 699, Deposition of Margaret Gould Stewart, October 21, 2024, 73:2–12.

352 META3047MDL-014-00377295, "Re: Pre-read on Cosmetic Surgery AR Effects (next Thursday)," May 12, 2020, at 295.

353 Deposition of Margaret Gould Stewart, October 21, 2024, 260:10–16.

354 Deposition of Margaret Gould Stewart, October 21, 2024, 107:25–121:8, 124:10–125:17.

355 META3047MDL-014-00053599, "FW: Pre-read on Cosmetic Surgery AR Effects (next Thursday)" April 9, 2020, at 599.

356 META3047MDL-014-00053599, "FW: Pre-read on Cosmetic Surgery AR Effects (next Thursday)" April 9, 2020, at 599.

surfaces,"[357] or 3) lifting the ban altogether. Pros of continuing the ban included "mitigat[ing] wellbeing concerns; no PR/regulatory risk," while cons included "[l]imits growth."[358] Meanwhile, pros of lifting the ban included "lowest impact to growth," and the cons included "[h]ighest wellbeing risk."[359]

176. After being provided these considerations, Mr. Zuckerberg chose to lift the ban.[360] He made this decision despite the serious well-being concerns outlined by Meta's research team. This decision troubled the supporters of the ban, including Ms. Gould Stewart, who wrote Mr. Zuckerberg a letter stating, "I don't think it's the right call given the risks… I just hope that years from now we will look back and feel good about the decision we made here."[361]

b. Internal evidence that Meta rejected recommendations from health and safety experts to remove like counts

177. A second case in which Meta prioritized business interests over well-being was its May 26, 2021, decision not to implement the internally-recommended "default" form of an initiative known as Project Daisy.[362] Beginning in 2018, Project Daisy was introduced to investigate whether removing like counts on Instagram and Facebook would diminish the rate of "negative social comparison" on both platforms.[363] Dr. Kyle Andrews, a researcher involved in conducting

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357 The "recommendation surfaces" referenced here are the "gallery of effects" that users can look through on Meta's platforms. Users may "go into the gallery and peruse" and come across recommended filter options they may want to apply to their photos. See Deposition of Margaret Gould Stewart, October 21, 2024, 129:6–130:1

358 META3047MDL-003-00179481, "Cosmetic Surgery Effects (a/c priv)," 2020, at 481.

359 META3047MDL-003-00179481, "Cosmetic Surgery Effects (a/c priv)," 2020, at 481.

360 META3047MDL-014-00377295, "Re: Pre-read on Cosmetic Surgery AR Effects (next Thursday)," May 12, 2020, at 295.

361 META3047MDL-014-00377295, "Re: Pre-read on Cosmetic Surgery AR Effects (next Thursday)," May 12, 2020, at 295.

362 Instagram, May 26, 2021, "Giving People More Control on Instagram and Facebook," *Instagram*, https://about.instagram.com/blog/announcements/giving-people-more-control. Accessed July 14, 2025.

363 Deposition of Kyle Andrews, PhD, November 19, 2024, 311. "Negative social comparison" is a term used by

this research and presenting the results to company decisionmakers,[364] described Project Daisy as a "well-being project."[365]

178. Project Daisy provided data showing that removing like counts would drive a reduction in negative social comparison, and thereby improve health and well-being.[366] Meta's researchers concluded that, when like counts were removed, people "reported less negative comparison than those who still had like counts," and that "teen girls appeared to benefit the most with respect to negative comparison."[367] A summary of this research was shared among internal Meta team members in 2020 through a blog post called "What Makes Teens Tick?"[368] This post recognized these significant findings, noting that the removal of like counts "made some stride towards reducing social comparison for teens" through its "statistically significant impact on reducing the frequency of 'like' comparison for both teens and non-teens."[369] Based on these results, which indicated that removing like counts could ameliorate the harms associated with social comparison, Dr. Andrews recommended that Meta launch Project Daisy on Instagram.[370] Researchers who worked on Project Daisy also believed it would improve well-being and advocated for implementation at the time.[371] In particular, one of the project's lead well-being researchers, Justin Cheng, stated that having "like counts" hidden by default would be the most effective way to improve negative social comparison and well-being, and that Project Daisy was

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Meta to understand the rate at which its platforms make people feel worse about themselves because of other people's posts. See, Deposition of Kyle Andrews, PhD, November 19, 2024, 19:20-23

364 Deposition of Kyle Andrews, PhD, November 19, 2024, 312:12-19.

365 Deposition of Kyle Andrews, PhD, November 19, 2024, 318:23-25, 319:1-7.

366 Deposition of Kyle Andrews, PhD, November 19, 2024, 327:4-18, 342:24-25, 343:1-15.

367 Deposition of Kyle Andrews, PhD, November 19, 2024, Dep. 338:19-22.

368 META3047MDL-003-00191207, "What Makes Teens Tick?" June 5, 2020.

369 META3047MDL-003-00191207, "What Makes Teens Tick?" June 5, 2020, at 214.

370 Deposition of Kyle Andrews, PhD, November 19, 2024, 339:6-10.

371 Deposition of Justin Cheng, March 13, 2025, 354:3–23; Deposition of Moira Burke, January 28, 2025, 189:7-16; META3047MDL-003-00028613, "FW: Daisy Update 8.17.20," September 2, 2020.

the "rare case where a product intervention can improve well-being for almost everyone that uses our products."[372]

179. However, Meta was hesitant to implement the feature because decision-makers at the company believed that Project Daisy introduced undesirable trade-offs. Among these trade-offs was the observation that Daisy "resulted in a decline in ad performance," and a "revenue drop of 1 percent plus or minus point 9 percent."[373] Removing like counts further diminished time spent on Meta's platforms, which Dr. Andrews noted was "almost the same thing as [weakening] ad performance."[374] Still, Dr. Andrews recommended making these changes despite the drop in revenue and ad performance. Instead, however, three-and-a-half years after the company first started discussing hiding like counts in December 2017,[375] Meta launched an opt-in[376] variant of Project Daisy on May 26, 2021, which the company knew would lead many users away from adopting the feature.[377] This opt-in version stood in stark contrast to the studied and internally-recommended default version, which would be launched to all users, and hide all like counts by default.[378] The company spun this decision as a boon for consumers, explaining that removing like counts was "beneficial for some, and annoying to others, particularly because people use like

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372 META3047MDL-003-00071387, "Re: Daisy Update 8.17.29," August 25, 2020, at 392.

373 Deposition of Kyle Andrews, PhD, November 9, 2024, 324:13-19.

374 Deposition of Kyle Andrews, PhD, November 19, 2024, 324:16-19.

375 META3047MDL-003-00153077, "Re: Instagram HPM — 09/30/19," December 2, 2019, at 077.

376 An "opt-in" feature is one that is not enabled by default, but instead requires the user to adjust a specific setting within in the app. See Deposition of Kyle Andrews, PhD, November 19, 2024, 349:20-25; 350:1-4.

377 Opt-in features are decidedly less effective than default. Research has shown that defaults are powerful drivers of behavior. *See, e.g.*, Johnson, E. J., & Goldstein, D. (2003), "Do Defaults Save Lives?," *Science*, 302:1338-1339; McKenzie, C. R. M., Liersch, M. J., & Finkelstein, S. R. (2006), "Recommendations implicit in policy defaults," *Psychological Science*, 17(5):414-420. In an internal document from 2009, Mr. Zuckerberg alludes to this kind of research, stating, "stats show us that most people just use whatever the default setting or filter is." See, Deposition of Mark Zuckerberg, March 27, 2025, 237:6-238:-8, Exhibit 32.

378 Deposition of Kyle Andrews, PhD, November 19, 2024, 349:20-25; 350:1-4; https://about.instagram.com/blog/announcements/giving-people-more-control. Accessed July 14, 2025. Notably, as recently as April 2021, Meta had received recommendations from external experts that it "should have Daisy on by default for teens." META3047MDL-003-163937, "Re: Daisy (hiding like counts) + Youth Defaults," April 14, 2021, at 938. See also Deposition of Karina Newton, February 27, 2025, at 245:1-254:9.

counts to get a sense for what's trending or popular."[379] In fact, the launched version: a) was not the version recommended by the research team; b) was a watered-down version relative to the version that researchers at Meta had studied; and c) had not been shown by researchers to significantly ameliorate the problem of harmful social comparisons on Instagram and Facebook.[380] Again, Meta's decision to implement a weak version of Project Daisy reflected the company's tendency to place business interests above user welfare, contradicting its claims that the company prioritized user welfare over profit.[381]

c. Internal evidence that Meta continually delayed—and weakened—its launch of Private By Default despite clear recommendations concerning health and safety

180. Meta also rejected health and safety recommendations in favor of growth when determining whether to implement a Private By Default setting for all teen accounts. This feature was designed to limit how easily teen accounts could be discovered, and to keep the information of teen users from other users, thereby decreasing opportunities for bullying and unwanted contact.[382] One slide deck prepared by Instagram's Growth Team noted that the benefits of Private By Default aligned with safety experts' expectations and could "prevent high severity actions such as child grooming and inappropriate contact with minors."[383]

181. It appears that this feature was originally scheduled to launch on September 2, 2020, to

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379 Instagram, May 26, 2021, "Giving People More Control on Instagram and Facebook," *Instagram*, https://about.instagram.com/blog/announcements/giving-people-more-control/. Accessed July 14, 2025.

380 *See generally* Deposition of Kyle Andrews, PhD, November 19, 2024, 349-350.

381 Even after May 2021, Meta continued to resist internal efforts to make Daisy default for teens. See META3047MDL-003-128836, "Message summary [{"otherUserFbld":null,"threadFloild":3679631302141618}]" Satish Mummareddy, July 28, 2021; Deposition of Karina Newton, February 27, 2025, 254:16-257:9.

382 Deposition of Vaishnavi Jayakumar, January 30, 2025, 69:5-70:22, Darius Kilstein, December 17, 2024, 213:7–21, 222:19–223:8, Exhibit 57, at 5.

383 Deposition of Darius Kilstein, December 17, 2024, 381:14-17, Exhibit 57, at 7.

address these ongoing teen safety concerns.[384] According to the same slide deck referenced above, Private By Default was publicly announced even earlier, in December 2019 as part of the company's "age collection moment."[385] This announcement apparently garnered positive feedback in the press, as noted in that same slide deck: "The inclusion of the safety rationale for collecting age helped us land this favorable [sic] in the press and avoid criticism that this was a move solely to help with ads targeting."[386]

182. Though Instagram made this announcement, it appears that, internally, the company was not aligned on whether Meta would, in fact, launch the feature. In mid-August 2020, the launch was met with strong resistance from Meta leadership who grew concerned about its conflict with various business interests, especially growth and engagement.[387] John Allen Thomas, a Meta employee who worked in Product Growth, stated in an email that "[w]e just reviewed the plan in family growth circle and [are] pretty worried…"[388] Darius Kilstein, an Instagram employee working on Private By Default, echoed these concerns, writing to his team that, "We shared [Private By Default] to CP Growth… as well as Alex Schultz via email, they were pretty concerned with the ecosystem hits (as am I)."[389] A slide deck entitled "Teen Private By Default Launch Decision Review," put together by the Growth Graph Team, details these growth

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384 Deposition of Vaishnavi Jayakumar, January 30, 2025, 746:10-13.

385 Deposition of Darius Kilstein, December 17, 2024, Exhibit 57, at 7; META3047MDL-031-00136977, "Teen Private By Default Launch Decision Review," August 2020, at 980.

386 Deposition of Darius Kilstein, December 17, 2024, Exhibit 57, at 7; META3047MDL-031-00136977, "Teen Private By Default Launch Decision Review," August 2020, at 982.

387 Deposition of Vaishnavi Jayakumar, January 30, 2025, 69:5-70:22; META3047MDL-003-00181760, "Re: [3:00] FGC | Defaulting New Teen Accounts to Private on IG," August 19, 2020; META3047MDL-003-00028529, "Re: Private By Default - Follow up," August 20, 2020; Deposition of Darius Kilstein, December 17, 2024, 77:8–378:2, 379:7–380:22, Exhibit 57.

388 META3047MDL-003-00181760, "Re: [3:00] FGC | Defaulting New Teen Accounts to Private on IG," August 19, 2020, at 762.

389 META3047MDL-003-00028529 at 3, "Re: Private By Default - Follow up," August 20, 2020, at 531.

concerns.[390] The growth team predicted that launching Private By Default would reduce Instagram's monthly active teens by 831,000 (just under 2% of users)[391] and recommended against the launch.[392]

183. Because of these growth concerns—and despite the recommendations to launch the feature by the Policy, Legal, Communications, Privacy, and Well-being teams[393]—Meta delayed the launch to see if they could find an alternative solution with less impact on growth. Mr. Kilstein explained that the Private By Default team needed "to test some other variants which get the safety wins while minimizing the ecosystem impact."[394] In fact, the company's purported desire to find a solution that compromised neither growth nor well-being was not reflected in its decision-making. Some staff claimed that it would not be possible to find strong enough evidence to convince Meta's leadership that Private By Default would decrease the rate of bullying enough to justify the drop in growth.[395] However, [redacted], a Product Lead at Meta, stated that Meta's team was "absolutely certain" that the features would have "massive" gains with regards to reducing the prevalence of bullying on the platform.[396] The issue, then, did not appear to be that sufficient evidence of the positive impact of Private By Default could not be found, but rather that there were "too many tradeoffs" to justify the feature's full rollout.[397] Here, the company clearly prioritized growth above user welfare.

184. This resulted in a diminished launch of Private By Default in 2021, in which the

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390 *See* META3047MDL-031-00136977, "Teen Private By Default Launch Decision Review," August 2020; Deposition of Darius Kilstein, December 17, 2024, 373:11–20, Exhibit 57.

391 Deposition of Darius Kilstein, December 17, 2024, Exhibit 57 at 3; META3047MDL-031-00136977, "Teen Private By Default Launch Decision Review," August 2020.

392 Deposition of Darius Kilstein, December 17, 2024, 380:13–22, Exhibit 57 at 6.

393 Deposition of Darius Kilstein, December 17, 2024, 380:13–19, Exhibit 57, at 6.

394 META3047MDL-003-00028529, "Re: Private By Default - Follow up," August 20, 2020, at 531.

395 META3047MDL-003-00028529, "Re: Private By Default - Follow up," August 20, 2020.

396 META3047MDL-003-00028529, "Re: Private By Default - Follow up," August 20, 2020, at 529.

397 META3047MDL-003-00028529, "Re: Private By Default - Follow up," August 20, 2020, at 529.

protective privacy setting was only implemented by default for new users under the age of 16, and did not capture existing users under the age of 18.[398] Since the default did not apply to these existing users, the feature made only modest improvements to collective well-being. Meanwhile, according to Ms. Jayakumar, the launch of Private By Default was simultaneously launched alongside new notifications and reminders[399] that were known to contribute to addictive social media use among teens.[400] In taking these actions, Meta chose to prioritize business interests over the safety and well-being of teens.

d. Internal evidence that Meta leadership frequently declined to provide resources that employees requested to promote user well-being

185. Justin Cheng, a former research scientist at Meta, stated in his deposition that "the company did not prioritize well-being research enough,"[401] likely further impairing any effort to reasonably argue for the implementation of well-being efforts. He believed that much of the inability to get "leadership buy-in"[402] on well-being-related research projects arose because Meta wanted to avoid "inconvenient" research findings that may have included, for example: "[The finding that [i]ncreased well-being is associated with spending less time on Facebook;" and "[The finding that a] specific feature that Meta wants to promote is… not good… [or is] bad for you in some way or form," or even findings that may negatively impact Meta's financial interests.[403] For example, in his testimony, Mr. Cheng recounted being deterred from researching anxiety because it was "a sensitive topic."[404]

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398 Deposition of Vaishnavi Jayakumar, January 30, 2025, 748:5-23.
399 Deposition of Vaishnavi Jayakumar, January 30, 2025, 747:6-16.
400 Deposition of Vaishnavi Jayakumar, January 30, 2025, 141:9-142:8.
401 Deposition of Justin Cheng, March 13, 2025, 69:19–70:10.
402 Deposition of Justin Cheng, March 13, 2025, 82:3.
403 Deposition of Justin Cheng, March 13, 2025, 84:15–85:1, 85:21–86:9.
404 Deposition of Justin Cheng, March 13, 2025, 82:2–10.

186. On other occasions, Meta employees expressed frustration about the company's slow response or underinvestment in well-being initiatives or research. One such instance was the company's response to the death of 14-year-old [redacted], who had died in 2017 from an act of self-harm after saving, liking, or sharing 2,100 Instagram posts related to suicide, self-harm, and depression.[405] In an email chain, one Meta employee who worked in content policy, [redacted],[406] noted that it took too long to get a policy change in response, and Nick Clegg agreed, stating, "I pretty well had to yell at a room full of senior FB folks before we got some movement."[407]

187. These internal discussions highlight two important points: First, that Meta was aware of the serious health and safety risks its platforms posed to users; and second, that employees were urging the company from within to accept that it would have to take business risks or incur financial losses if it wanted to prioritize health and safety. Meta's choice to allow profit motives to supersede user welfare appear to have frustrated a number of its own employees and indicate that the company was not in fact treating user safety as its top priority.

e. Internal evidence that Meta "deprioritized," under-funded, or shut down teams and initiatives designed to understand and improve user well-being.

188. Internal communications and testimony indicate that Meta could have done more to prioritize tools designed to improve user well-being. For example, George Volichenko, a former data scientist at Instagram, testified that he left the company, in part, because the well-being

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405 Milmo, Dan, Sept. 30, 2022, "The bleakest of worlds: how [redacted] fell into a vortex of despair on social media," *The Guardian*, https://www.theguardian.com/technology/2022/sep/30/how-molly-russell-fell-into-a-vortex-of-despair-on-social-media/.

406 Deposition of Nick Clegg, March 20, 2025, 66:4-25.

407 Deposition of Nick Clegg, March 20, 2025, Exhibit 6, at 1. See also META3047MDL-040-00317980, "Re: Time Well Spent Approach: FB v IG," July 31, 2018.

team's "hands were tied" regarding what they were licensed to accomplish.[408]

189. In his deposition, Mr. Zuckerberg acknowledged that Meta has in the past adopted a "lockdown sprint" protocol, during which teams could be reassigned or asked to focus intensely on completing a particular project.[409] These lockdowns were enacted for both the launch of Instagram Live and an initiative to increase user growth to 400,000 new users a day—both of which were focused on increasing user engagement.[410] Notably, it appears that Instagram Live was released on April 6, 2016, just two months after the lockdown proposal.[411] These timelines and responses to these projects stand in stark contrast to the protracted timelines and unheeded requests for additional staff on a variety of well-being products and research. For example, multiple initiatives that promised to increase well-being experienced significant delays in implementation. Quiet Mode, an option to turn off notifications, was first discussed in 2017, but was not launched until January 2023, more than five years later.[412] Hiding like counts was first discussed in December 2017, and an opt-in version of the feature was finally launched over three years later, on May 26, 2021.[413] Finally, Take a Break was first discussed in May 2017, but only launched over four years later, on December 7, 2021.[414] These delays, which stand in stark contrast to the rapid progress Meta demonstrated when pursuing its financial objectives, are inconsistent with Meta's claim that well-being was among the company's top priorities, and that it would sacrifice profits for user welfare.

190. Furthermore, Meta knowingly understaffed teams that were focused on well-being while

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408 Deposition of George Volichenko, December 16, 2024, 160:9–163:7.
409 Deposition of Mark Zuckerberg, March 27, 2025, 342:17-20, 347:10-11.
410 *See generally* Deposition of Mark Zuckerberg, March 27, 2025, 336:2-364:6; Exhibits 48 and 49.
411 Deposition of Mark Zuckerberg, March 27, 2025, 347:19, 348:11.
412 Deposition of Mark Zuckerberg, March 27, 2025, 368:8-17, 370:9-18.
413 Deposition of Mark Zuckerberg, March 27, 2025, 373:16-374:21, 375:10-25.
414 Deposition of Mark Zuckerberg, March 27, 2025, 380:14-21, 381:13-22.

launching new growth products at a faster rate in 2017, and it rejected requests for additional well-being "headcounts" and proposals in 2019 and 2021, when the lack of adequate staffing posed significant problems with respect to well-being, which was consistently deprioritized by Meta.

191. For example, in or around October 2017, when Meta was "launching more new products at a faster rate than ever," and its top priority was addressing its perceived loss of market share with teens,[415] employees flagged for CEO Mark Zuckerberg that Instagram had an increasing "responsibility to ensure [its] community is safe" given Instagram's growing size to 850 million monthly users. Specifically, the Instagram team noted that the Protect and Care ("PAC") team—a predecessor to IG's well-being team—was not adequately staffed "to stay ahead of all potential PAC related issues," thereby leaving "Instagram PAC [to be] far behind" which presented "a major liability for FB Inc."[416] In fact, "PAC/Compassion [had not] focused on technology addiction in the past for purely prioritization/bandwidth reasons, especially because it likely wouldn't be tied to direct product work so [it] was harder to prioritize…"[417]

192. Additionally, in April 2019, approximately a year and a half after Meta began its internal research on problematic use,[418] David Ginsberg, then Vice President of Research,[419] requested

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415 Deposition of Kang-Xing Jin, November 8, 2024, at 212:8–221:11, Exhibit 13.

416 META3047MDL-050-00331333, "Instagram Quarterly Review," Oct. 9, 2017, at 334.

417 META3047MDL-040-00595529, "Re: research on FB or technology "addiction," Sept. 9, 2017, at 530; *see also* Deposition of David Ginsberg, January 9, 2025, 115:15–117:11, Exhibit 6; Deposition of Jennifer Guadagno, PhD, November 14, 2024, 167:2–9, Exhibit 20; see also Deposition of Guy Rosen, February 19, 2020, 444:5–21, Exhibit 18.

418 Deposition of Jennifer Guadagno, PhD, November 14, 2024, 165:10–24; Deposition of Moira Burke, January 28, 2025, at 38:1–40:9, 47:11-25.

419 Deposition of David Ginsberg, January 9, 2025, 53:23–54:19.

additional "headcount"[420] to work on a well-being initiative known as "Well-being 10x."[421] Mr. Ginsberg made this request due to "a strong need to increase [] investment" in "problematic use/addiction and teens," social comparison, and loneliness which "impact[ed] people's well-being."[422] At the time, Instagram had only two researchers and no data engineers, data scientist, core data scientist, design, or project managers ("no DE/DS/CDS/Design/PMs") focused on well-being.[423] Despite the fact that the headcount request flagged that without additional headcount and funding, Instagram would be "on a trajectory to deliver exploratory findings and continue [its] research at a slower pace" and "would remain unstaffed," Mark Zuckerberg did not fund the Well-being 10x initiative. Head of Instagram Adam Mosseri and Head of Product Chris Cox discussed how Meta would have acted differently if the request had concerned "IG teen growth."[424]

193. And, in August and November 2021, Nick Clegg—then Vice President of Global Affairs—twice submitted headcount requests, which were also endorsed by Chris Cox and Alex

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420 "Headcount" refers to "the budget to hire additional . . . people on your team." Deposition of Guy Rosen, February 19, 2020, 195:2–7.

421 Deposition of David Ginsberg, January 9, 2025, at 248:22–258:24, Exhibit 16; For more information on the initiative itself, *see* Deposition of Jennifer Guadagno, PhD, November 14, 2024, 253:22–254:20, Exhibits 29, 31; *see generally* META3047MDL-003-00017972, "Well-Being 10x," March 8, 2019.

422 Deposition of David Ginsberg, January 9, 2025, at 248:22–258:24, Exhibit 16 at META3O47MDL-020-00230761-762.

423 META3047MDL-003-00017998, "9457: H2 2022 Feed Pillar Backtest," 2022; *see also* Deposition of David Ginsberg, January 9, 2025, Exhibit 16; Deposition of Jennifer Guadagno, PhD, November 14, 2024, at 280:18–282:12; Deposition of Paul Alexander Dow at 68:12–15.

424 META3047MDL-003-00144407, "Well-Being 10X: Sheryl Review," at 414; META3047MDL-003-00145472, "Re: Background on Well-Being Contingency HC Ask," April 16, 2019, at 474; META3047MDL-050-00366411, Short Message Report, March 7, 2023; *see also* Deposition of David Ginsberg, January 9, 2025, at 248:22–258:24, Exhibit 16; Deposition of Susan Li, March 10, 2025, at 220:14–228:16, Exhibit 21; Deposition of Adam Mosseri, March 17, 2025, at 437:12–440:19, Exhibits 45–46; Deposition of Paul Alexander Dow, November 7, 2024, at 252:2–260:21, Exhibit 16; Deposition of Jennifer Guadagno, PhD, November 14, 2024, at 288:25–302:5, Exhibits 30-31; META3047MDL-003-00149580, "Re: Well-being *raw* notes," Sept. 17, 2019; META3047MDL-006-00000061, "Re: Background on Well-Being Contingency HC Ask," April 16, 2019.

Schultz, directly to Mark Zuckerberg; the requests were not approved.[425] In August, Mr. Clegg provided Mr. Zuckerberg with a proposal "for additional investment to strengthen [Meta's] position on wellbeing," which "has become increasingly urgent over recent months," and stated that Meta "need[ed] to do more" because it was "being held back by a lack of investment on the product side," "not able to make changes and innovation at the pace required to be responsive to policymaker concerns[,]" "both under-staffed and fragmented across teams" with respect to the "wellbeing work," "not on track to succeed for [its] core well-being topics (problematic use, bullying & harassment, connections, and SSI)," and not addressing various well-being "gaps," as well as falling behind "competitors and external expectations."[426] As part of "a product strategy that will get [Meta] on track for success over the next ~2 years," Mr. Clegg and others proposed headcounts of at minimum 25 people for a central cross-family or cross-function team ("XFN") and 20 engineers ("ENG") and ideally "40 XFN" and "84 ENG" for both Facebook and Instagram."[427] Because the proposal was denied or not funded in November 2021, Mr. Clegg scaled down the proposal with two options, decreasing the number of XFN to either 25 or 7 and the number of ENG to zero, to create "the bare minimum needed to meet basic policymaker inquiries."[428] Yet, again, Mr. Clegg's second request was denied with no headcount allocated.[429]

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425 Deposition of Nick Clegg, March 20, 2025, at 118:4–150:5, Exhibit 15; Deposition of Antigone Davis, March 4, 2025, Exhibit 57; Deposition of Susan Li, March 10, 2025, at 228:17–235:6, Exhibit 22; Deposition of Pratiti Raychoudhury, December 12, 2024, Exhibit 36.

426 Deposition of Nick Clegg, March 20, 2025, at 118:4–150:5, Exhibit 15, at 3-4; Deposition of Antigone Davis, March 4, 2025, Exhibit 57, at 3-6; *see also* Deposition of Antigone Davis, March 4, 2025, Exhibit 56.

427 Deposition of Nick Clegg, March 20, 2025, at 118:4–150:5, Exhibit 15, at 3-4; Deposition of Antigone Davis, March 4, 2025, Exhibit 57, at 3-6; Deposition of Susan Li, March 10, 2025, at 228:17–235:6, Exhibit 22; Deposition of Pratiti Raychoudhury, December 12, 2024, Ex. 36 at 4.

428 Deposition of Nick Clegg, March 20, 2025, at 118:4–150:5, Exhibit 15 at 2; Deposition of Antigone Davis, March 4, 2025, Exhibit 57, at 2-3; Deposition of Susan Li, March 10, 2025, at 228:17–235:6, Exhibit 22; Deposition of Pratiti Raychoudhury, December 12, 2024, Ex. 36 at 4.

429 Deposition of Nick Clegg, March 20, 2025, at 118:4–150:5; Deposition of Antigone Davis, March 4, 2025, Exhibit 57; Deposition of Susan Li, March 10, 2025, at 228:17–235:6, Exhibit 22; Deposition of Pratiti Raychoudhury, December 12, 2024, Exhibit 36, at 1.

Following such denial from CEO Zuckerberg, Adam Mosseri expressed being "really worried about" well-being research, as Meta had "been talking about [well-being] for a long time but have made little progress."[430]

194. Brian Boland—a former VP of Partnerships Product Marketing, Partner Engineering, Marketing, Strategic Operations, & Analytics at Facebook from 2018 to 2020—testified not only that Mr. Zuckerberg determined priorities and headcounts, but also that Meta did not "meaningfully care about user safety."[431] And Arturo Béjar—a former Director of Engineering who led Facebook PAC from 2009 until 2015 and worked on well-being as an expert from 2019 to 2021—had observed the same, testifying that Meta prioritized growth and engagement metrics over safety measures, broke up the moved key parts of the PAC team under the growth team, created conflicts of interest for anyone working on safety due to growth-based metrics and compensation, provided inadequate resources or support for well-being or safety, and lacked meaningful safety tools and features at the time.[432]

195. Given such circumstances, George Volichenko—a former Data Scientist who worked on Take a Break and Quiet Mode features as part of Instagram's Teen Mental Health team addressing problematic use—felt that it was his job to build features as a defense to potential litigation, as opposed to actually helping with the safety and health of teenagers, and left Instagram because the financial benefits did not outweigh the layers of leadership that made it difficult to launch products, he felt that the employees' "hands were tied" when it came to providing products that were helpful to the users, and Meta added pressure to constantly launch

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430 Deposition of Kang-Xing Jin, November 8, 2024, Exhibit 32; META3047MDL-044-00182656, "Re: Well Being Research," October 27, 2021, at 657; *see also* Deposition of Kang-Xing Jin, November 8, 2024, at 386:21–392:3.

431 Deposition of Brian Boland, April 25, 2025, 265:11–18; 105:5–109:16.

432 Deposition of Arturo Béjar, April 7, 2025, 151:21–157:19.

products that would be low in adoption or ineffective.[433,434]

vii. Conclusion

196. As described in this section, Meta made external statements asserting that consumer well-being is its top or one of its top priorities, that it prioritizes well-being over profit, and that it invested in its well-being efforts. To support these statements, Meta's employees implemented social influence tactics, including drumbeats and proof points. As with other external statements from the company and given the nature of its platforms as credence goods, consumers would have been more reliant on Meta to provide accurate, honest, and relevant information about its products. Consumers are likely to take away a false impression of Meta's platforms from Statements A1-A9, as they would not have expected that Meta actually: gave little weight to promoting user well-being when it made internal decisions about Augmented Reality features, hiding like counts, and the Private by Default Setting; declined repeated requests from

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433 Deposition of George Volichenko, January 3, 2024, 151:6–156:11, 158:2–163:22.

434 Other Candid acknowledgements of Meta's failures to fully fund or prioritize vital well-being work can found in numerous internal documents and chats. Some additional examples include: META3047MDL-031-00017964, "Instagram Well-being HPM 7/24/2020," July 24, 2020, ("We made the hard decision to de-prioritize Mental Health for this half and ask most of that team to pivot to Elections Voting Empowerment."); META3047MDL-040-00601233, "Re: well being," March 27, 2019, (Mosseri – "Instagram Wellbeing team is currently woefully understaffed relative to the state of the product on most safety related integrity issues….Mark has been very hesitating [sic] to increase the percentage of our resources on wellbeing and integrity so far this year…"); META3047MDL-020-00277373, "Message summary [{"otherUserFbld":10045956739198,"threadFbld":null}]" [redacted], February 23, 2021, (Jayakumar - "I was wondering whether you think priority / concern social media addiction and time spent is still a company-wide concern …" [redacted] - "honestly no."), META3047MDL-003-00166569, "[WIP] Problematic Use Product Strategy Brief," 2021, ("Facebook and Instagram currently are not aligned in their approach, and there are several more high impact problematic use product ideas that are not currently prioritized."); META3047MDL-003-00105559, "Re: the Daisies and well-being," March 11, 2020, (Burke – "Every couple of years there's a new workstream to standard well-being measurement (~2016 under the Compassion team, and 2019 under Product Foundations), and we just do more work that identifies all of the challenges / shows why we need different metrics rather than a single one. (I'm a bit sour because that has twice resulted in re-orgs for the relevant team, which then thwarts the ongoing work."); META3047MDL-028-00003303, Well-Being Research Tracker, (2022 research tracking spreadsheet marking all NAC work as "deprioritized/BtL [below the line]"); META3047MDL-044-00131401, "Message summary [{"otherUserFbld":null,"threadFbld":2893629427424698}]" [redacted], November 5, 2021, ("the points about the problems with focusing on sessions and the team getting shutdown [in the 2021 WSJ article Is Facebook Bad for You; 360 Million Users Say Yes] are inconvenient but true.").

employees for more resources to promote user well-being; and "deprioritized," under-funded, or shut down teams and initiatives designed to understand and promote user well-being.

B. Meta conveyed to consumers that its platforms were not addictive

197. In this section I address Meta's public statements regarding the addictiveness of its platforms, how those statements are likely to shape consumer perceptions of Meta's platforms, and how evidence from Meta employees and documents reveals an internal narrative about Meta's platforms which differs considerably from the narrative presented publicly. A summary of this section is presented below.

198. Meta, or high-ranking Meta personnel including Meta's CEO, Head of Instagram, Meta's Global Head of Safety, Vice President of Global Affairs, and Vice President, Head of Research have made public statements that fall into one of the three following categories:

a. Meta's statements claiming its platforms are not addictive;

b. Meta's statements claiming its platforms are not designed to be addictive; and

c. Meta's discussion of time management tools as proof points to support its statements that its platforms are not addictive.

199. The above statements have a tendency to mislead because:

a. A reasonable consumer would understand addiction to have a broad, lay meaning;

b. A reasonable consumer would not expect that Meta designed its products to be, and knew that they were, addictive in the broad, lay sense; and

c. A reasonable consumer would perceive Meta's time management features as effective at curbing addictive use, but those features were not effective at curbing

addictive use.

200. Below, I focus my analysis on nine statements that I identified through a review of the operative complaints and my own independent investigation. I selected the statements based on several factors, including the nature of the deception, their likelihood of reaching consumers, and the ease of grouping them together for purposes of discussion. The list is not exhaustive. The absence of a particular statement from the tables below should not be taken to imply that the absent statement is not potentially deceptive.

201. I then analyze each grouping of statements to identify the tactics that Meta deployed and relied on to bolster the persuasiveness of its public narrative. Finally, I demonstrate how these statements were false or misleading using the assumptions provided to me by counsel and examples from Meta's own internal documents and employee testimony.

i. Explanation of addiction-related terminology

202. At its core, addiction—including both substance-based and behavioral addiction—involves two elements: an erosion or loss of self-control, and the imposition of harm in the long-term.[435] Though a narrower medical or clinical definition of the term "addiction" might cover only officially recognized medical diagnoses, the more common lay understanding and use of the term refers to attitudes and patterns of behavior that exhibit these core features of control loss and harmful outcomes. By 2018, when Meta made the earliest of its addiction-related at-issue statements, "social media addiction" had emerged as a term in the popular lexicon to describe the capacity of social media platforms to produce uncontrolled use that resulted in harm to their

[435] *See, e.g.*, Grant, J. E., Potenza, M. N., Weinstein, A., & Gorelick, D. A. (2010), "Introduction to behavioral addictions," *The American Journal of Drug and Alcohol Abuse*, 36(5):233-241 (p. 234); Alter, A. L. (2017), *Irresistible: The rise of addictive technology and the business of keeping us hooked* (p. 20), Penguin Press.

users. In academic work,[436] popular media,[437] and internal Meta documents,[438] the term "addiction" is routinely used to describe problematic patterns of social media-related behavior that are not necessarily associated with a medical diagnosis. As such, consumers would likely evaluate Meta's statements about "addiction" and "addictiveness" according to this broader lay understanding of the term, in which any element that is designed to or actually does make the product difficult to resist is considered an addictive quality.

203. Additionally, several other terms exist to refer to behavioral patterns that meet the lay understanding of addiction. In the case of addictive technology, these terms include: "problematic use," "compulsive use," "extended use," and "dependence." For example, a 2017 book chapter on the definitions of substance and non-substance addiction[439] notes that:

> The phenomenon of Internet addiction has many related terms, including Internet Addiction (IA), Internet Addiction Disorder (IAD), Internet dependency or Internet dependence (ID), Pathological internet use or Problematic internet use (PIU), excessive internet use, and impulsive-compulsive internet usage disorder (IC-IUD),[440]

204. In the case of social media addiction, each of those synonyms for addictive use of the

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436 *See, e.g.*, Van Den Eijnden, R. J., Lemmens, J. S., & Valkenburg, P. M. (2016), "The social media disorder scale," *Computers in Human Behavior*, 61:478-487; Cheng, C., Lau, Y. C., Chan, L., & Luk, J. W. (2021), "Prevalence of social media addiction across 32 nations: Meta-analysis with subgroup analysis of classification schemes and cultural values," *Addictive Behaviors*, 117:106845.

437 *See, e.g.,* Seymour, Richard, Aug. 23, 2019, "The machine always wins: what drives our addiction to social media," *The Guardian*, https://www.theguardian.com/technology/2019/aug/23/social-media-addiction-gambling; Peck, Sarah K., Oct. 18, 2018, "I Ran 4 Experiments to Break My Social Media Addiction. Here's What Worked,," *Harvard Business Review*, https://hbr.org/2018/10/i-ran-4-experiments-to-break-my-social-media-addiction-heres-what-worked; Bromwich, Jonah Engel, Jan. 27, 2017, "Generation X More Addicted to Social Media Than Millennials, Report Finds," *The New York Times*, https://www.nytimes.com/2017/01/27/technology/millennial-social-media-usage.html; Inman, Skyler, Jul. 15, 2016, "How to Curb Your Social Media Addiction," *Inc.*, https://www.inc.com/skyler-inman/ditch-your-social-media-addiction-with-these-five-tips.html.

438 See below at Section X.B.vi.a.

439 Zou, Z. et al. (2017), "Definition of substance and non-substance addiction," *Advances in Experimental Medicine and Biology*, 1010:21-41.

440 Zou, Z. et al. (2017), "Definition of substance and non-substance addiction," *Advances in Experimental Medicine and Biology*, 1010:21-41 (p. 31).

technology is also used variously in public discourse, academic research, and internally within Meta to describe a troubling phenomenon that is familiar to many people, including social media platform users, parents, healthcare professionals, researchers, and others.

ii. Analysis of individual statements: *Addictiveness*

205. The first grouping of statements is presented below in Table 4:

Table 4. Meta's statements claiming its platforms are not addictive

No.	Date	Speaker	Statement	Context
B1	December 8, 2021	Adam Mosseri, Head of Instagram	"Senator, respectfully, I don't believe the research suggests that our products are addictive."[441]	Mr. Mosseri responded to Senator Blumenthal, who asked: "Instagram is addictive. That is the view that has been repeated again and again and again by people who are experts in this field. Parents know it. And for teens who see Instagram's algorithms encouraging, for example, eating disorders, they find it almost impossible to stop. The UK code restricts Instagram's use of addictive design, legally restricts its use of addictive design. Shouldn't we have a similar rule in the United States?"
B2	September 30, 2021	Antigone Davis, Meta's Global Head of Safety	"So I disagree with calling our product addictive. I also think that is not how we build products."[442]	Ms. Davis made this statement in response to Senator Sullivan, who asked: "So, Ms. Davis, it is probably—well, I want to ask you, but I have three daughters, and when I read the—when I read the Wall Street Journal story, I was shocked, but, you know, in some ways, not surprised because I think we have seen a lot of this. So when you are looking at your applications, your services, do you balance the mental health needs of Americans versus the addictive nature of the products that you sell?"

441 *Protecting Kids Online: Instagram and Reforms for Young Users*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. (Dec. 8, 2021), https://www.congress.gov/event/117th-congress/senate-event/331205/text.

442 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. 1 (Sept. 30, 2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf.

206. Meta's Head of Instagram, Adam Mosseri, made Statement B1 at a December 2021 Congressional hearing on protecting young users online, when Mr. Mosseri used these tactics to respond to a line of questioning about addiction. In the hearing, Senator Blumenthal asked Mr. Mosseri the following:

> Instagram is addictive. That is the view that has been repeated again and again and again by people who are experts in this field. Parents know it. And for teens who see Instagram's algorithms encouraging, for example, eating disorders, they find it almost impossible to stop. The UK code restricts Instagram's use of addictive design, legally restricts its use of addictive design. Shouldn't we have a similar rule in the United States?[443]

207. When the Senator referenced the notion that "teens . . . find it almost impossible to stop," he was making clear to Mr. Mosseri that his use of the word "addiction" comports with the broad, lay meaning ascribed to the word.[444] Mr. Mosseri responded, "Senator, respectfully, I don't believe the research suggests that our products are addictive."[445] This response refutes the Senator's assertion that "Instagram is addictive," so a reasonable consumer would understand Mr. Mosseri to be denying that Instagram is addictive in the broad, lay sense of the word, and that the company did not otherwise have internal awareness that the platform operates to induce problematic usage consistent with addiction.[446] Immediately after refuting the Senator, Mr.

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443 *Protecting Kids Online: Instagram and Reforms for Young Users*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. (Dec. 8, 2021), https://www.congress.gov/event/117th-congress/senate-event/331205/text.

444 As discussed above in Section X.B.i.

445 *Protecting Kids Online: Instagram and Reforms for Young Users*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. (Dec. 8, 2021), https://www.congress.gov/event/117th-congress/senate-event/331205/text.

446 Moreover, immediately after Mr. Mosseri's response, the Senator made additional remarks leaving no doubt that he is using the broad, lay meaning of "addictive": "We can debate the meaning of the word addictive, but the fact is that teens who go to the platform, find it difficult, maybe sometimes impossible, to stop. And part of the reason is that more content is driven to them to keep them on the site, to aggravate the emotions that are so seductive and ultimately addictive." *Protecting Kids Online: Instagram and Reforms for Young Users*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. (Dec. 8, 2021), https://www.congress.gov/event/117th-congress/senate-event/331205/text/.

Mosseri continued: "Research actually shows that on 11 of 12 difficult issues that teens face, teens who are struggling said that Instagram helps more than harms."[447] In doing so, Mr. Mosseri side-stepped the Senator's question and raised a proof point that would lead a reasonable consumer to think that he was referring to research that demonstrates that Instagram is not addictive in the broad, lay sense of the word. Yet, the study that Mr. Mosseri refers to is not about addiction at all: rather than studying how people felt about the amount of time they spent on Instagram, it instead studied how Instagram affected their feelings on aspects of well-being, such as body image. Thus, Mr. Mosseri's use of this proof point has a tendency to mislead by bolstering the consumer's impression that Instagram is not addictive. Moreover, the statistic that Mr. Mosseri referenced here was cited by Meta in other instances as well, creating a drumbeat of repetition that tended to enhance the credibility of the statistic.[448]

208. Ms. Davis also made a similar statement, Statement B2, at a September 2021 Congressional hearing. A Senator asked Ms. Davis, "So when you are looking at your applications…do you balance the mental health needs of Americans versus the addictive nature of the products that you sell?" Ms. Davis told Congress, "So I disagree with calling our product addictive. I also think that is not how we build products."[449] The exchange shows the Senator using "addictive" in the broad, lay sense of the word: immediately after Ms. Davis's response, the Senator adds that addiction has to do with "teenagers constantly wanting to be engaged in

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447 *Protecting Kids Online: Instagram and Reforms for Young Users*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. (Dec. 8, 2021), https://www.congress.gov/event/117th-congress/senate-event/331205/text.

448 For example, just a few months earlier, this statistic also appeared in a blog post from Pratiti Raychoudhury, Vice President, Head of Research: "Contrary to The Wall Street Journal's characterization, Instagram's research shows that on 11 of 12 well-being issues, teenage girls who said they struggled with those difficult issues also said that Instagram made them better rather than worse."

449 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. 1 (Sept. 30, 2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf.

social media" and "hav[ing] more eye-balls for a longer amount of time engaged." Rather than withdrawing her assertion that she "disagree[s] with calling our product addictive," Ms. Davis appears to agree with the Senator's concept of "addiction," stating that she has not "met a parent who doesn't think about the time their child spends on their phone."[450] Ms. Davis then pivoted to Meta's time-spent tools as a proof point, claiming that "…one of the things…that we have done to actually to [sic] try to address that is to make people aware of how much time they are spending" through the time spent "dashboard."[451] By acknowledging parents' concerns about how teens spend their time and mentioning Meta's use-management tools, Ms. Davis appears responsive to the Senator's question and gives the impression that the platform is not addictive, and that Meta has no internal knowledge that the platform operates in a way that induces problematic usage consistent with addiction.

209. Ms. Davis's reframing of the addiction conversation to center on product design and use-management tools rather than the platforms' effects on users exemplifies a common persuasion tactic employed in Meta's public statements. By shifting the focus to Meta's supposedly good intentions and its proof points in the form of use-management tools, Ms. Davis effectively side-steps the Senator's actual question and instead answers a different question that was not posed to her.

210. The fact that Mr. Mosseri's and Ms. Davis's statements were made in Congressional testimony also made these statements an effective form of agenda setting, as they were high-

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450 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. 1 (Sept. 30, 2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf.

451 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. 1 (Sept. 30, 2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf.

profile statements that helped Meta set forth a strong narrative countering external perspectives that their products were addictive in the broad, lay sense of the word. The general tendency for consumers to assume that a company's communications are truthful and complete is particularly heightened in the context of such formal testimony.

211. In summary, a reasonable consumer would understand from the above statements that Meta's products were not addictive in the broad, lay sense of the word and the Meta did not have knowledge that its platform design operates to induce problematic usage consistent with addiction. As discussed below, in paragraphs 231-232, I have assumed that Meta's products are in fact internally known to be addictive in the broad, lay sense of the word, and also reviewed internal documents that support the same conclusions. Therefore, my opinion is that the above statements have a tendency to mislead.

iii. Analysis of individual statements: *Product Design*

212. As shown in the table below, high-ranking officials at Meta have publicly stated that the company does not design its products to be addictive.

Table 5. Meta's statements claiming it does not design its platforms to be addictive

No.	Date	Speaker	Statement	Context
B3	November 17, 2020	Mark Zuckerberg, CEO of Meta	"we certainly do not design the product in [an addictive] way"[452]	Mr. Zuckerberg made this statement before Congress in response to the question "Do you believe your product can be addictive?"
B4	March 25, 2021	Mark Zuckerberg, CEO of Meta	"…no. I don't agree with that."[453]	Mr. Zuckerberg made this statement before Congress in response to the question "Do you agree that you make money off of creating an addiction to your platforms?"
B5	March 7, 2018	Facebook	"at no stage does wanting something to be addictive factor into [our design] process."[454]	A representative from Facebook provided this statement for a BBC article in which tech leaders described Facebook as addictive. Immediately preceding this statement, the article notes that "Facebook told the BBC that its products were designed 'to bring people closer to their friends, family, and the things they care about.'"
B6	September 30, 2021	Antigone Davis, Meta's Global Head of Safety	"Respectfully, Senator that is not actually how we build our products. In fact, we made changes to our news feed to allow for more meaningful interactions, knowing that that would impact the time spent. In fact, it did impact the time spent by about 50 million hours per day. But we did it anyway because we were trying to build a positive, more positive experience."[455]	Ms. Davis responded to questions from Senator Sullivan, who asked: "But isn't part of your business model to have more eye-balls for a longer amount of time engaged using your services?"

452 *Breaking the News: Censorship, Suppression, and the 2020 Election Before S. Comm. on the Judiciary*, 116th Cong. at 57:09 (2020), https://www.judiciary.senate.gov/committee-activity/hearings/breaking-the-news-censorship-suppression-and-the-2020-election/; PBS NewsHour, Nov. 17, 2020, "WATCH LIVE: Facebook, Twitter CEOs testify on social media's role in 2020 election," *YouTube*, https://www.youtube.com/watch?v=2f7YIxRoSQQ&t=2601s/.

453 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm. on Communications and Technology*, 117th Cong. at p. 72 (2021), https://www.congress.gov/117/chrg/CHRG-117hhrg46925/CHRG-117hhrg46925.pdf/.

454 Andersson, Hilary, July 3, 2018, "Social media apps are 'deliberately' addictive to users," *BBC*, https://www.bbc.com/news/technology-44640959.

455 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm Before S. Comm. on Commerce, Science, and Transportation*, 117th Cong. at p. 39 (2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf.

No.	Date	Speaker	Statement	Context
B7	March 31, 2021	Nick Clegg, VP of Global Affairs	"The goal is to make sure you see what you find most meaningful — not to keep you glued to your smartphone for hours on end."[456]	This statement is from a blog post on the website, *Medium*, titled "You and the Algorithm: It Takes Two to Tango," in which Mr. Clegg rebuts recently published criticisms of Meta.

[456] Clegg, Nick, Mar. 31, 2021, "You and the Algorithm: It Takes Two to Tango," *Medium*, https://nickclegg.medium.com/you-and-the-algorithm-it-takes-two-to-tango-7722b19aa1c2. Accessed July 14, 2025.

213. In delivering these messages, Meta's team frequently presents the company as moral and caring to make its messaging more convincing. Framing statements in terms of product design itself—rather than the product's ultimate impact on users—can function to side-step questions about the platforms' actual effects, and even bolster mischaracterizations of the platforms' actual effects.

214. This was the case in 2020, when Mr. Zuckerberg appeared before Congress and was asked by Senator Lindsay Graham, "Mr. Zuckerberg, do you believe your products can be addictive?"[457] In Statement B3, Mr. Zuckerberg side-stepped Senator Graham's question about addictiveness by instead addressing intent in design, stating that "We certainly do not design the product in that way. We design the product to be as useful and as meaningful as possible."[458] In this instance, Mr. Zuckerberg's response avoids the question at hand and instead directs his audience to focus on what he implies are the good intentions of Meta's product team. The statement seems to suggest that Meta itself is not responsible for engendering addiction to its platforms, and that any such addictive behavior is unintentional, beyond its control, and unrelated to its goals. It also shifts the conversation to focus on quality- over quantity of time spent, emphasizing that Meta is focused on ensuring that its users derive meaning and other benefits from the use of its platforms.

215. When pressed further by Senator Graham about growing evidence that social media sites

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457 *Breaking the News: Censorship, Suppression, and the 2020 Election Before S. Comm. on the Judiciary*, 116th Cong. at 57:16–25 (2020), https://www.judiciary.senate.gov/committee-activity/hearings/breaking-the-news-censorship-suppression-and-the-2020-election/; PBS NewsHour, Nov. 17, 2020, "WATCH LIVE: Facebook, Twitter CEOs testify on social media's role in 2020 election," *YouTube*, https://www.youtube.com/live/5kY4etXpJhs?si=AQqn5Vqnc9WPQcG0/. Accessed July 14, 2025.

458 *Breaking the News: Censorship, Suppression, and the 2020 Election Before S. Comm. on the Judiciary*, 116th Cong. at 57:16–25 (2020), https://www.judiciary.senate.gov/committee-activity/hearings/breaking-the-news-censorship-suppression-and-the-2020-election/; PBS NewsHour, Nov. 17, 2020, "WATCH LIVE: Facebook, Twitter CEOs testify on social media's role in 2020 election," *YouTube*, https://www.youtube.com/live/5kY4etXpJhs?si=AQqn5Vqnc9WPQcG0/. Accessed July 14, 2025.

are addictive, Mr. Zuckerberg told Congress: "I don't think the research has been conclusive, but it is an area that we care about and study. We certainly do not want our products to be addictive."[459] Here, Mr. Zuckerberg's response shifts the focus to Meta's purportedly good intentions—claims that the company does not *want* its platforms to be addictive—and implying that this is an issue Meta takes seriously and works hard to address.

216. In Statement B4, in a later appearance before Congress, in March 2021, Mr. Zuckerberg continued to represent Meta as a company that does not want to induce addictive use. When asked if he agreed that Meta "make[s] money off of creating an addiction to [its] platforms,"—a question fueled by an understanding of Meta's business model that increases revenue by increasing engagement—Mr. Zuckerberg replied, "no. I don't agree with that."[460]

217. Ms. Davis also made a similar statement, Statement B6, during her appearance before Congress later that year. During that appearance, she was asked, "But isn't part of your business model to have more eye-balls for a longer amount of time engaged using your services?" [461] Like Mr. Zuckerberg, Ms. Davis flatly rejected this portrayal of Meta, insisting that "that is not actually how we build our products." [462] Ms. Davis then reframed the conversation to focus on

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459 *Breaking the News: Censorship, Suppression, and the 2020 Election Before S. Comm. on the Judiciary*, 116th Cong. at 57:38–46 (2020), https://www.judiciary.senate.gov/committee-activity/hearings/breaking-the-news-censorship-suppression-and-the-2020-election/; PBS NewsHour, Nov. 17, 2020, "WATCH LIVE: Facebook, Twitter CEOs testify on social media's role in 2020 election," *YouTube*, https://www.youtube.com/live/5kY4etXpJhs?si=AQqn5Vqnc9WPQcG0/. Accessed July 14, 2025.

460 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation*, Hearing Before the Subcomm. on Communications & Technology and the Subcomm. on Consumer Prot. & Commerce of the H. Comm. on Energy & Commerce, 117th Cong. (Mar. 25, 2021), https://www.congress.gov/event/117th-congress/house-event/111407/text/.

461 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm Before S. Comm. on Commerce, Science, and Transportation*, 117th Cong. at p. 39 (2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf/.

462 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm Before S. Comm. on Commerce, Science, and Transportation*, 117th Cong. at p. 39 (2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf/.

meaningful time spent on the platform, stating "In fact, we made changes to our news feed to allow for more meaningful interactions, knowing that that would impact the time spent." [463] According to Ms. Davis, this change "did impact the time spent by about 50 million hours per day. But we did it anyway because we were trying to build a…more positive experience."[464] Ms. Davis's statement provides a persuasive proof point appearing to show Meta's dedication to ensuring that its platforms are not addictive. In a similar fashion to the statements about priorities above,[465] Ms. Davis suggests that Meta is so committed to protecting users from addiction that it is willing to sacrifice engagement significantly.

218. These messages to Congress appear to be part of a broader drumbeat strategy that guides Meta's communications regarding addiction. Years earlier, Meta issued a similar statement, Statement B5, in response to a 2018 *BBC* article on the addictive nature of social media apps, which featured commentary from Silicon Valley insiders claiming that platforms like Facebook were designed to be deliberatively addictive.[466] Perhaps most prominently, the article included comments from former Facebook President Sean Parker at a 2017 *Axios* event, in which he claimed that Facebook was consciously designed to "[exploit] a vulnerability in human psychology" and to "consume as much of your time and conscious attention as possible."[467] In

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463 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm Before S. Comm. on Commerce, Science, and Transportation*, 117th Cong. at p. 39 (2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf/.

464 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm Before S. Comm. on Commerce, Science, and Transportation*, 117th Cong. at p. 39 (2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf/.

465 *See* Section X.A.

466 Andersson, Hilary, July 3, 2018, "Social media apps are 'deliberately' addictive to users," *BBC*, https://www.bbc.com/news/technology-44640959.

467 Solon, Olivia, Nov. 9, 2017, "Ex-Facebook president Sean Parker: site made to exploit human 'vulnerability,'" *The Guardian*, https://www.theguardian.com/technology/2017/nov/09/facebook-sean-parker-vulnerability-brain-psychology; Allen, Mike, Nov. 9, 2017, "Sean Parker unloads on Facebook: 'God only knows what it's doing to our children's brains,'" *Axios*, https://www.axios.com/2017/12/15/sean-parker-unloads-on-facebook-god-only-knows-what-its-doing-to-our-childrens-brains-1513306792; Pandey, Erica,

responding to the claims made in the *BBC* article, a spokesperson for Facebook denied the allegations, stating that "at no stage does wanting something to be addictive factor into" the design process for its products.[468]

219. Mr. Clegg also perpetuated these claims about product design in Statement B7, which appeared in a public-facing blog post on the site *Medium* explaining Facebook's algorithm to a general audience. In this post, titled "You and The Algorithm: It Takes Two to Tango," Mr. Clegg appears to be receptive to many of the criticisms levied against social media platforms, acknowledging that simply brushing aside concerns about the algorithm is a mistake, and that "Companies like Facebook need to be frank about how the relationship between you [i.e., the general public] and their major algorithms really works. And they need to give you more control."[469] These statements imply that Meta cares about the consumer's interests and lend credence to the statement Mr. Clegg makes later in the post about the algorithm, namely that "The goal [of the algorithm] is to make sure you see what you find most meaningful—not to keep you glued to your smartphone for hours on end."[470] As with the statements before, Mr. Clegg portrays Meta as a company whose "goal" was not for its products to be addictive.

220. In summary, a reasonable consumer would understand from the above statements that Meta did not design its products to be addictive in the broad, lay sense of the word, nor had

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Nov. 9, 2017, "Sean Parker: Facebook was designed to exploit human 'vulnerability,'" *Axios*, https://www.axios.com/2017/12/15/sean-parker-facebook-was-designed-to-exploit-human-vulnerability-1513306782.

468 Andersson, Hilary, July 3, 2018, "Social media apps are 'deliberately' addictive to users," *BBC*, https://www.bbc.com/news/technology-44640959.

469 Clegg, Nick, Mar. 31, 2021, "You and the Algorithm: It Takes Two to Tango," *Medium*, https://nickclegg.medium.com/you-and-the-algorithm-it-takes-two-to-tango-7722b19aa1c2. Accessed July 14, 2025.

470 Clegg, Nick, Mar. 31, 2021, "You and the Algorithm: It Takes Two to Tango," *Medium*, https://nickclegg.medium.com/you-and-the-algorithm-it-takes-two-to-tango-7722b19aa1c2. Accessed July 14, 2025.

knowledge that its platform design operates to addict young users. As discussed below, in paragraphs 231-232, I have assumed that Meta did design its products to be addictive in the broad, lay sense of the word, and despite having knowledge that its platform design operates to addict young users, Meta did not take any actions to change its design to address such fact. I also reviewed internal documents that support the same conclusions. Therefore, my opinion is that the above statements have a tendency to mislead.

iv. Analysis of individual statements: *Tools*

221. As indicated by several of the statements discussed above, Meta's communications strategy has routinely involved mentioning tools purportedly intended to curb addictive use. The company has referenced these tools both generally and specifically as proof points to support its claims about product design.

Table 6. Meta's statements discussing platform features as proof points to support its statements that its platforms are not addictive

No.	Date	Speaker	Statement	Context
B8	November 5, 2021	Pratiti Raychoudhury, Vice President, Head of Research	"We've built tools and controls to help people manage when and how they use our services. 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."[471]	Included in a Meta blogpost titled "The WSJ Report Ignores Our Approach to Well-Being Research."
B9	June 27, 2023	Instagram	"We want teens to feel good about the time they spend on our apps, which is why we've built features like Take a Break on Instagram. Soon, teens will also see a notification when they've spent 20 minutes on Facebook, prompting them to take time away from the app and set daily time limits. We're also exploring a new nudge on Instagram that suggests teens close the app if they are scrolling Reels at night."[472]	From a Meta blog post titled, "Giving Teens and Parents More Ways to Manage Their Time on Our Apps."

471 Raychoudhury, Pratiti, Nov. 5, 2021, "The WSJ Report Ignores Our Approach to Well-Being Research," *Meta*, https://about.fb.com/news/2021/11/wsj-report-ignores-our-approach-to-well-being-research/. Accessed July 14, 2025.

472 Raychoudhury, Pratiti, June 27, 2023, "Parental Supervision and Teen Time Management on Meta's Apps," *Meta*, https://about.fb.com/news/2023/06/parental-supervision-and-teen-time-management-on-metas-apps/. Accessed July 14, 2025.

222. In Statement B8, Ms. Raychoudhury referenced use-reduction tools in a blog post where she addressed criticisms of Meta published in *The Wall Street Journal*. First, Ms. Raychoudhury countered *The Wall Street Journal*'s reporting about addiction to Meta's platforms by drawing a distinction between addiction and "problematic use," the term that Meta used in much of its research to describe compulsive and habitual use on the platform.[473] In this post, Ms. Raychoudhury wrote that "[p]roblematic use does not equal addiction. Problematic use has been used to describe people's relationship with lots of technologies, like TVs and smartphones."[474] Ms. Raychoudhury's post addresses consumers' concerns about the extent to which users are spending excessive time on Meta's platforms. The fact that she explicitly labels this issue as "problematic use" and distinguishes it from "addiction," in the context of this post, underscores that, in general, a reasonable consumer is likely to think of these concepts interchangeably unless explicitly instructed to consider the terms independently. Having signaled that "problematic use" is her preferred label, Ms. Raychoudhury then referenced tools developed by Meta to curb problematic use: "We've built tools and controls to help people manage when and how they use our services. 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."[475] Statement B8 signals that Meta's platforms do not pose a unique danger when it comes to problematic, compulsive, or addictive use, and that its tools effectively help users avoid these habits.

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473 See Consumer Understanding and Consumer Deception subsections immediately below this subsection.

474 Raychoudhury, Pratiti, Nov. 5, 2021, "The WSJ Report Ignores Our Approach to Well-Being Research," *Meta*, https://about.fb.com/news/2021/11/wsj-report-ignores-our-approach-to-well-being-research/. Accessed July 14, 2025.

475 Raychoudhury, Pratiti, Nov. 5, 2021, "The WSJ Report Ignores Our Approach to Well-Being Research," *Meta*, https://about.fb.com/news/2021/11/wsj-report-ignores-our-approach-to-well-being-research/. Accessed July 14, 2025.

223. These tools were also referenced in a June 2023 Instagram blog post. The post included the following statement, Statement B9:

> We want teens to feel good about the time they spend on our apps, which is why we've built features like Take a Break on Instagram. Soon, teens will also see a notification when they've spent 20 minutes on Facebook, prompting them to take time away from the app and set daily time limits. We're also exploring a new nudge on Instagram that suggests teens close the app if they are scrolling Reels at night.[476]

224. As with Statement B8, Statement B9 suggests that Meta has developed robust safety features that effectively prevent users from becoming addicted (in the broad, lay sense of the word) to its platforms. Similarly, Meta publicized the Take a Break tool when it was first launched on December 7, 2021, describing it in a blog post announcement as "empower[ing] people to make informed decisions about how they're spending their time."[477] In this post, Meta also touted promising early test results that indicated that 90% of teen users kept Take a Break reminders on once they had set them.[478] And in August 2018, Meta publicized the launch of a "Daily Reminder" tool, describing it as a "collaboration and inspiration from leading mental health experts and organizations, academics, our own extensive research and feedback from our community" that will drive the effort to "give people more control over the time they spend on our platforms."[479] Similarly, in September 2024, Meta promoted teen accounts. Adam Mosseri described those accounts by stating, "They're an automatic set of protections for teens that try to

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476 June 27, 2023, "Giving Teens and Parents More Ways to Manage Their Time on Our Apps," *Meta*, https://about.fb.com/news/2023/06/parental-supervision-and-teen-time-management-on-metas-apps/. Accessed July 14, 2025.

477 Mosseri, Adam, Dec. 7, 2021, "Raising the Standard for Protecting Teens and Supporting Parents Online," *Meta*, https://about.fb.com/news/2021/12/new-teen-safety-tools-on-instagram/. Accessed July 14, 2025.

478 Mosseri, Adam, Dec. 7, 2021, "Raising the Standard for Protecting Teens and Supporting Parents Online," *Meta*, https://about.fb.com/news/2021/12/new-teen-safety-tools-on-instagram/. Accessed July 14, 2025.

479 Ranadive, Ameet, & Ginsberg, David, Aug. 1, 2018, "New Tools to Manage Your Time on Facebook and Instagram," https://about.fb.com/news/2018/08/manage-your-time/. Accessed July 14, 2025.

proactively address the top concerns that we've heard from parents about teens online." [480] Teen accounts included "Time limit reminders," a feature turned on by default for teens "to address parents' biggest concerns, including … whether their [teens'] time is being well spent."[481] These statements present these features as expertly and carefully designed to prevent addictive use among users.

225. In summary, a reasonable consumer would expect from the above statements that the features that Meta referred to were effective at curbing addictive use. As discussed below, in paragraphs 231-232, I have assumed that these features were not effective at curbing addictive use, and also reviewed internal documents that support the same conclusion. Therefore, my opinion is that the above statements have a tendency to mislead.

v. Evaluation of consumer understanding

226. These statements across the three identified categories—those in which Meta stated its products were not addictive, those in which Meta stated its products were not designed to be addictive, and those in which Meta indicated that its tools are effective at curbing addictive use—convey to consumers that Meta's platforms are neither designed to be, nor are they in practice, addictive.

227. As discussed above, consumers assume that corporate communications are intended to inform and will therefore avoid misleading language.[482] The term at the heart of this issue, "addiction," carries both an ordinary, colloquial meaning, as well as a technical definition used

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480 Kindelan, Katie, Sept. 17, 2024, "Instagram introduces mandatory 'Teen Accounts' with built-in limits, parental controls," *GoodMorningAmerica.com* https://www.goodmorningamerica.com/family/story/instagram-introduces-teen-accounts-113734038.

481 Ranadive, Ameet, & Ginsberg, David, Aug. 1, 2018, "New Tools to Manage Your Time on Facebook and Instagram," https://about.fb.com/news/2024/09/instagram-teen-accounts/. Accessed July 28, 2025.

482 Fiske, A. P. (1991), Structures of *social life*: The *four elementary forms* of *human relations: Communal sharing, authority ranking, equality matching, market pricing*, Free Press.

in clinical settings. However, in Meta's Statements B1 through B5, it simply uses or responds to the term "addiction" without ascribing a narrow, clinical meaning to the term. As a result, for the reasons discussed in X.B.i, consumers are likely to interpret the term "addiction" with the broad, lay meaning, not the narrow, clinical meaning. Moreover, given that broad interpretation of "addiction," consumers are also likely to understand Meta's statements to convey that the company did not otherwise have internal awareness that its platforms were associated with "problematic use" or "dependence" or with any of the other synonyms for "addiction," interpreted in the broad sense, identified above.

228. Consumers also tend to assume that corporate communications are complete and contain no relevant omissions.[483] Given the immense public interest in social media addiction, consumers will assume that Meta's statements on addiction convey all of Meta's internal knowledge on social media addiction. As such, when Meta referred to research that portrayed its products as not addictive (Statement B1), or when Meta stated that research on addiction was inconclusive (context for Statement B3, see paragraph 215), a consumer could have reasonably assumed that that was all of the relevant information available to Meta on the topic and that the company was not aware of any inconsistent information that suggested otherwise.

229. Further, as described in the section above, consumers have a limited capacity to assess the decisions a company has made about product design based on the final product itself, and even with access to external viewpoints about the product, because they do not have access to the internal information that Meta had. As such, statements about Meta's design process (Statements B3 to B7) are difficult for consumers to evaluate, weigh, and act upon. This is particularly true

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[483] Fiske, A.P. (1991), *Structures of social life: The four elementary forms of human relations: Communal sharing, authority ranking, equality matching, market pricing*, Free Press.

given that Meta's platforms are credence goods, and consumers cannot independently identify whether product features have or have not been shaped by specific design intentions.[484] Given this difficulty, and given the absence of internal sources of information, consumers are unable to dispute Meta's statements that it did not design its products to be addictive.

230. Finally, Meta's use of drumbeat messaging is likely to increase the perceived validity of its narrative.[485] The company's drumbeat strategy focused on product changes and well-being tools which served as proof points supporting the claim that Meta is working to meaningfully reduce the prevalence of addictive use.

vi. Examination of assumptions underpinning consumer deception

231. In evaluating whether Statements B1-B9 have a tendency to mislead, counsel has asked me to assume:

a. That Meta designed its products to be, and knew that its products were, addictive in the broad, lay sense of the word; and

b. That features that Meta referred to when refuting that their products were addictive, or designed to be addictive, were internally known to be ineffective at curbing addictive use.

232. As with other sections of this report, I have assessed many of Meta's internal documents to understand the basis of these assumptions and to further contrast Meta's external statements with its internal knowledge. Given the difference between what Meta knew or discussed

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484 Darby, M. R., & Karni, E. (1973), "Free competition and the optimal amount of fraud." *The Journal of Law & Economics*, 16(1), 67–88. See section VI.C on why social media is a credence good.

485 See, e.g., York, Kyle, Feb. 19, 2020, "Drumbeat Marketing: Tell your story so much that you annoy yourself," How Brands Are Built, https://howbrandsarebuilt.com/drumbeat-marketing-tell-your-story-so-much-that-you-annoy-yourself/; Udry, J., & Barber, S. J. (2023), "The illusory truth effect: A review of how repetition increases belief in misinformation," *Current Opinion in Psychology*, 56:101736; Hassan, A., & Barber, S. J. (2021), "The effects of repetition frequency on the illusory truth effect," *Cognitive Research: Principles and Implications*, 6(38):1-12; Fazio, L. K. et al. (2015), "Knowledge does not protect against illusory truth," *Journal of Experimental Psychology: General*, 144(5):993-1002; Pennycook, G., Cannon, T. D., & Rand, D. G. (2018), "Prior exposure increases perceived accuracy of fake news," *Journal of Experimental Psychology: General*, 147(12):1865-1880.

internally, and what it communicated externally, Statements B1-B9 have a tendency to mislead consumers.

a. Internal evidence of addictiveness in the lay sense of the word

233. As a preliminary matter, the information contained in Meta's internal documents is consistent with my opinion that consumers attribute a broad, lay meaning to the term "addiction." Those documents indicate that Meta has used the term "problematic use" interchangeably with "addiction."[486] In particular, it appears that "problematic use" replaced the use of the term "addictive use" internally within Meta at some point, as demonstrated by a 2020 email written by [redacted] a research scientist at Meta.[487] In this email, Ms. Bachan wrote, "Problematic use (formerly referred to as, 'Addictive use')."[488]

234. Furthermore, Meta's internal use of "problematic use" is strikingly similar to the broad, lay understanding of addiction. For example, a 2022 internal literature review on consumer

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[486] *See, e.g.,* META3047MDL-003-00145472 (an internal e-mail noting that the company "continue[s] to face external scrutiny on Facebook and Instagram's impact on well being, especially around areas of problematic use/addiction and teens"); META3047MDL-014-00155983, "Strengths, Weaknesses, Opportunities, Goals for Safety and Well-Being," 2018, at 987 (internal document outlining a strategic goal for H1 2019 as "Move 'tech addiction' debate to 'problematic use' discussion focused on how to identify it, its low prevalence, guidance and resources."); Deposition of Karina Newton, February 27, 2025, Exhibit 31 at 1 (internal e-mail in which Ms. Newton states: "For policy POV background, the time spent dash + end of feed notification is the biggest proof point we have on tech addiction/problematic use…"); Deposition of Jennifer Guadagno, PhD, November 14, 2024, Exhibit 21 (an internal literature review on Facebook addiction in which the author states: "I'll use 'addiction' as a brief term for this spectrum of problematic use of Facebook, but it's not clear that addiction is the correct term. We may want to adopt a more generic term going forward."); META3047MDL-034-00493009, "Re: Materials & kicking off this email for updates," February 3, 2018 (an email thread discussing the company's narrative around well-being that states: "Social media addiction is a closely related issue. There is very little consensus on the underlying facts or even a definition of what may constitute addiction or problematic use…"); META3047MDL-040-00353449, "FW: Facebook Well-being Research on 'Problematic Use'" March 25, 2020 (an internal email from Meta employee [redacted] to Meta employee Kenzie Snyder that states: "As per your request, here are links to PDF versions of my work for Facebook the last 8 months on Problematic Use (or what many might call 'social media addiction')").

[487] META3047MDL-014-00377348, "Re: Define and Measure our Impact on Well-being: 2020 recap and update [1/5/20]" February 19, 2021, at 353.

[488] META3047MDL-014-00377348, "Re: Define and Measure our Impact on Well-being: 2020 recap and update [1/5/20]" February 19, 2021, at 353.

perceptions of Facebook includes a definition of "problematic use" as: "having serious problems with sleep, work, or relationships that a user attributes to Facebook - and concerns with/preoccupations about how they use Facebook (e.g., a lack of control or a persistent fear of missing out)."[489] This definition incorporates two core features of addiction, namely an erosion of self-control and the experience of associated harms.[490]

235. Internal documents also indicate that Meta staff engaged in deliberate self-censoring when it came to the use of the term "addiction," in order to avoid negative connotations.[491] However, the fact that Meta tried to avoid using the term "addiction" would not change a reasonable consumer's perception that "addiction" has a broad, lay meaning, absent Meta signaling to the consumer that it attributed a narrow, clinical meaning to the term. Meta was aware that teens used the very language of addiction themselves when describing their

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489 META3047MDL-047-00068518, "Literature Review: Understanding Consumer Perception of Facebook App Integrity and Privacy," August 2022, at 550; *see also* META3047MDL-031-00137080, "Mental Health 2021: Risks, opportunities and future investments," September 29, 2020, at 111; Deposition of Charles Sismondo, October 16, 2024, Exhibit 5; See also META3047MDL-003-00089141, "Well-being Research 10,000 Foot View," March 6, 2019, at 142.

490 META3047MDL-113-00003044, "Problematic Use Major Concepts"; META3047MDL-019-00004797, "[WIP What we Know About Social Media Problematic Use;" META3047MDL-040-00210633, "Re: CDS-Policy Pre-read," September 25, 2020; *see also* META3047MDL-020-00005380, "Problematic Use Overview: Past Product Investment and Future Opportunities," October 2020; Deposition of Kang-Xing Jin, November 8, 2024, Exhibit 35 at 1; Alter, A. L. (2017), *Irresistible: The rise of addictive technology and the business of keeping us hooked*, Penguin Press.

491 *See, e.g.,* Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 13; META3047MDL-047-01295269, "Message summary [{"otherUserFbld":100024117786743,"threadFbld":null}]" Moira Burke, April 19, 2018; Deposition of Arturo Béjar, April 7, 2024, at 135:20-138:25; Deposition of Kristin Hendrix, January 22, 2025, Exhibit 49 at 4; Deposition of Elena Davis, March 5, 2025, Exhibit 3 at 1-2, Exhibit 11 at 1, Exhibit 10 at 1-2, Exhibit 14 at 2; Deposition of Justin Cheng, March 13, 2025, 22:20-23:16, 251:10-13, 253:21-254:19, 256:11-257:24, 500:11-501:12, 546:21-547:21, Exhibit 36 at 1-2, Exhibit 30 at 1-4; Deposition of Jennifer Guadagno, PhD, November 14, 2024, Exhibit 21, Exhibit 23 at 1-5; Deposition of Kang-Xing Jin, November 8, 2024, Exhibit 35; Deposition of Pratiti Raychoudhury, December 12, 2024, Exhibit 30 at 48; META3047MDL-003-00002225, "The WSJ Report Ignores Our Approach to Well-Being Research," November 5, 2021; META3047MDL-004-00006491, "Re: Intros," February 22, 2018; META3047MDL-004-00006497, "Sandberg/Steyer Conversation"; META3047MDL-004-00006548, "Brief – Steyer"; META3047MDL-005-00000001, "'Addiction' to Facebook: A Literature Review," Oct. 3, 2017; META3047MDL-020-00005380, "Problematic Use Overview," Oct. 2020; META3047MDL-044-00108564–8581, "'Addiction/Problematic Use Design Audit Plan [WIP]," Aug. 2018; META3047MDL-113-00003042, "FB 'Addiction' and related concepts"; META3047MDL-113-00003044, "Problematic Use major concepts."

relationship to Instagram.[492] For instance, research commissioned by Meta in 2019 found that teens have an "addict's narrative" about their Instagram use.[493]

236. Meta possessed, as of at least 2018, internal information and research indicating that its Instagram platform operates to be addictive and/or induced problematic use consistent with addiction. For instance, research commissioned and received from third parties demonstrated that Meta's platforms have contributed to addictive use among teens. For example, results from a 2018 well-being survey commissioned by Meta included the finding that teens "feel addicted to IG" and that "like addicts, [teens] feel that they are unable to stop themselves from being on IG."[494] Other third-party research commissioned by Meta also concluded that app addiction was common among teenagers on Instagram,[495] reporting, for example, that 36% of girls between the ages of 16 and 18 years, and 26% of girls between the ages of 13 and 15 years felt they spent too much time on the app.[496] And in internal research on "problematic use," Meta found that 31% of U.S. Facebook users fit the description, and that people who experience "problematic use" are more likely to be younger.[497]

b. Internal evidence of Meta's knowledge that its platform design psychologically manipulates young users and induces addictive use

237. In addition, evidence from Meta's internal documents indicate that Meta regularly considered how it does or could exploit human psychology—specifically teenage psychology—

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492 Deposition of Wendy Gross, PhD, January 28, 2025, 143:1-145:9, Exhibit 13.
493 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 9 at 8.
494 Deposition of Wendy Gross, PhD, January 28, 2025, Gross Exhibit 13
495 Deposition of Wendy Gross, PhD, January 28, 2025, 48:4-55:18.
496 Deposition of Wendy Gross, PhD, January 28, 2025, 60:4-14, Exhibit 6 at 37, 51.
497 META3047MDL-047-00068518, "Literature Review: Understanding Consumer Perception of Facebook App Integrity and Privacy," August 2022, at 550.

to maximize engagement on its platforms.

238. By the end of 2018, Meta not only knew the "Known Negative Effects of FB and/or Social Media in General on Teens"—including increased screen time and sleep issues, social pressures, body image concerns, fear of missing out ("FoMo"), depression, isolation, and anxiety—and lacked "a robust program, set of products, or research study that demonstrate[d its] commitment to well-being," but also had designed products that exploited human psychology.[498] In an internal document titled "Youth Empathy Framing," with respect to "Concerns Related to Wellbeing," Meta researchers wrote:

> Product features that are designed to exploit insecurity, or provide a dopamine rush (likes, notification, the pull-down-to-see, the infinite scroll, etc), to increase time spent, are inherently at odds with well-being and take away from people's ability to consciously focusing on activities that add value to their lives.
>
> Because our product exploits weaknesses in the human psychology to promote product engagement and time spent [and that because of our reliance on AI, we cannot currently control for when content is being strategically leveraged to manipulate the opinions and moods of individual people] if we are committed to the wellbeing of individuals, we need to **a) to alert people to the effect that the product has on their brain** (for example: your view of yourself is affected by other people's highlight reel, etc) and **b) provide them with tools to have more control over their own experience.** [emphasis in original][499]

239. In a May 2020 slide deck prepared by Ms. Jimenez, titled "Teen Fundamentals," outlined the company's research into adolescent development and neuroscience with the aim of adapting

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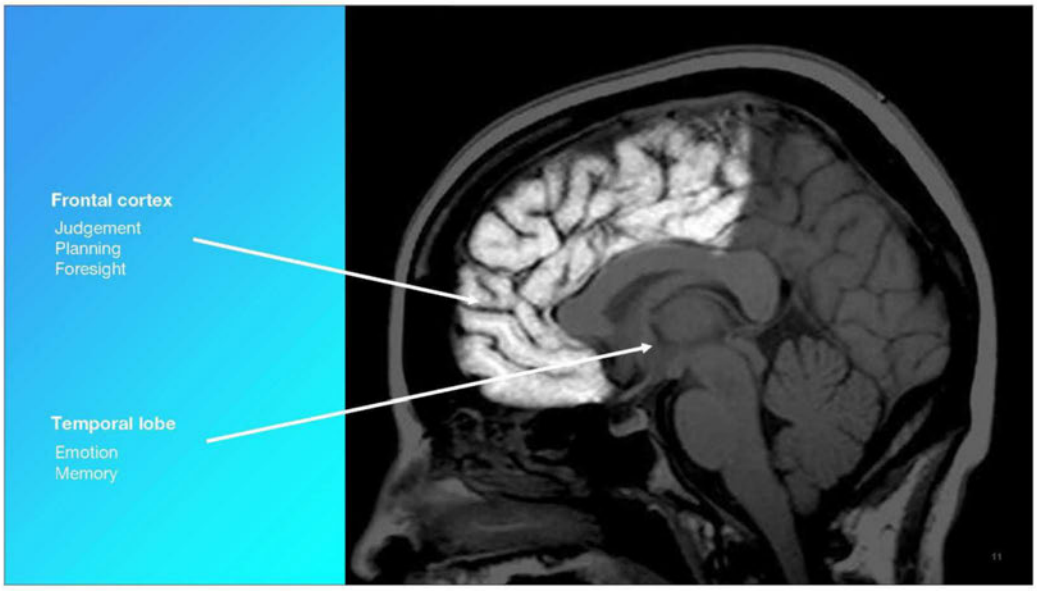
498 Deposition of Shayli Jimenez, February 11, 2025, Exhibit 16 at 818, 826; Deposition of Mark Zuckerberg, March 27, 2025, Exhibit 6 at 818, 826; META3047MDL-034-00429898, "H1 2019 Global Integrate Plan: Safety & Well-Being," 2018, at 918, 919; Deposition of Antigone Davis, March 4, 2025, Exhibit 27A at 2-3, Ex. 76 at 2-3.

499 Deposition of Shayli Jimenez, February 11, 2025, Exhibit 16 at 10; Deposition of Mark Zuckerberg, March 27, 2025, Exhibit 6 at 826.

Instagram to take advantage of teens' unique psychology.[500] This deck constituted the first phase of four aimed at deepening Meta's understanding of teen users and developing a program to keep up with trends and market shifts among teens in the long run.[501] It began by describing and displaying the biology of the teenage brain, as seen in Figure 8 below, noting that:

> The teenage brain is usually about 80% mature…At this time teens are highly dependent on their temporal lobe where emotions, memory and learning, and the reward system reign supreme.[502]

Figure 8. "Teen Fundamentals" Slide Showing a Teenage Brain[503]



The teenage brain is usually about 80% mature. The remaining 20% rests in the frontal cortex - the area of the brain responsible for...At this time teens are highly dependent on their temporal lobe where emotions, memory and learning, and the reward system reign supreme.

240. After outlining these features of teenage neurobiology, the presentation moved to a discussion of behavior, asking rhetorically, "So, now that we know this - what is the effect of

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500 META3047MDL-003-00132740, "Teen Fundamentals," May 2020.
501 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 741.
502 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 750.
503 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 750.

teen's biology on their behavior? and how does this manifest itself in product usage?"[504] It went on to describe teens as "insatiable when it comes to 'feel good' dopamine effects,"[505] with this insatiability contributing to a "persistent quest to discover new means of stimulation."[506] The presentation also made clear that such persistence contributes to user engagement on Meta's platform itself, noting that teens' sensitivity to dopamine is "one of the reasons that the risk of drug addiction is higher for adolescents and keeps them scrolling and scrolling." [507]

241. With this knowledge of teens' psychological vulnerabilities in mind, the "Teen Fundamentals" presentation went on to describe how Meta's platforms are designed to exploit those vulnerabilities. The presentation explained that those features included Instagram's capacity to provide teens with "something new and novel," noting that "much like our big bro FB, IG has a pretty good hold on the serendipitous aspect of discovery through our Explore surface, recommendations and social graph. And every time one of our teen users finds something unexpected their brains deliver them a dopamine hit."[508] It also observed that "[a]pproval and acceptance are huge rewards for teens and interactions are the currency on IG. DMs, notifications, comments, follows, likes, etc. encourage teens to continue engaging and keep coming back to the app."[509]

242. Finally, towards the end of the presentation, Meta employees were asked to consider how they could incorporate an awareness of teen psychology into their work, specifically with respect to the design of Instagram:

> …I want to remind you all once more of the core things that make teens tick. New

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504 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 752.
505 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 762.
506 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 766.
507 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 787.
508 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 761.
509 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 793.

> things, feeling good and reward. We are not quite checking all of these boxes… [w]e do well to think hard about how we can make IG an app tailored to the teenage mindset.[510]

243. This presentation was cited by senior leadership at Meta (including Adam Mosseri) and distributed to various Instagram leads and product teams.[511]

244. Around the same time, Ms. Jimenez herself discussed the addictive nature of Instagram with UX researchers in a September 10, 2020, chat where Ms. Jimenez stated, "oh my gosh yall IG is a drug," and one researcher replied, "We're basically pushers."[512] Ms. Jimenez also stated that Meta was "causing Reward Deficit Disorder bc people are binging on IG so much they can't feel reward anymore…like their reward tolerance is so high"; that she knew "Adam doesn't want to hear it - he freaked out when I talked about dopamine in my teen fundamentals leads review but its [sic] undeniable[]"; that "[i]ts [sic] biological and psychological"; that "most of the time it isn't" productive to be on Instagram because "the majority [of the experience] is just mindless scrolling and ads . . . and superficial interactions"; and that she was "pretty sure not all the people unsatisfied with IG have churned - theres [sic] prob more people stuck in the habit loop than not."[513]

245. The UX researchers agreed throughout the chat, with one stating that it was "kind of scary" when Ms. Jimenez made "that gambling reference"; that "[s]imilar to slot machines, many apps implement a reward pattern optimized to keep you engaged as much as possible"; that "the nature of capitalism and endless growth sort of fuels it"; and that "the top down directives drive

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510 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 795, 797.

511 *See, e.g.,* Deposition of Shayli Jimenez, February 11, 2025, 81:3-82:5; 209:6-210:14; 116:19-118:21;188:23-189:3; Exhibits 27-28; 82:17-91:17; Exhibit 6; 46:1-49:25, 55:18-57:25; Exhibit 4; META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 766.

512 Deposition of Shayli Jimenez, February 11, 2025, Exhibit 17; 266:12–293:19.

513 Deposition of Shayli Jimenez, February 11, 2025, Exhibit 17.

it all towards making sure people keep coming back for more."[514]

246. Several other internal documents indicate that Meta not only intentionally designed its products to maximize teen engagement,[515] but that Meta was aware that its intentional design choices had a negative impact on teens.[516] For instance, Facebook researcher Tom Wynter observed in an internal chat that Meta "literally optimize[s] Teen feeds for engagement," and "it seems to genuinely be the case that optimizing for sessions just naturally distributes more harm to teenagers. . . it's been too consistent over time."[517]

247. Furthermore, despite knowing that various features (such as infinite scroll, autoplay, and ephemerality) lead or are linked to a plethora of mental health issues, including loss of control,[518] Meta also implemented goals related to users' time spent on the platform for each of 2014 through 2026.[519] As shown in IG Goal Map H2 2022 and IG Goal Map H2 2022 v2, one of the

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514 Deposition of Shayli Jimenez, February 11, 2025, Exhibit 17.

515 META3047MDL-047-00706686, "Message summary [{"otherUserFbId":100028925479616,"threadFbId":null}]" [redacted], October 26, 2023, ("basically the company position is that time spent and engagement metrics proxy user value and we are 'not' just tuning the algorithm to keep people scrolling as much and as long as possible…except mechanically, we absolutely do . . . So really, the algorithm is absolutely tuned to maximize engagement in a maximally empirical, principle-less way.")

516 *See, e.g.*, META3047MDL-022-00025511, "Message summary [{"otherUserFbId":100028925479616,"threadFbId":null}]" [redacted], August 22, 2023; Deposition of Tom Cunningham, March 7, 2025, at 122:3-22; META3047MDL-072-00032552, "Message summary [{"otherUserFbId":10002147842088,"threadFbId":null}]" [redacted], October 25, 2023; META3047MDL-046-00328644, "Message summary [{otherUserFbId":100028925479616,"threadFbId":null}]" [redacted], October 24, 2023.

517 META3047MDL-072-00032552, "Message summary [{"otherUserFbId":10002147842088,"threadFbId":null}]" [redacted], October 25, 2023; *see also* META3047MDL-020-00342152, "Message summary [{"otherUserFbId":null,"threadFbId":3504757539554103}]" [redacted], September 10, 2020 ("I think all of us (employees) work tirelessly to make our products a positive experience for people but the top down directives drive it all towards making sure people keep coming back for more.").

518 *See*, *e.g.,* META3047MDL-040-00049019, "Mental Well-being Strategy," March 18, 2021, at 031; META3047MDL-163-00004745, "PU Pod: Roadmap Revisit," March 2023, at 762; Deposition of Mark Zuckerberg, March 27, 2025, Exhibit 31; META3047MDL-044-00108564, "'Addiction'/Problematic Use Design Audit Plan [WIP]" 2018, at 58.

519 Deposition of Mark Zuckerberg, March 27, 2025, at 171:17-22, 194:9-18, Exhibits 23–28; META3047MDL-014-00305741, "Re: Teens and News Feed Alignment," November 9, 2016.

"topline IG goal metrics," which did not include any metric on well-being and to which "[e]verything else[] rolls up," was sessions—"the topline goal for engagement" with "Time Spent" and "Watch Time" as the "North Star"—and "the only thing that matter[ed was] improving the topline metrics," meaning that time spent remained a topline or critical goal, and well-being metrics or efforts were designed so they did not diminish metrics that included time spent, "xAU (teen and genpop), sessions, revenue, reels producer PR, paid creators[,]" Overall Impressions, and/or "other higher-order" metrics.[520] All of these documents indicate that, when Antigone Davis was asked by a Senator, "But isn't part of your business model to have more eye-balls for a longer amount of time engaged using your services?", her response that "that is not actually how we build our products" was false (see Statement B6). About six months before Ms. Davis made Statement B6, Mark Zuckerberg had made similar, even more explicit claims that "I don't give our News Feed team or our Instagram team goals around increasing the amount of time that people spend," and that it is a "common misconception that our teams - our goals, or even have goals [sic], of trying to increase the amount of time that people spend."[521] Mr. Zuckerberg denied multiple times in Congressional testimony that Meta expressly set goals for how much time people spend on the platform.[522] These claims also appear to contradict Meta's internal documents demonstrating that the company set goals with respect to "time spent" metrics for each of 2014 through 2026.[523]

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520 META3047MDL-050-00272136, "IG Goal Map H2 2022," 2022; META3047MDL-047-01209007, "IG Goal Map H2 2022," 2022; META3047MDL-050-00267998, "IG Goal Map H2 2022 v2," 2022; META3047MDL-047-01209013, "IG Goal Map H2 2022 v2," 2022

521 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm. on Communications and Technology*, 117th Cong. at p. 56 (2021), https://www.congress.gov/117/chrg/CHRG-117hhrg46925/CHRG-117hhrg46925.pdf.

522 Deposition of Mark Zuckerberg, March 27, 2025, at 171:12-16.

523 Deposition of Mark Zuckerberg, March 27, 2025, at 171:17-22, 194:9-18, Exhibits 23-28.

c. Internal evidence of ineffective tools

248. As discussed above in Statements B8-B9 and as described below, Meta gave consumers the impression that its products had features or tools that were effective at curbing addictive use. However, Meta's internal documents show that the company knew numerous features and tools—in particular, Daily Limit, Mute Notifications, Take a Break, and Quiet Mode —were ineffective. Meta apparently chose to launch such features in a manner that encouraged low adoption rates, such as launching features as opt-in only as opposed to active by default.

249. For example, on August 1, 2018, Meta announced "new tools to help people manage their time on Facebook and Instagram: an activity dashboard, a daily reminder [Daily Limit], and a new way to limit notifications [Mute Notifications]."[524] However, such time management tools were launched only to a small percentage of users with no commitment to rollout more broadly.[525] The apparent rationale for this approach was "to see how the tools impact [Meta's] core business metrics" and "out of respect for the Growth team concerns about the potential negative impact" on daily active usage as a result of launching this tool.[526] Kate Rouch, who ultimately became Meta's Global Head of Brand and Product Marketing, flagged that this approach was an example of the company "put[ting] our own (e.g. business) needs before those of the people who use our service" and an "implementation [that] optimiz[es] for business / growth outcomes." [527]

250. Moreover, for at least three years from the date these tools were launched, Meta knew the

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524 Ranadive, Ameet, and Ginsberg, David, Aug. 1, 2018, "New Tools to Manage Your Time on Facebook and Instagram," https://about.fb.com/news/2018/08/manage-your-time/.

525 META3047MDL-040-00317980, "Re: Time Well Spent Approach: FB v IG," July 31, 2018, at 989-990.

526 META3047MDL-040-00317980, "Re: Time Well Spent Approach: FB v IG," July 31, 2018, at 988-990.

527 META3047MDL-040-00317980, "Re: Time Well Spent Approach: FB v IG," July 31, 2018, at 990, 980.

"adoption rate" and "reach [was] low."[528]

251. Furthermore, Meta knew that its Daily Limit tool, which was meant to "[l]imit the total time [users] spend on Instagram each day by setting a reminder,"[529] had only been adopted by 1.4% of teens by April 2024, six years after the feature launched.[530] Meta knew that the Daily Limit was ineffective because it was "opt-in" only, did not impose a true block to usage, but rather only provided an easily dismissible pop-up reminder. Only in 2024 did Meta allow supervising parents on teen accounts the option to set up a real time limit that, once exceeded, truly blocked the teen from accessing the platform. Still, this block is not operational by default. By default, time limit reminders merely send teens a notification "telling them to leave the app after 60 minutes each day."[531]

252. Take a Break was a time management tool launch three years later in December 2021 and was similarly internally known to be ineffective. According to Meta's public statements, the Take a Break tool "ask[s users] to take a break from Instagram" after they have been "scrolling for a certain amount of time" and "suggest[s] that they set reminders to take more breaks in the future."[532] However, Meta knew that the tool would be ineffective because the company launched its Take a Break tool as an "opt-in" reminder only, rather than as a default feature that

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528 META3047MDL-031-00265234, "Re: [2022 Update] FW: feedback requested: unship proposal for Time Spent (in "Your Activity")" April 6, 2022, at 248; *see also* Deposition of Liza Crenshaw, March 5, 2025, Exhibit 11; Deposition of Karina Newton, February 27, 2025, Exhibit 31; META3047MDL-020-00691200, "Message summary [{"otherUserFbld":100042455490564,"threadFbld":null}]" Charles Simondo, March 10, 2020; Deposition of Kang-Xing Jin, November 8, 2024, Exhibit 35.

529 META3047MDL-047-00067885, "Instagram Feature Awareness," July 2023; META3047MDL-047-00622470, "Teen Feature Awareness," July 2023.

530 META3047MDL-129-00000930, "Teen Time Spent and Time Spent Product SOTU," April 29, 2024.

531 Sept. 17, 2024, "Introducing Instagram Teen Accounts: Built-In Protections for Teens, Peace of Mind for Parents," *FB.com*, https://about.fb.com/news/2024/09/instagram-teen-accounts/. Accessed July 28, 2025.

532 Mosseri, Adam, Dec. 7, 2021, "Raising the Standard for Protecting Teens and Supporting Parents Online," https://about.instagram.com/blog/announcements/raising-the-standard-for-protecting-teens-and-supporting-parents-online. Accessed July 14, 2025.

would actually stop usage; moreover, the reminders were "easy to dismiss."[533] Meta employees noted that, by not enabling the Take a Break by default, the company was "not taking the problem [of problematic use] seriously, even now."[534] Moreover, Meta ignored expert advice from its Youth Advisory Council, delivered both before and after the launch of the Take a Break feature, that it should be implemented as a default tool if it was genuinely designed to be effective. Nonetheless, the feature was never enabled by default.[535] By April 2024, three years since its launch, only 4.4% of teen users had adopted the feature.[536]

253. In January 2023, Meta similarly launched the Quiet Mode tool as an opt-in feature. Quiet Mode is a tool purportedly designed to curb problematic late-night use. Once enabled, the tool mutes notifications, changes users' activity status to "In quiet mode," and automatically sends an auto-reply message to senders when users receive DMs.[537] Approaching Instagram's Quiet Mode launch on January 19, 2023,[538] Meta knew that a notable percentage of Instagram's teen users experienced problematic late night use (i.e., usage between 12am and 4am), that Instagram had a "coverage gap" such that it did not have a tool designed to curb late use for the 7.4%, or approximately 13 million teens, who exhibited problematic late night use, and knew that "IG lag[ged] on teens late-night investments compared to other apps."[539] Additionally, even though

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533 META3047MDL-034-00161639, "Take a Break/Nudges GTM," at slide 6.

534 META3047MDL-046-00071961, "Message summary [{"otherUserFbid":100027372548112, "threadFbid":null}]," Sept. 29, 2021.

535 *See* META3047MDL-003-00021356, "Meta Youth Advisors Meeting Minutes," August 27, 2021-January 28, 2022, at 371 (October 6, 2021 meeting where [redacted] recommends it be "default") and 357 (Jan. 28, 2022 meeting where multiple experts says it should be default for global rollout).

536 META3047MDL-129-00000930, "Teen Time Spent and Time Spent Product SOTU," April 29, 2024.

537 Jan. 19, 2023, "Giving People Control Over Their Time and What They See on Instagram," https://about.instagram.com/blog/announcements/new-ways-to-control-what-you-see-on-instagram. Accessed July 21, 2025.

538 Jan. 19, 2023, "Giving People Control Over Their Time and What They See on Instagram," https://about.instagram.com/blog/announcements/new-ways-to-control-what-you-see-on-instagram. Accessed July 21, 2025.

539 META3047MDL-111-00371250, "Late Night Use: IG Mental Well-being, Problematic Use - Strategy and

the Instagram Mental Well-Being team recommended "opting early teens into Quiet Mode by default,"[540] Meta did not launch Quiet Mode as a default feature.[541]

254. Meta knew that as of February 2023, of the 50 million teens who experienced late night problematic use, fewer than 1% had opted to use Quiet Mode, only 4% had opted to use Take a Break, and fewer than 1% of the platform's teen users had opted to use both.[542]

255. Meta's internal communications appear to reveal an understanding within Meta that its time management tools tend to be largely ineffective. For example, in an October 2019 direct message to Meta colleagues, Dr. Gross stated that teens "had fairly negative things to say about the time spent tools we have (particularly that the tools are easy to ignore)." Dr. Gross's point was echoed in an internal Instagram safety briefing document from H2 2023, which noted that while the Take a Break feature had a high retention rate among users, it suffered from a "low honor rate" attributed to the fact that "reminders are easily dismissible."[543] Accordingly, Meta researchers found that, in H1 2022, 0.165% of weekly active teens took a ten-minute break after receiving a nudge.[544] In Q3 2022, research showed that this number was actually *declining* among weekly active teens,[545] despite Meta's public claim that over 90% of teens who set the

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Design," July 21, 2022; META3047MDL-065-00122305, "Feed Pause: FI - Controls Team in collaboration with xMWB," November 2022; META3047MDL-047-01352629, "IG wellbeing moment in Q2 + what google announced related to "digital wellbeing" at I/O," May 9, 2018; META3047MDL-003-00017819, "Tech-Backlash — Digital Wellness," November 12, 2018; META3047MDL-019-00018494, "Role of Household Ecosystem & Problematic Usage."

540 META3047MDL-111-00371250, "Late Night Use: IG Mental Well-being, Problematic Use - Strategy and Design," July 21, 2022; Deposition of George Volichenko, January 3, 2024, at 219:6-220:25.

541 Deposition 30(b)(6) of Sayed Otaru, June 9, 2025, at 270:10-271:10, 289:17-291:11; Deposition of Vaishnavi Jayakumar, January 30, 2025 at 150:23-151:3

542 META3047MDL-060-00000456, "IG Mental Well-being: Behavior Reduction Strategy: Late Night Use," February 16, 2023, at 464.

543 META3047MDL-035-00001642, "SJC IG Safety Briefing," 2023, at 660.

544 META3047MDL-047-01170167, "IG Mental Well-being FYI [Archived]," 2022, at 167.

545 Deposition of George Volichenko, December 16, 2024, Exhibit 4.

reminders keep them on.[546] A 2022 internal literature review on consumer perceptions of Facebook also noted that "[u]sers are generally less willing to self-police" and, as a result, platform features designed to "[help] users feel more in control of their experiences … might not be as effective as imagined."[547] More generally, internal Meta research has also found that teen users do not find it easy to adjust Instagram's notification settings,[548] suggesting that Instagram's design includes barriers to enabling these features in the first place. Similarly, tests of Instagram's "Quiet Mode," a feature meant to prevent late night compulsive use, found it only reduced teen late night use by 0.38%.[549]

256. Again, these tools were ineffective at least in part because users had to actively opt to use them (an opt-in default), rather than using them by default (an opt-out default).[550] Former Meta engineering consultant and Director of Site Integrity Arturo Béjar testified that, based on his considerable experience building features for the company, "[i]f a feature is opt-in, almost nobody will use it," and that an opt-in tool might attract "maybe 1 or 2 percent [adoption] if you're really doing well."[551] Adam Mosseri also testified that, "if the feature is on by default, more people are going to use it."[552] CEO Mark Zuckerberg was well aware of this pattern, stating as early as 2009 that "stats show us that most people just use whatever the default setting or filter

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546 Mosseri, Adam, Dec. 7, 2021, "Raising the Standard for Protecting Teens and Supporting Parents Online," *Meta*, https://about.fb.com/news/2021/12/new-teen-safety-tools-on-instagram/. Accessed July 14, 2025.

547 META3047MDL-047-00068518, "Literature Review: Understanding Consumer Perception of Facebook App Integrity and Privacy," August 2022, at 551.

548 META3047MDL-003-00020800, "Beyond the Individual User: Understanding our Products through the Household Ecosystem," 2020.

549 Deposition of George Volichenko, December 16, 2024, 149:21-152:2; META3047MDL-034-00504271, "Re: [Launch Decision; Input Requested by 1/13 EOD] Quiet Mode Test Results & Launch Plan 1/19," Jan. 20, 2023.

550 Deposition of George Volichenko, December 16, 2024, 106:6–107:1, 112:1–20, 164:8–24

551 Deposition of Arturo Béjar, April 7, 2024, 168:2-8.

552 Deposition of Adam Mosseri, March 17, 2025, 315:19-24; *see also* Deposition of Nick Clegg, March 20, 2025, 651:3-7; Deposition of Shilpa Mody, March 14, 2025, 340:12-19; Deposition of Moira Burke, January 28, 2025, 253:5-11.

is. That leads me to believe that the best thing we can do is improve the default experience."[553] Meta has reported that 97% of teens aged between 13- and 15-years-old adopt the defaults built into the company's platforms.[554]

257. The ineffectiveness of these tools reflects Meta's unwillingness to make changes to its platforms that are designed to meaningfully reduce time spent. Ms. Jayakumar described user control tools which leave the fundamental product architecture unchanged as "temporary Band-Aid[s]."[555] Ms. Jayakumar explained that these tools are "not a substitute for a more foundational strategy around ensuring that young people are having age-appropriate experiences online."[556]

258. Rather than meaningfully address addictive use, these tools appear to have functioned primarily as proof points for use in public persuasion efforts. By and large, Meta touted these proof points without having evidence to support that the features would result in less addictive use. Internal documents reveal that Meta identified a need to invest in a "[d]rumbeat of product work that shows dedication to [problematic use]."[557] When Take a Break was announced, an internal presentation noted the "perception [that] we aren't doing enough to support teen well-being on IG" and highlighted the opportunity to "demonstrate progress and help teens feel that time spent on Instagram is intentional and meaningful."[558] By maintaining a steady stream of new tools, Meta has been able to create a drumbeat of proof points that signal it is addressing the

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553 META3047MDL-046-00446151, "RE: Discussion Post," March 18, 2009, at 152.

554 https://about.fb.com/news/2025/04/introducing-new-built-in-restrictions-instagram-teen-accounts-expanding-facebook-messenger/. Accessed July 21, 2025.

555 Jayakumar, Vaishnavi, Jan. 29, 2024, "Red Herrings To Watch For At The Senate's Child Safety Hearing," https://www.techpolicy.press/red-herrings-to-watch-for-at-the-senates-child-safety-hearing/.

556 Jayakumar, Vaishnavi, Jan. 29, 2024, "Red Herrings To Watch For At The Senate's Child Safety Hearing," https://www.techpolicy.press/red-herrings-to-watch-for-at-the-senates-child-safety-hearing/.

557 META3047MDL-014-00377348, "Re: Define and Measure our Impact on Well-being: 2020 recap and update [1/5/20]" February 19, 2021, at 354.

558 META3047MDL-034-00161639, "Take a Break/Nudges GTM," at slide 2.

issue without ever demonstrating any reduction in problematic use.

vii. Conclusion

259. As described in this section, Meta made external statements asserting that its platforms were not addictive in the broad, lay sense, and that its platforms were not designed to be addictive and/or not known to induce problematic use consistent with addiction. Meta's statements further gave consumers the impression that its' platforms' tools were meant to help users manage their time and prevent addictive use. To support these statements, Meta employees implemented social influence tactics, including omitting research findings about the habit-forming effects of the platforms, deploying effort heuristics, setting a different agenda focused on the quality of time spent on the platform rather than quantity, and deploying proof points to support their claims. As with other external statements from the company and given the nature of its platforms as credence goods, consumers would have been particularly reliant on Meta to provide accurate, honest, and relevant information about its products. Similarly, they would likely have understood Meta's statements about "addiction" to refer to a broader lay definition that includes any kind of compulsive, habitual use. Additionally, when Meta released statements about features and tools aimed at curbing addictive use, the exclusion of key pieces of internal knowledge about their inefficacy would have led consumers to believe they are legitimate solutions to these concerns. Thus, consumers are likely to take away a false impression of Meta's platforms.

C. Meta conveyed to consumers that its platforms do not harm users

260. In this section I address Meta's public statements regarding the extent to which its platforms are associated with or cause harm to users, how the statements are likely to shape consumer perceptions of Meta's platforms, and how evidence from Meta employees and

documents reveals an internal narrative about Meta's platforms that sits in stark contrast to the narrative presented publicly. A summary of this section is presented below.

261. Meta, or high-ranking Meta personnel including Meta's CEO, Meta's Global Head of Safety, Vice President – Head of Research, and Meta's Vice President of Integrity have made public statements that fall into one of the four following categories:

a. Meta's statements claiming that research shows that the overall effect of Meta's platforms on user well-being is neutral or positive rather than negative;

b. Meta's statements claiming that harmful content and experiences on Meta's platforms are rare;

c. Meta's statements claiming that its internal policies keep its platforms safe for users; and

d. Meta's statements claiming that its platforms are safe and suitable for young users.

262. These statements have a tendency to mislead because:

a. A reasonable consumer would falsely believe that Meta had robust and/or effective procedures for keeping harmful content off its platforms and that young users would encounter harmful content in negligible quantities;

b. A reasonable consumer would falsely believe that the platforms were safe and suitable for young users; and

c. A reasonable consumer would falsely believe Meta did not possess internal research findings documenting that young users experienced and reported harmful encounters and harmful experiences at a frequency rate much higher than its public metrics reported.

263. Below, I focus my analysis on ten illustrative statements that I identified through a review of the operative complaints and my own independent investigation. I selected the statements based on several factors, including the nature of the deception, their likelihood of reaching consumers, and the ease of grouping them together for purposes of discussion. The list is not exhaustive, and Meta made many similar misleading statements especially pertaining to the Community Standard Enforcement Reports (CSERs) which were released quarterly to the public. The absence of a particular statement from the tables below should not be taken to imply that the absent statement is not potentially deceptive.

264. I then analyze each grouping of statements to show what tactics Meta deployed and relied upon to bolster the persuasiveness of these public messages. Finally, I demonstrate how these statements were false or misleading using the assumptions provided to me by counsel and examples from Meta's own internal documents and employee testimony.

i. Analysis of individual statements: *Research*

265. Meta or its representatives have variously responded to questions about possible harm associated with the company's platforms by insisting that the company's own research on that issue—including leaked research published by *The Wall Street Journal*—actually shows that Meta's platforms have a neutral or positive effect on user well-being rather than negative.

Table 7. Meta's statements claiming that research shows that the overall effect of Meta's platforms on user well-being is neutral or positive rather than negative

No.	Date	Speaker	Statement	Context
C1	March 25, 2021	Mark Zuckerberg, CEO of Meta	"I don't believe so. This is something that we study and we care a lot about; designing products that improve peoples' well-being is very important to us."	During a congressional hearing in March 2021, Mark Zuckerberg was asked, "Do you believe that your platform harms children?"[559]
C2	September 30, 2021	Antigone Davis, Meta's Global Head of Safety	"In fact, one of the main presentations referenced by the Wall Street Journal included a survey of twelve issues—difficult and serious issues like loneliness, anxiety, sadness, and eating disorders … For eleven of the twelve issues, teen girls who were struggling were more likely to say that Instagram was affirmatively helping them than making things worse."	This statement was included in Antigone Davis's initial testimony submitted to Congress.[560]
C3	September 26, 2021	Pratiti Raychoudhury, Vice, Head of Research	"Contrary to The Wall Street Journal's characterization, Instagram's research shows that on 11 of 12 well-being issues, teenage girls who said they struggled with those difficult issues also said that Instagram made them better rather than worse."	This statement was included in a blog post on Meta's Newsroom titled "What Our Research Really Says About Teen Well-Being and Instagram."[561]

559 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm. on Communications and Technology*, 117th Cong. at p. 100 (2021), https://www.congress.gov/117/chrg/CHRG-117hhrg46925/CHRG-117hhrg46925.pdf.

560 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm Before S. Comm. on Commerce, Science, and Transportation*, 117th Cong. at p. 11 (2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf. This comment regarding the "11 of 12" well-being issues is repeated elsewhere (e.g., Statement B1) and is based on findings from one of the leaked slide decks. See Nov. 2019, "Hard Life Moments – Mental Health Deep Dive," *FB.com*, https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-1.pdf, p. 14.

561 Raychoudhury, Pratiti, Sept. 26, 2021, "What Our Research Really Says About Teen Well-Being and Instagram," *Meta*, https://about.fb.com/news/2021/09/research-teen-well-being-and-instagram/. Accessed July 14, 2025.

No.	Date	Speaker	Statement	Context
C4	March 25, 2021	Mark Zuckerberg, CEO of Meta	"…overall, the research that we have seen is that using social apps to connect with other people can have positive mental health benefits and well-being benefits by helping people feel more connected and less lonely."	Mr. Zuckerberg made this statement at a Congressional hearing in response to the following: "… I do know that Facebook has acknowledged that passive consumption on your platform is leading to people feeling worse… Yet Facebook is designed to keep people scrolling. Instagram is designed to get users to go from video to video. So I would like to ask you, if you said earlier that you don't want kids sitting in front of the screens passively consuming content, and your products are designed to increase screen time, do you currently have any limitations on your own kids' use of your products, or how do you think that will change as they get older?"[562]

[562] *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm. on Communications and Technology*, 117th Cong. at p. 56 (2021), https://www.congress.gov/117/chrg/CHRG-117hhrg46925/CHRG-117hhrg46925.pdf/.

266. Statement C1 was made at a March 2021 Congressional hearing. At that hearing, Mr. Zuckerberg was asked about studies that showed that "too much time on screens and social media is leading to loneliness and despair."[563] Mr. Zuckerberg first attempted to avoid directly answering the question, but he eventually stated that "I don't think that the research is conclusive on that."[564] By answering in this manner, Mr. Zuckerberg staked out a position that external criticisms of the platforms are not grounded in solid scientific evidence.

267. Later, in Statement C1, when asked, "Do you believe that your platform harms children?" he responded "I don't believe so. This is something that we study and we care a lot about; designing products that [sic] peoples' well-being is very important to us."[565] With Statement C1, Mr. Zuckerberg's allusion to Meta's internal research functions as a proof point for his and the company's official position, conveying to the audience that it is not merely an opinion that Meta's products are not harmful, but is instead a conclusion grounded in Meta's own scientific evidence. Statement C1 further implies that Meta does not possess inconsistent information suggesting that its platforms are harmful.

268. In that same testimony, Mr. Zuckerberg also attempted to shift the focus of the discussion from harm to the role that Meta's platforms play in connecting people, testifying that "what [Meta's] products do is help people stay connected to people they care about, which I think is

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563 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm. on Communications and Technology*, 117th Cong. at p. 56 (2021), https://www.congress.gov/117/meeting/house/111407/documents/HHRG-117-IF16-Transcript-20210325.pdf.

564 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm. on Communications and Technology*, 117th Cong. at p. 56 (2021), https://www.congress.gov/117/meeting/house/111407/documents/HHRG-117-IF16-Transcript-20210325.pdf.

565 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm. on Communications and Technology*, 117th Cong. at p. 100 (2021), https://www.congress.gov/117/chrg/CHRG-117hhrg46925/CHRG-117hhrg46925.pdf/.

one of the most fundamental and important human things that we do."[566] With Statement C4, Mr. Zuckerberg echoed that position when he responded to another question about the harms of passive consumption on Facebook by stating that "…overall, the research that we have seen is that using social apps to connect with other people can have positive mental health benefits and well-being benefits by helping people feel more connected and less lonely."[567] Repeatedly drawing attention to the capacity for Meta's platforms to connect people functions to side-step criticism. This logical sleight of hand implies that the platforms cannot do harm *and* connect people, which is not true, and shifts attention away from harm and to benefits, absolving Mr. Zuckerberg of having to deliver a definitive response about the harm-related question that was originally asked. Rather than addressing scientific evidence of harm, the statements convey to consumers that the use of Meta's platforms has largely positive, rather than negative, effects on well-being and imply that Meta has internal research to back up those claims.[568]

269. Similarly, in Statement C2, at a September 2021 Congressional hearing, Ms. Davis referenced a leaked Instagram study that surveyed users about twelve well-being issues, testifying that "…For eleven of the twelve issues, teen girls who were struggling were more likely to say that Instagram was affirmatively helping them than making things worse."[569]

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566 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm. on Communications and Technology*, 117th Cong. at p. 100 (2021), https://www.congress.gov/117/meeting/house/111407/documents/HHRG-117-IF16-Transcript-20210325.pdf.

567 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm. on Communications and Technology*, 117th Cong. at p. 56 (2021), https://www.congress.gov/event/117th-congress/house-event/111407.

568 These types of narratives and implications, including that Meta's "products are a net benefit to people's well-being" were identified as "primary points to land" in Meta's core supporting narrative work. *See, e.g.*, META3047MDL-019-00057707, "[DRAFT/WIP] Research Synthesis for Core Supporting Narrative (CSN) on Well-being (#7)," June 8, 2022, at 707; META3047MDL-065-00235345, "CSN 7 Strategy Doc: Well-Being," at 345; META3047MDL-003-00163297, "Company Narrative Audit," March 2021, at 303, 310.

569 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm Before S. Comm. on Commerce, Science, and Transportation*, 117th Cong. at p. 11 (2021), https://www.commerce.senate.gov/2021/9/protecting-kids-online-facebook-instagram-and-mental-health-harms.

However, Ms. Davis failed to acknowledge the study's negative findings on teen well-being (*see* paragraphs 271-273 below), and instead used the purported finding that Instagram made "11 of 12"well-being issues better for teen girls, rather than worse, as a drumbeat and as a proof point to suggest the platform was safe and only harmed its users minimally, if at all.

270. In Statement C3, Meta further emphasized that proof point to mitigate the impact of the leaks on public opinion when Meta's VP, Head of Research, Ms. Raychoudhury, similarly wrote in a September 2021 blog post that "[c]ontrary to The Wall Street Journal's characterization, Instagram's research shows that on 11 of 12 well-being issues, teenage girls who said they struggled with those difficult issues also said that Instagram made them better rather than worse."[570] The blog post concluded by stating that "suggesting that Instagram is toxic for teens is simply not backed up by the facts."[571]

271. Meta's focus on this "11 of 12" finding is an effective consumer persuasion tactic because it both appears to rebut the larger claim that Instagram is harmful and appears to provide affirmative evidence that Instagram's net effect on users is actually positive. By framing the results as a positive and talking about the "11 of 12" data in the aggregate, Meta implies that the platforms are more beneficial than harmful for all users—an impression that internal chats show Meta was hoping to convey.[572] But this statement, and Ms. Raychoudhury's blog post more generally, ignore the significant percentage of respondents to the survey in question who believed that Instagram made these issues worse. In particular, the survey found that approximately 31% of all survey respondents believed Instagram made "problematic use" worse

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570 Deposition of Pratiti Raychoudhury, December 12, 2024, Exhibit 28 at 1.
571 Deposition of Pratiti Raychoudhury, December 12, 2024, Exhibit 28 at 6.
572 Deposition of Adam Mosseri, March 17, 2025, Exhibit 85 at 002.

and approximately 32% of teens girls believed Instagram made "body issues" worse.[573]

272. Further, Meta's September 2021 blog post, which contains Statement C3, combines the "11 of 12" proof point with a statement that "external research on these issues found teens report having both positive and negative experiences with social media" and that Meta's research is "part of [Meta's] effort to minimize the bad on [the] platforms and maximize the good."[574] Thus, Meta's framing of the results would lead a reasonable consumer to believe that *both* Meta's internal research *and* external studies show that the platforms have an overall net positive, or at worst a neutral, impact on young users' well-being.

273. Finally, the "11 of 12" claim represents just one statistic from one of many studies conducted or commissioned by Meta. Given this fact, Meta's omission of conflicting findings from other internal studies that it was aware contradicted the "11 of 12" claim renders the relevant statements deceptive in a distinct way. Rather than acknowledging that its own employees concluded that "the average net effect of FB on people's well-being is slightly negative" and that significant numbers of users experienced either mild or severe "problematic use," negative social comparison, loneliness, or other negative outcomes,[575] Meta publicly worked to reassure consumers that the platforms were safe and suitable for young users by side-stepping criticism and selectively citing research that painted a misleading picture of the true harms associated with the platforms.

ii. Analysis of individual statements: *Prevalence*

274. As shown below, Meta has advanced its position that its platforms are not harmful by

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573 Deposition of Pratiti Raychoudhury, December 12, 2024, Exhibit 28 at 4.
574 Deposition of Pratiti Raychoudhury, December 12, 2024, Exhibit 28 at 2-3.
575 META3047MDL-020-00230760, "Re: Background on Well-Being Contingency HC Ask," April 17, 2019, at 761; META3047MDL-020-00263116, "Well-being Research: 10,000 Foot View," March 6, 2019.

publishing quarterly *Community* Standards *Enforcement Reports* ("CSERs").[576]

[576] *Meta*, Community Standards Enforcement Report, https://transparency.meta.com/reports/community-standards-enforcement/. Accessed July 14, 2025.

Table 8. Meta's statements claiming that harmful content and experiences on Meta's platforms are rare

No.	Date	Speaker	Statement	Context
C5	May 23, 2019	Meta	"One of the most significant metrics we provide in the Community Standards Enforcement Report is prevalence…We care most about how often content that violates our standards is actually seen relative to the total amount of times any content is seen on [our platforms]. This is similar to measuring concentration of pollutants in the air we breathe. When measuring air quality, environmental regulators look to see what percent of air is Nitrogen Dioxide to determine how much is harmful to people. Prevalence is the internet's equivalent—a measurement of what percent of times someone sees something that is harmful."	From Meta's blog post titled, "Measuring Prevalence of Violating Content on Facebook."[577]
C6	November 13, 2019	Guy Rosen, VP of Integrity at Meta	"In Q3 2019, this upper limit was 0.04%. Meaning that . . . out of every 10,000 views on Facebook or Instagram in Q3 2019, we estimate that no more than 4 of those views contained content that violated [the suicide and self-injury] policy."	Mr. Rosen wrote this statement in a blog post on Meta's website which announced the release of the Q3 2019 Community Standards Enforcement Report.[578]
C7	February 11, 2021	Guy Rosen, VP of Integrity at Meta	"The prevalence of violent and graphic content also dropped from 0.07% to 0.05% [in Q4 2020]."	Mr. Rosen wrote this statement in a blog post on Meta's website which announced the release of the Q4 2020 Community Standards Enforcement Report.[579]

577 Raychoudhury, Pratiti, May 23, 2019, "Measuring Prevalence of Violating Content on Facebook, *Meta,* https://about.fb.com/news/2019/05/measuring-prevalence/. Accessed July 14, 2025.

578 Meta, "Community Standards Enforcement Report, November 2019 Edition," https://about.fb.com/news/2019/11/community-standards-enforcement-report-nov-2019/#CSER-metrics. Accessed July 14, 2025.

579 Meta, "Community Standards Enforcement Report, Fourth Quarter 2020," https://about.fb.com/news/2021/02/community-standards-enforcement-report-q4-2020/. Accessed July 14, 2025.

No.	Date	Speaker	Statement	Context
C8	November 9, 2021	Guy Rosen, VP of Integrity at Meta	"In Q3, the prevalence of bullying and harassment content was 0.14-0.15% or between 14 and 15 views of bullying and harassment content per 10,000 views of content on Facebook, and 0.05-0.06% or between 5 and 6 views per 10,000 views of content on Instagram."	Mr. Rosen wrote this statement in a blog post on Meta's website which announced the release of the Q3 2021 Community Standards Enforcement Report.[580]

[580] Meta, "Community Standards Enforcement Report, Third Quarter 2021," https://about.fb.com/news/2021/11/community-standards-enforcement-report-q3-2021/. Accessed July 14, 2025.

275. CSERs are disseminated to the public through Meta's "Transparency Center"[581] and their quarterly releases were publicized via blog posts, press releases, and conference calls with senior Meta executives to ensure wider dissemination.[582] The underlying CSERs contain various statistics purported to capture Meta's handling of prohibited content on its platforms. Meta refers to the policies that govern which types of content it prohibits as its *community standards*[583]—examples of which are provided in Table 9 below—and the CSERs are intended to provide regular updates to the public regarding Meta's efforts to enforce those policies and to keep users safe. In Meta's own words, it chooses to publish the CSERs on a quarterly basis in order to "more effectively track [its] progress and demonstrate [its] continued commitment to making Facebook and Instagram safe and inclusive."[584]

Table 9. Examples of Meta's Community Standards[585]

Policy Area	Examples of Prohibited Content
Violence and Incitement	Threats of violence that could lead to death, serious injury, kidnapping or abductions, etc.[586]
Adult Sexual Exploitation	Imagery depicting non-consensual sexual touching, mocking survivors, threats to commit non-consensual sexual touching, sharing non-consensual intimate imagery (NCII), etc.[587]

581 Meta's Transparency Center is one component of the company's public relations efforts, and provides information related to company policies, enforcement strategies, security updates, and corporate governance, among other topics. *See* https://transparency.meta.com/.

582 *See e.g.*, Meta, Nov. 9, 2021, "Community Standards Enforcement Report Press Call," https://about.fb.com/wp-content/uploads/2021/11/Community-Standards-Enforcement-Report-Press-Call-Transcript-11.09.21.pdf. Accessed July 14, 2025.

583 *See generally* Meta, "Community Standards," https://transparency.meta.com/policies/community-standards/.

584 Meta, "Community Standards Enforcement Report," https://transparency.meta.com/reports/community-standards-enforcement. Accessed July 14, 2025.

585 *See* Meta, "Community Standards," https://transparency.meta.com/policies/community-standards/.

586 *See* Meta, "Violence and Incitement," https://transparency.meta.com/policies/community-standards/violence-incitement/. Accessed July 14, 2025.

587 *See* Meta, "Adult Sexual Exploitation," https://transparency.meta.com/policies/community-standards/adult-sexual-exploitation/. Accessed July 14, 2025.

Policy Area	Examples of Prohibited Content
Bullying and Harassment	Threats, releasing personally identifiable information, unwanted malicious contact (including sexual harassment), degrading/shaming content, attacks, calls for suicide or self injury, and more.[588]
Child Sexual Exploitation, Abuse, and Nudity	Threatening, depicting, praising, supporting, providing instructions for, making statements of intent, admitting participation in, or sharing links of the sexual exploitation of children (including real minors, toddlers, or babies, or non-real depictions with a human likeness, such as in art, AI-generated content, fictional characters, dolls, etc).[589]
Suicide, Self-Injury, and Eating Disorders	Promoting or depicting SSI or eating disorders, content that instructs users on extreme weight loss behavior, etc.[590]
Adult Nudity and Sexual Activity	Visible genitalia, photorealistic/digital imagery that focuses on commonly sexualized body parts recorded without the awareness of the person depicted in them, etc.[591]
Hateful Conduct	Dehumanizing speech, allegations of serious immorality or criminality, calls and hopes for harms, etc.[592]
Inauthentic Behavior	Creation of inauthentic accounts in order to deceive users, evade community standards enforcement, misuse Meta reporting systems to harass others, etc.[593]
Misinformation	Misinformation that is likely to contribute to imminent violence, promotes harmful health practices, attempts to interfere with elections, etc.[594]
Third-Party Intellectual Property Infringement	Copyright infringement, trademark infringement, sale or promotion of counterfeit goods, etc.[595]
Locally Illegal Content, Products, Or Services	Posts that violate local laws (if they also violate community standards or human rights policy)[596]

588 *See* Meta, "Bullying and Harassment," https://transparency.meta.com/policies/community-standards/bullying-harassment/. Accessed July 14, 2025.

589 *See* Meta, "Child Sexual Exploitation, Abuse, and Nudity," https://transparency.meta.com/policies/community-standards/child-sexual-exploitation-abuse-nudity/. Accessed July 14, 2025.

590 *See* Meta, "Suicide, Self-Injury, and Eating Disorders," https://transparency.meta.com/policies/community-standards/suicide-self-injury/. Accessed July 14, 2025.

591 *See* Meta, "Adult Nudity and Sexual Activity," https://transparency.meta.com/policies/community-standards/adult-nudity-sexual-activity/. Accessed July 14, 2025.

592 *See* Meta, "Hateful Conduct," https://transparency.meta.com/policies/community-standards/hateful-conduct/. Accessed July 14, 2025.

593 *See* Meta, "Inauthentic Behavior," https://transparency.meta.com/policies/community-standards/inauthentic-behavior/. Accessed July 14, 2025.

594 *See* Meta, "Misinformation," https://transparency.meta.com/policies/community-standards/misinformation/. Accessed July 14, 2025.

595 *See* Meta, "Third-Party Intellectual Property Infringement," https://transparency.meta.com/policies/community-standards/intellectual-property/. Accessed July 14, 2025.

596 *See* Meta, "Locally Illegal Content, Products, or Services,"

276. The most prominent statistic advanced in Meta's CSERs is its "prevalence" metric. This metric estimates the proportion of views of content that violate Meta's community standards relative to all views of content on Facebook or Instagram.[597] As the "prevalence" page on Meta's Transparency Center site explains, a prevalence of 0.20% means that for every 10,000 views, 20 views included violating content.[598] The CSERs provide prevalence metrics for several of the policy areas listed above, including violence and incitement, child endangerment (including nudity, physical abuse, and sexual exploitation), bullying and harassment, and hate speech.[599] Meta has variously described prevalence as a "key [metric],"[600] a "critical metric,"[601] and "[one] of the most significant metrics" provided in the CSERs.[602]

277. Meta has additionally published blog posts on its website's Newsroom page to accompany the publication of the CSER each quarter, highlighting updated prevalence statistics. For example, Figure 9 below provides an excerpt from a blog post summarizing the Q2 2022 CSER data that prominently displayed updated prevalence metrics for bullying and harassment on each of Facebook and Instagram:

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https://transparency.meta.com/policies/community-standards/locally-illegal-products-services. Accessed July 14, 2025.

597 Mar. 6, 2025, "Prevalence," *Meta,* https://transparency.meta.com/policies/improving/prevalence-metric/. Accessed July 14, 2025.

598 Mar. 6, 2025, "Prevalence," *Meta,* https://transparency.meta.com/policies/improving/prevalence-metric/. Accessed July 14, 2025.

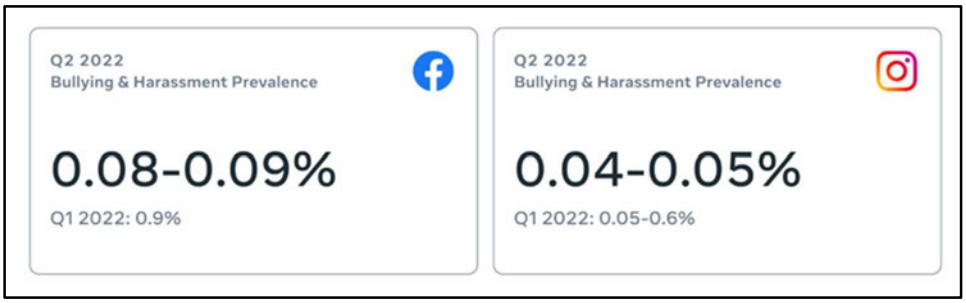
599 "Community Standards Enforcement Report," *META.com,* https://transparency.meta.com/reports/community-standards-enforcement/. Accessed July 14, 2025.

600 Rosen, Guy, May 23, 2019, "An Update on How We Are Doing At Enforcing Our Community Standards," *FB.com,* https://about.fb.com/news/2019/05/enforcing-our-community-standards-3. Accessed July 14, 2025.

601 May 23, 2019, "Measuring Prevalence of Violating Content on Facebook," *Meta,* https://about.fb.com/news/2019/05/measuring-prevalence. Accessed July 14, 2025.

602 May 23, 2019, "Measuring Prevalence of Violating Content on Facebook," *Meta,* https://about.fb.com/news/2019/05/measuring-prevalence. Accessed July 14, 2025.

Figure 9. Excerpt from Q2 2022 CSER Report[603]



278. As Figure 9 illustrates, the prevalence of content in violation of Meta's community standards for bullying and harassment was around 0.08-0.09% for Facebook and 0.04-0.05% for Instagram in Q2 of 2022. On Instagram, for example, Q2's prevalence metric equates to between 4 and 5 views of prohibited bullying/harassment content for every 10,000 total views on the platform, thereby creating an impression that it was rare for users to witness or experience bullying and harassment on the platform.

279. Through its public communications, Meta has positioned the prevalence metric as a proxy for how much harm its Facebook and Instagram platforms do to their users. It has done so by claiming that prevalence is the best metric for measuring the *impact* of harmful content. In a May 2019 Newsroom post explaining the metric, Meta acknowledged that the "way content causes harm on the internet is by being seen."[604] With Statement C5, describing its motivations for tracking prevalence in a separate Newsroom post from the same month, it stated that it "care[s] most about how often content that violates [its] policies is actually seen by someone,"[605] rather than the total number of published posts that violate Meta's community standards. On the

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603 Bickert, Monika, Aug. 25, 2022, "Community Standards Enforcement Report, Second Quarter 2022," *FB.com*, https://about.fb.com/news/2022/08/community-standards-enforcement-report-q2-2022/. Accessed July 14, 2025.

604 May 23, 2019, "Measuring Prevalence of Violating content on Facebook," *FB.com,* https://about.fb.com/news/2019/05/measuring-prevalence. Accessed July 14, 2025.

605 Rosen, Guy, May 23, 2019, "An Update on How We Are Doing At Enforcing Our Community Standards," *FB.com,* https://about.fb.com/news/2019/05/enforcing-our-community-standards-3. Accessed July 14, 2025.

"Prevalence" page of the company's Transparency Center website, Meta reasons that "[m]easuring views of violating content rather than the amount of violating content published better reflects the *impact on the community*," since a "piece of violating content could be published once but seen 1,000 times, 1 million times or not at all."[606] In describing the metric in these ways, Meta has framed prevalence as the most useful measure to attend to, and one that is capable of tracking the rate of real harm on the platform.

280. In Statement C5, when describing the function of the prevalence metric, Meta has compared it to measuring the concentration of pollutants in the air,[607] claiming that just as environmental regulators record the percent of nitrogen dioxide in the air, Meta records the percent of times a user is exposed to violating content.[608] By deploying this analogy, Meta has created the impression that prevalence is a key indicator of the health and safety on its platforms, conveying again that a low prevalence of policy-violating content is an accurate gauge of the level of harm experienced by its users.

281. Further, Meta has explicitly connected the prevalence of violating content with the quality of user *experiences* on its platforms: In a blog post originally introducing the CSER reports and prevalence metric, Vice President of Analytics Alex Schultz explained that his own personal experiences facing abuse on Facebook in relation to his identity as a gay man made him "want to ensure that people's experiences on Facebook are positive." [609] He continued by stating

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606 Updated Mar. 6, 2025, "Prevalence," *Meta,* https://transparency.meta.com/policies/improving/prevalence-metric/ (emphasis added). Accessed July 14, 2025.

607 May 23, 2019, "Measuring Prevalence of Violating content of Facebook," *FB.com*, https://about.fb.com/news/2019/05/measuring-prevalence. Accessed July 14, 2025.

608 May 23, 2019, "Measuring Prevalence of Violating content of Facebook," *FB.com*, https://about.fb.com/news/2019/05/measuring-prevalence. Accessed July 14, 2025.

609 Schultz, Alex, May 15, 2018, "Hard Questions: How Do We Measure Our Efforts to Keep Bad Content off Facebook?," *FB.com*, https://about.fb.com/news/2018/05/measuring-our-efforts/ (emphasis added). Accessed July 14, 2025.

that "I hope this [CSER] report, blog and guide show you how we're trying to do that and open up a conversation on how we can do it better. Because what you measure, you can improve."[610] Mr. Schultz's blog post clearly positioned the release of CSERs and prevalence metrics as the most informative measure of users' negative or harmful experiences on the platform.

282. Meta's decision to position CSERs as the best measure of the frequency of users' negative or harmful experiences on the platforms was misleading. This is especially true as Meta routinely deployed the CSER statistics as proof points to side-step or refute general criticisms that the platforms were harmful to their users. By deploying the CSER metrics in this way, Meta implied that the amount of harmful content on its platforms was low and the attendant harms limited. According to Meta's 2021 Narrative Audit, this is precisely the message Meta intended to convey. The Narrative Audit recommended that Meta use the CSERs with "consumers" as "proof points" to change the negative "external narrative" regarding the platforms' harmful content.[611] Each CSER report creates the impression that users rarely encounter harmful content on Meta's platforms and therefore the platforms are safe for users.

283. Meta's CSER prevalence metric is also misleading because it minimizes the perception of harm by choosing a so-called "unit of analysis" (percentage of page views) that necessarily minimizes the resulting statistic in an absolute sense. Of all the denominators Meta could have selected mathematically in calculating this proxy for harm, views (the number of discrete pages seen by users) is a notably large number—larger than, say, number of sessions on the platform or number of days or weeks of platform use—thereby minimizing the magnitude of the resulting

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610 Schultz, Alex, May 15, 2018, "Hard Questions: How Do We Measure Our Efforts to Keep Bad Content off Facebook?," *FB.com*, https://about.fb.com/news/2018/05/measuring-our-efforts/ (emphasis added). Accessed July 14, 2025.

611 META3047MDL-003-00163297, "Company Narrative Audit," March 2021, at 308.

datapoint. If Meta had instead adopted a different methodology and measured prevalence by how many sessions included harmful content, or aggregated views across all harms, or measured by how many people were exposed to harm across a week, month, or year, the resulting harms ratio would have been much larger in an absolute sense.

284. A reasonable consumer would interpret such absolutely small percentages (*e.g.*, 0.14-0.15% or 0.05-0.06% prevalence of bullying and harassment for Facebook and Instagram in Statement C8) as signaling that exposure to such harmful content was similarly low in an absolute sense. A reasonable consumer would have neither the expertise nor the information to unpack Meta's statistical and methodological approach to understand that low levels of prevalence according to the CSER methodology do not speak to the likelihood of exposure, or magnitude of harm, to individual users.

285. Meta's decision to promote and publicize the CSER metric is in stark contrast to its decision *not* to disclose other internal metrics such as its Bad Experiences and Encounters Framework ("BEEF"), Tracking Reach of Integrity Problems Survey ("TRIPS"), or Negative Experiences Tracking Survey ("NETS") data (further described below), which focused on individual users rather than page views, and produced statistics that were significantly larger and considerably more meaningful. As discussed below, Meta selectively presented consumers with a sanitized picture of its platforms in the form of CSER reports that omitted the alarming results of its internal research on the frequency of harms experienced by large numbers of users.

iii. Analysis of individual statements: *Policies*

286. Finally, as shown above in Table 10, Meta has made public statements conveying the position that its internal guidelines and policies successfully prevent users from viewing harmful or inappropriate content.

Table 10. Meta's statements claiming that its internal policies keep its platforms safe for users

No.	Date	Speaker	Statement	Context
C9	September 30, 2021	Antigone Davis, Meta's Global Head of Safety	"Senator, we do not direct people toward content that promotes eating disorders. That actually violates our policies, and we remove that content when we become aware of it. We actually use AI to find content like that and to remove it"	Ms. Davis's Congressional testimony in response to Senator Blackburn's question: "Why did Senator Blumenthal's office so easily access Instagram and set up this account for a 13 year old and then immediately they began to receive information about eating disorders and self-harm content? What kind of artificial intelligence are you using that would direct them that way?"[612]
C10	No publication date	Instagram	"At Instagram, we have guidelines that govern what content we recommend to people…we also avoid making recommendations that may be inappropriate for younger viewers… We use technology to detect both content and accounts that don't meet these Recommendations Guidelines and to help us avoid recommending them. As always, content that goes against our Community Standards will be removed from Instagram."	Statement included on Instagram's Help Center page titled "Recommendations on Instagram."[613]

612 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. 1 (Sept. 30, 2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf.

613 "Recommendations on Instagram," https://help.instagram.com/313829416281232. Accessed July 14, 2025.

287. For example, in Statement C9, in her September 2021 appearance before Congress, Ms. Davis responded to anecdotal evidence indicating that Instagram recommends eating disorder and self-harm content to young users by stating that the platform does *not* do that because "[t]hat actually violates our policies, and we remove that content when we become aware of it."[614] Similarly, in Statement C10, on Instagram's Help Center page, Meta explains that the platform has "guidelines that govern what content we recommend to people," that the platform "avoid[s] making recommendations that may be inappropriate for younger viewers," and that, "content that goes against our Community Standards will be removed from Instagram."[615]

288. A reasonable consumer would understand Statements C9 and C10 to indicate that the platforms had robust and effective methods for identifying and removing content that violated the company's policies, and, more importantly, that Meta did not have knowledge that such content can be "recommended to people." As discussed in Section X.C.v, below, these statements do not reflect the underlying reality of Meta's platforms and its recommendation systems. More broadly, these statements also falsely imply that Meta's internal checks and processes are capable of preventing, and do prevent, users of its platforms from viewing harmful content and experiencing harm. The statements function to reassure audiences that Meta's safeguards successfully ensure user safety and well-being.

iv. Evaluation of consumer understanding

289. As discussed previously in Section VIII.A, consumers will implicitly assume that

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614 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. 1 (Sept. 30, 2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf.

615 "Recommendations," *Instagram*, https://help.instagram.com/313829416281232. Accessed July 14, 2025.

products are safe by default unless stated otherwise,[616] and that a company's communications about health and safety are generally truthful and complete.[617] As such, when Meta assures consumers that its internal well-being research shows that, broadly speaking, Instagram is safe for teens,[618] or when it presents prevalence statistics in its CSERs showing that harmful content appears within a small proportion of views on Facebook and Instagram, consumers are likely to infer that this reflects Meta's truthful and complete understanding of the harms on its platforms, based on *all* the research it has conducted. Meta's repetition of particular drumbeats and proof points across Congressional testimony, blog posts, and other public statements, also serves to increase the likelihood that its communications are believed by consumers, thereby enhancing the "illusory truth effect," described above.[619]

290. Moreover, because social media is a credence good,[620] consumers are forced to rely to a large extent on Meta's public statements to infer the rates of harm and safety on Meta's platforms. In this context, most consumers lack the expertise and information required to independently assess Meta's claims about health and safety, especially given the technical nature of much of Meta's messaging on this topic, the inaccessibility of the underlying data, and the inaccessibility of Meta's techniques for collecting and analyzing those data. Though an expert may be able to determine that Meta's prevalence statistic is a poor proxy for harm (given that the

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616 Levine, T. R. (2014), "Truth-Default Theory: A theory of human deception and deception detection," *Journal of Language and Social Psychology*, 33(4), 378–392.

617 Grice, H. P. (1989), *Studies in the way of words*, Harvard University Press.

618 Raychoudhury, Pratiti, Sept. 26, 2021, "What Our Research Really Says About Teen Well-Being and Instagram," *FB.com,* https://about.fb.com/news/2021/09/research-teen-well-being-and-instagram/. Accessed July 14, 2025.

619 See Section VIII.B.ii.

620 Darby, M. R., & Karni, E. (1973), "Free competition and the optimal amount of fraud," *The Journal of Law & Economics*, 16(1):67-88. See Section VI.C on why social media is a credence good.

prevalence metric is calculated as a percentage of total content views[621]), individuals without a background in statistical analysis are likely to interpret the low prevalence figures communicated in Meta's statements as indicating that the platforms present few, if any, risks of harm to users. Similarly, an expert might suspect that there is a wide array of harmful experiences which are not captured by Meta's community standards (e.g., negative social comparison, interpersonal conflict, etc.), while a lay person may not. As such, consumers may reasonably infer that, because the prevalence of violating content is negligible, so is the prevalence of harmful-but-not-violative content and the corresponding rate of harm.

291. The challenge of assessing Meta's statements similarly applies to the company's claims about its research on well-being. For example, when *The Wall Street Journal* published reporting based on leaked internal Meta research and documents which it claimed demonstrated the company's awareness of harm on its platforms, Meta publicly released just two slide decks along with annotations. In the annotated decks, Meta downplayed the findings of its own researchers and their internal research projects, labeling conclusions as "researcher speculation"[622] and repeatedly emphasizing that the research was not designed to demonstrate causality.[623]

292. Rather than directly addressing the implications of Meta's own leaked research and acknowledging the harmful nature of its platforms, Meta undercut its researchers and spun the results to its benefit by selecting the most favorable stats to trumpet, and explaining away

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621 Updated Mar. 6, 2025, "Prevalence," *Meta,* https://transparency.meta.com/policies/improving/prevalence-metric/. Accessed July 14, 2025.

622 Oct. 2019, "Teen Mental Health Deep Dive," *FB.com,* https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-2.pdf, pp. 3 and 29. Accessed July 14, 2025.

623 Oct. 2019, "Teen Mental Health Deep Dive," *FB.com,* https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-2.pdf, pp. 1-4, 17-19, 21-28, 30-32, 34-35, 37, 40-41. Accessed July 14, 2025.

damaging results and internal statements as bad research or speculation. Because most consumers lack the expertise needed to evaluate both the research on its own and Meta's subsequent characterization of that research, they are more likely to take Meta at its word, accepting the narrative about harm that Meta aimed to advance.

v. Examination of assumptions underpinning consumer deception

293. In evaluating whether Statements C1-C10 have a tendency to mislead, counsel has asked me to assume:

a. Meta's internal documents and research acknowledge that its platforms have a negative impact on subjective well-being, and are linked to high levels of problematic use, loneliness, self-harm, and bullying especially among young users;

b. Meta had internal research that indicated harmful experiences and content on the platforms were not rare or isolated;

c. Meta did not disclose this internal research to the public;

d. Meta's internal policies and standards were often insufficient to prevent harmful content from reaching users; and

e. Meta downplayed the findings of its own internal research that suggested harm occurred on the platform and did not disclose relevant and material research findings to consumers.

294. As with other sections of this report, I have assessed many of Meta's internal documents to understand the basis of these assumptions and to further contrast Meta's external statements with its internal knowledge. Given the difference between what Meta knew or discussed

internally, and what it communicated externally, its external statements have a tendency to mislead consumers.

a. Internal documents provide evidence that Meta knew that the platforms had negative effects on well-being, particularly among young users

295. Internal documents provide evidence of Meta's internal understanding of the harms associated with use of its platforms.[624] For example, a presentation from March 2019 titled "Well-Being 10x,"—so named because it described how Meta might implement a tenfold increase in well-being efforts on Facebook and Instagram—that was reviewed by Chief Product Officer Chris Cox, COO Sheryl Sandberg, and VP of Research David Ginsberg,[625] indicates that Meta's researchers believed both Facebook and Instagram had a net negative impact on subjective well-being, for both adults and youth.[626] This presentation identified three suspected drivers of the overall net negative impact of its platforms: problematic use, social comparison, and loneliness.[627] I "Problematic use" was defined as "[s]erious, negative impact on sleep, relationships, work, or lives, combined with lack of control over FB use," with results of the research showing that the prevalence of problematic use was "3.1% severe (US), 55% mild (global)" and "[m]ore common for younger people."[628] The "3.1%" identified in this document originated in a study conducted by three Meta researchers who combined a survey of 20,000 Facebook users with behavioral and demographic data to estimate the rate of problematic use

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624 *See, e.g.*, META3047MDL-003-00017819, "Tech-Backlash — Digital Wellness," November 12, 2018, at 824, 825.

625 META3047MDL-003-00144496, "RE: the things I mentioned in the leadership meeting," March 14, 2019, at 496.

626 META3047MDL-003-00018009, "Well-Being 10x," March 8, 2019, at 014-015; META3047MDL-014-00175728, "Well-being Research: 10,000 Foot View," March 6, 2019.

627 META3047MDL-003-00018009, "Well-Being 10x," March 8, 2019, at 017.

628 META3047MDL-003-00018009, "Well-Being 10x," March 8, 2019, at 017; *see also* Deposition of Justin Cheng, March 13, 2025, Exhibit 30 at 148 (summarizing the underlying data and visually depicting it through various graphs, including one which shows that "problematic use" exceeds 5% in late teens at 1051).

across all U.S. users.[629] Social comparison was defined as "evaluating yourself negatively to others whom you perceive as better off," with results showing that the prevalence of social comparison was "5% chronic (global), 40% mild (global)" and "[m]ore common in people under 30 and women."[630] To arrive at these conclusions, Meta's researchers surveyed roughly 38,000 people from 18 countries.[631] Finally, loneliness was described as the "difference between [the] quality of friendships [a] person has and wants," with results showing that the prevalence was "7% chronic (global), 36% mild (global)" and "[h]igher in younger adults (age 18-24), veterans, and LGBTQ."[632] In this case, researchers conducted a 6,500 person survey run across 12 countries.[633]

296. Together, these statistics indicate that large numbers of individuals reported being negatively affected by Meta's platforms. When Meta researchers estimated that roughly 3.1% of U.S. Facebook users experience problematic use, that percentage represented approximately 7 million people who were experiencing diminished sleep quality, and whose relationships, work, and other aspects of life were harmed by excessive Facebook use.[634] Additionally, when Meta estimated that 5% of Facebook users experience chronic social comparison globally, and 7% experience chronic loneliness globally, these percentages implied that approximately 150 million and 210 million users,[635] respectively—numbers that exceeded the total populations of all but a

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629 META3047MDL-020-00588361, "Problematic Facebook use: When people feel like Facebook negatively affects their life," July 31, 2018, at 361-362.

630 META3047MDL-003-00018009, "Well-Being 10x," March 8, 2019, at 017.

631 META3047MDL-008-00000045, "Social comparison on Facebook, on Instagram, and in everyday life," April 22, 2019, at 046.

632 META3047MDL-003-00018009, "Well-Being 10x," March 8, 2019, at 018.

633 META3047MDL-032-00000452, "Facebook both increases and decreases loneliness," November 15, 2018.

634 According to Pew Research, approximately 70% of Americans (approximately 238 million people) had used Facebook, *see* Nov. 13, 2024, "Social Media Fact Sheet," *Pew Research Center,* https://www.pewresearch.org/internet/fact-sheet/social-media/. 3.1% of 238 million is roughly 7 million.

635 Calculated as a percentage of 3 billion users globally. See Dixon, S.J. (2024) "Number of monthly active Facebook users worldwide as of 4th quarter 2023." *Statista*, accessed at: https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide.

small number of countries—were harmed through their use of Facebook. Further, the numbers produced by these studies are incapable of capturing the percentage of users who are harmed in aggregate, summed across all forms of harm, since each study investigates only a sliver of those harms.

297. Other internal Meta research demonstrates a clear understanding that problematic use, negative social comparison, and loneliness are associated with harmful experiences and outcomes. For example, Meta's "Well-Being Integrated Outreach Plan" for the first half of 2020 noted social comparison was something that Meta "need[ed] to solve," explaining that

> **Social Comparison heavily impacts users Mental Health**. Social comparison is one of the primary IG experiences negatively impacting mental health due to long-term, constant self-critique and scrutiny, permanently shaping the way a person views themselves in relation to others.[636]

298. Similarly, a 2020 study on the relationship between social comparison and Facebook use authored by Facebook research scientists Moira Burke, Justin Cheng, and [redacted] noted that "negative outcomes [associated with social comparison] include depression, envy, and lower well-being."[637]

299. The results associated with the conclusion that Meta's platforms had a net negative effect on well-being were discussed among Meta's leadership. For example, David Ginsberg (at the time, VP of Product, Choice, and Competition) included these results in a message to Alex Schultz (at the time, VP of Analytics for Internationalization and Growth) and other Meta leadership, writing that "[d]espite all the positive effects the FB provides… there is increasing

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636 META3047MDL-019-00118434, "H1 2020 Well-being Integrated Outreach Plan," at 437, 440 (emphasis retained from original).

637 META3047MDL-003-00001802, "Social Comparison and Facebook: Feedback, Positivity, and Opportunities for Comparison," April 2020, at 803.

scientific evidence… that the average net effect of FB on people's well-being is slightly negative."[638]

300. Other internal research from Meta on problematic use found even higher rates than the 3.1% figure identified above. A follow up study from 2019, which looked at 50,000 users across 11 nations, employed an "extended measurement framework," and referred to the 3.1% number as representative of "extreme problematic use," found that 12.5% of all users (10% in the U.S., specifically) experienced problematic use.[639] The study also found that an additional "11% of people report[ed] negative life impact 'very often' but only 'sometimes' lack[ed] control," meaning they did not qualify under the researchers' definition of problematic use.[640] In a 2021 chat, Meta employee Jennifer Guadagno, the former leader of the team responsible for investigating problematic use in 2018, stated that her "personal POV is that this [problematic use] is one of, if not THE, most important area for us as a company."[641] Nonetheless, she noted that problematic use "wasn't deemed a priority" and the "FB App leads" deprioritized the work.

301. A subsequent internal 2022 presentation focused on the association between late night use and problematic use appears to have combined the 2019 dataset discussed above with additional late night behavioral proxies.[642] The presentation concluded that "18.3% of

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638 META3047MDL-003-00144500, "Re: the things I mentioned in the leadership meeting," March 14, 2019, at 501, Deposition of Alexander Schultz, February 27, 2025, Exhibit 48.

639 META3047MDL-004-00003641 at 4-6, "Facebook's Measurement Strategy for Problematic Use [Well-Being]: Survey & First Results [October 2019]" November 14, 2019, at 644, 645, 646; *see also* META3047MDL-044-00111865, "Problematic Use POV," 2020 (Quoting the 12.5% figure and stating that "Your Time of Facebook and Your Activity (on Instagram) were two products launched to address problematic use. However, they were deprioritized despite successful launches…."

640 META3047MDL-004-00003641, "Facebook's Measurement Strategy for Problematic Use [Well-Being]: Survey & First Results [October 2019]" November 14, 2019, at 646.

641 Deposition of Jennifer Guadagno, PhD, November 14, 2024, Exhibit 37 at 261; *see also* Deposition of Jennifer Guadagno, PhD, November 14, 2024, 310:21-311:6.

642 META3047MDL-035-00005017, "Late Night Use: IG Mental Well-being, Problematic Use - Strategy and Design," August 4, 2022, at slide 36.

[Instagram] teen users exhibit behaviors associated with [problematic use]."[643] The same presentation provides some basic data about late night teen use. While not specific to US users, the presentation stated that "43.3% of WAU [weekly active user] teens have at least 1 late night session [12 am-4am].[644] And that "4.6% of WAU teens have 1 or more late sessions every night."[645]

302. In addition to problematic use, Meta also identified negative social comparison[646] and negative appearance comparison as a "high-reach, high-intensity problem"[647] area of concern for platform users. A 2018 internal study combining a survey of 5,793 users, log data, and qualitative interviews found that "social comparison is common on IG."[648] Not only did the study find that 51% of people were exposed to negative social comparisons on Instagram, but that "women and teens are more prone to social comparison, especially negative social comparison" and that "negative social comparison lowers well-being."[649] An internal Meta email from 2020 noted that "we know from previous internal and external research that social comparison is linked to multiple negative well-being outcomes (*e.g.*, increased loneliness, worse body image, and negative mood or affect)…"[650]

303. Another internal social comparison study from December of 2020 surveyed 50,590

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643 META3047MDL-035-00005017, "Late Night Use: IG Mental Well-being, Problematic Use - Strategy and Design," August 4, 2022, at slide 36.

644 META3047MDL-035-00005017, "Late Night Use: IG Mental Well-being, Problematic Use - Strategy and Design," August 4, 2022, at slide 10.

645 META3047MDL-035-00005017, "Late Night Use: IG Mental Well-being, Problematic Use - Strategy and Design," August 4, 2022, at slide 10.

646 Internal documents define negative social comparison as "when someone feels bad about themselves after comparing themselves with others."

647 META3047MDL-037-00068428, "Appearance-based social comparison on Instagram," February 1, 2021, at 428.

648 META3047MDL-003-00101724, "Social Comparison on Instagram," November 2018, at 731; META3047MDL-003-00085928, "Pressure to Look Perfect," January 2019.

649 META3047MDL-003-00101724, "Social Comparison on Instagram," November 2018, (emphasis removed).

650 Deposition of Kyle Andrews, PhD, November 19, 2024, Exhibit 32 at 466.

people in 10 countries.[651] Meta's researchers identified several key takeaways from the research including that "appearance-based comparison is common on Instagram" with "nearly half (48%) of teen girls" saying they often or always compare their appearances to others on Instagram. And, more than a third of teen girls (37%) reported seeing posts that made them "feel worse about their bodies or appearances."[652]

304. Meta's researchers also repeatedly examined bullying and harassment on the platforms. A 2016 study surveying 1,285 U.S. teens who used Instagram concluded that "teens report feeling less safe on Instagram than non-teens" with roughly 10% of respondents reporting they disagreed or strongly disagreed with the statement: "I feel safe on Instagram."[653] The study's authors concluded that teens' "[d]isproportionate exposure to self-harm, bullying, and impersonation may not only impact teen's perceptions of safety on Instagram, but could have consequences for their overall wellbeing."[654]

305. Bullying was a frequent subject of research and Meta's researchers knew the problem was pervasive, particularly among young users. A 2018 presentation estimated that 15-25 million people a day (or 4.3% of daily users) were exposed to bullying on Instagram and that the "consequences are severe."[655] A 2019 slide deck entitled "Teen Bullying Deep Dive" relaying results from a study based on focus groups and a survey of 3,200 teens concluded that the "nature of social media…make it an optimal medium for bullying."[656] Of the 800 U.S. teens

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651 META3047MDL-037-00068428, "Appearance-based social comparison on Instagram," February 1, 2021, at 428.

652 META3047MDL-037-00068428, "Appearance-based social comparison on Instagram," February 1, 2021, at 428.

653 META3047MDL-023-00000037, "Teens feel less safe than non-teens on Instagram," December 11, 2016, at 037.

654 META3047MDL-023-00000037, "Teens feel less safe than non-teens on Instagram," December 11, 2016, at 037.

655 META3047MDL-003-00082217, "Bullying Deep Dive," 2018, at 223.

656 META3047MDL-003-00109989, "Teen Bullying Deep Dive: US, UK, FR, DE," 2019, at 992.

surveyed, 91% reported witnessing bullying on social media with 27% reporting seeing threats of physical violence and 22% reporting seeing non-consensual sharing of nude photos.[657]

306. Other research from Meta examined the impact of the platforms on teen mental health more holistically. For example, a presentation titled "Teen Mental Health" prepared in 2019 by Creatures of Habit, an independent research firm commissioned by Meta, outlined survey results of teens in the US and UK and found that teens believed that "Instagram is the worst platform for mental health."[658] The presentation explained that "[y]oung people are acutely aware that Instagram is bad for their mental health[.]"[659] It also stated that, while young people were open to the idea that Instagram might be used to benefit their well-being, they actually believed that "constructive uses of the platform for mental wellbeing were hypothetical rather than practical."[660] Another presentation based on the same research showed that roughly 21% of "US girls" reported that Instagram made them feel somewhat or much worse about themselves.[661]

307. The studies described above, and elsewhere in this report, reflect just some of the internal research available to Meta's executives that was never disclosed to the public. These and other studies stand in stark contrast to Meta's public messaging that the platforms were not harmful to young users, negative experiences and negative content were rare, and that Meta's policies and procedures were effective in protecting teens.

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657 META3047MDL-003-00109989, "Teen Bullying Deep Dive: US, UK, FR, DE," 2019, at 000.
658 Deposition of Wendy Gross, PhD, January 28, 2025, 81:6-25; META3047MDL-003-00091414, "Teen Mental Health," August/September 2019, at 442.
659 META3047MDL-003-00091414, "Teen Mental Health," August/September 2019, at 442.
660 META3047MDL-003-00091414, "Teen Mental Health," August/September 2019, 424.
661 META3047MDL-003-00109173, "Teen Mental Health Deep Dive" at 193.

b. Internal survey data show that negative experiences are far more common than the CSERs suggest

308. While prevalence was presented as the most significant metric for measuring negative or harmful experiences externally, Meta also measured the frequency of such experiences internally using a different framework focused on users' own experiences.[662] Building on earlier efforts to understand these "negative experiences,"[663] the work coalesced at Instagram into the *Negative Experiences Tracking Survey* ("NETS"). The first iteration of the survey, fielded in late 2017, asked Instagram users if they had encountered or witnessed any of a predetermined list of negative experiences in the last week, ranging from encountering spam to being harassed or bullied on the platform.

309. The first iteration of NETS captured responses from 30,000 Instagram users and found that 56% of respondents had encountered at least one type of negative experience on Instagram in the past week.[664] Similar surveys were run at semi-regular intervals including in at least January,[665] May,[666] and October of 2019.[667]

310. The results from these NETS surveys consistently showed that users were encountering high levels of harmful and disturbing content on Instagram, resulting in "negative experiences." The May 2019 version of NETS (surveying 30,000 Instagram users across eight countries) concluded that the "perceived reach of negative experiences on Instagram is quite high."[668] The

662 META3047MDL-019-00092596, "Instagram Well-being Measurement and Survey Tracker Research Wiki," 2021.
663 META3047MDL-019-00008232, "Instagram PAC Insights," 2017.
664 META3047MDL-019-00092596, "Instagram Well-being Measurement and Survey Tracker Research Wiki," 2021.
665 META3047MDL-023-00001752, "Instagram Well-being FYI | Group | Workplace," February 1, 2019.
666 META3047MDL-014-00347782, "Negative Experiences Survey — May 2019 Edition," May 2019.
667 META3047MDL-014-00347805, "Negative Experiences Survey — Oct 2019 Edition," October 2019.
668 META3047MDL-014-00347782, "Negative Experiences Survey — May 2019 Edition," May 2019.

survey showed that 28% of the respondents had witnessed bullying or harassment in the last seven days, 12% had seen suicide or self-injury (sometimes referred to internally as "SSI") content, and 7% had been the subject of bullying or harassment themselves.[669] The study also found that "teens have significantly more negative experiences than adults."[670]

311. The NETS survey instrument also inquired into the intensity of these experiences, finding that users' experiences varied significantly depending on the underlying harm. While some "bad experiences" had minimal impact on users (for example, "seeing spam"), other types of experiences were identified by users as "very bad" experiences. For example, users reported that seeing suicide and self-injury content or being bullied and harassed were especially intense experiences. Consequently, while some "negative experiences" were not as common as others, the intensity of those rarer experiences, such as being bullied, meant that even limited exposure could still have a considerable impact on the user's well-being.[671] Even so, Meta's researchers knew that just witnessing bullying—which 31% of teens surveyed for the May 2019 Nets study reported seeing in just the last seven days[672]—was "harmful to well-being and user experiences and [was] associated with feelings of anxiety, guilt, and fear…"[673]

312. The October 2019 version of NETS (also surveying 30,000 Instagram users across eight countries) added four new categories of harmful experiences to the mix, but generated nearly identical results.[674] The October version found that 30% of teens reported witnessing bullying or harassment in the last 7 days while 9% experienced bullying or harassment themselves.[675]

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669 META3047MDL-014-00347782, "Negative Experiences Survey — May 2019 Edition," May 2019.
670 META3047MDL-014-00347782, "Negative Experiences Survey — May 2019 Edition," May 2019.
671 META3047MDL-014-00347782, "Negative Experiences Survey — May 2019 Edition," May 2019.
672 META3047MDL-014-00347782, "Negative Experiences Survey — May 2019 Edition," May 2019.
673 META3047MDL-019-00090799, "Research and Data H2 2019 Highlights – Anti Bullying," 2019, at 801.
674 META3047MDL-014-00347805, "Negative Experiences Survey — Oct 2019 Edition," October 2019.
675 META3047MDL-014-00347805, "Negative Experiences Survey — Oct 2019 Edition," October 2019.

Additionally, it found that 27% reported seeing hate content, 26% reported seeing nudity, and 17% reported seeing SSI.[676] Of the "new" bad experiences added to the October 2019 version of NETS, 18% of teens reported seeing eating disorder content and 17% reported seeing non-consensual intimate imagery (sometimes referred to internally as "NCII").[677]

313. In comparison, Meta's CSER report for Q3 2019 (covering roughly the same time period as the October 2019 NETS study) claimed that "the likelihood that people view [SSI] content that violates [Meta's] policies is very low" and that "when we sample views of content in order to measure prevalence for these policy areas, many times we do not find enough, or sometimes any, violating samples to reliably estimate a metric."[678] Meta's CSER report went on to claim, in Statement C6, that the prevalence of violative suicide and self-injury content on Instagram was 0.04%, meaning that "out of every 10,000 views on Facebook or Instagram in Q3 2019, we estimate that no more than 4 of those views contained content that violated [the SSI] policy."[679] These statements create the impression that suicide and self-injury content was rare and users were unlikely to encounter such material. However, as just noted, Meta's October 2019 NETS survey found that 17% of teen respondents reported seeing suicide and self-injury content in just the past week.[680] NETS demonstrates that the frequency at which young users encountered harmful content, like SSI, on Instagram far exceeded the impression that Meta created through its CSER reports.

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676 META3047MDL-014-00347805, "Negative Experiences Survey — Oct 2019 Edition," October 2019.
677 META3047MDL-014-00347805, "Negative Experiences Survey — Oct 2019 Edition," October 2019.
678 Rosen, Guy, Nov. 13, 2019, "Community Standards Enforcement report, November 2019 Edition," *FB.com*, https://about.fb.com/news/2019/11/community-standards-enforcement-report-nov-2019/. Accessed July 14, 2025.
679 Rosen, Guy, Nov. 13, 2019, "Community Standards Enforcement report, November 2019 Edition," *FB.com,* https://about.fb.com/news/2019/11/community-standards-enforcement-report-nov-2019/. Accessed July 14, 2025.
680 META3047MDL-014-00347805, "Negative Experiences Survey — Oct 2019 Edition," October 2019.

314. In addition to the NETS survey which ran exclusively on the Instagram platform, Meta also developed a similar, but less comprehensive, survey for the Facebook platform referred to as the *Tracking Reach of Integrity Problems Survey* ("TRIPS").[681] Launched at end of 2018, the initial version of the study focused on a limited subset of "integrity problems" such as nudity, fake accounts, and misinformation.[682] Instead of running periodically, TRIPS was designed to run continuously with the survey questions being administered to thousands of users each week. The resulting data enabled researchers and managers to conduct continuous assessments, and to monitor changes in the metrics over time via "dashboards" and recurring "integrity reports."[683]

315. Over the course of 2019 and into 2020, the TRIPS survey was expanded and updated to include additional topics, such as questions about witnessing and experiencing bullying and harassment in November of 2019.[684] In December of 2019, Meta launched a version of the TRIPS survey on Instagram.[685] Once TRIPS was launched on Instagram, it appears that Meta stopped running the NETS survey, despite the fact that TRIPS measured the prevalence of a smaller set of negative experiences, and without the same degree of depth.[686] In particular, TRIPS did not measure a number of "high- and extremely-high-severity" problems, such as suicide and self-injury, and non-consensual intimate imagery, that Meta employees identified as

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681 META3047MDL-050-00295403, "The Tracking Reach of Integrity Problems Survey (TRIPS)," February 19, 2019.

682 META3047MDL-020-00662466, "Intro Document: Tracking Reach of Integrity Problems Survey (TRIPS MVP)," 2019-2020.

683 *See, e.g.,* META3047MDL-031-00043936, "Instagram Well-being Metrics Insights/Review 8/6," August 6, 2020; META3047MDL-003-00158476, "Integrity Update," May 19, 2020.

684 META3047MDL-004-00003631, "The Trips expansion has launched, Integrity Survey Measurement FYI & Updates (TRIPS, LEGIT, Voice Perception) | Group | Workplace," November 1, 2019; META3047MDL-020-00681595, "Re: TRIPS HPM - 11/15/19," November 19, 2019.

685 META3047MDL-020-00662466, "Intro Document: Tracking Reach of Integrity Problems Survey (TRIPS MVP)," 2019-2020.

686 META3047MDL-046-00180343, "Coming soon: A new integrity tracking survey for IG," March 2019.

"risky" and a "potential PR risk" if made public.[687]

316. In addition to NETS and TRIPS, Meta also conducted additional ad-hoc surveys demonstrating the extent and magnitude of specific harmful experiences. For example, Meta researchers surveyed over 6,000 U.S. teens in 2019. The study found that 30% of the respondents had experienced some type of "aggression" on Instagram in just the past 30 days.[688] Another study from 2018 found that 5.1 million users are exposed to SSI-related content each day.[689] A 2021 study found that 18% of the content that teen girls saw on Instagram fell into categories associated with "negative appearance comparison" (NAC) and by some measures, "approximately 70% of teen girls may see 'too much' sensitive [NAC] content."[690] NETS, TRIPS, and the standalone research studies all paint a drastically different picture from Meta's publicly disclosed CSERs.

317. A draft research note from 2020 titled "Improving Experiences and People Support at Instagram" directly acknowledged this disjunction.[691] Under a header titled "How big are these problems at Instagram?" the authors noted that, "…even though prevalence for violating content is on [sic] decimal points, TRIPS sentiment survey indicates that people's exposure to bad experiences is still orders of magnitude higher than that[.]"[692] Another presentation estimated

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687 META3047MDL-020-00682906, "Re: [INPUT NEEDED] TRIPS update and 2020 Priorities," April 18, 2020; META3047MDL-040-00204794, "Message summary [{"otherUserFbld":100029669716068,"threadFbld":null}]" Shilpa Mody, June 5, 2020.

688 META3047MDL-031-00091431, "NOTE: Bullying on Instagram - H1 2019 Key research learnings [Posted]" 2019.

689 META3047MDL-004-00013865, "SSI Desk Research," 2019; META3047MDL-020-00588207, "Suicide and Self-Injury (SSI) - Part 1: A review of the literature and a look into SSI on Instagram," September 21, 2018.

690 META3047MDL-037-00068333, "Appearance comparison: Defining sensitive ("High-NAC") content using FIT and X-Ray," June 18, 2021, at 345.

691 META3047MDL-046-00088815, "[DRAFT] Improving Experiences and People Support at Instagram," 2020.

692 META3047MDL-046-00088815, "[DRAFT] Improving Experiences and People Support at Instagram," 2020.

that the reach for witnessing bully and harassment as measured by TRIPS was 100 times that of policy-violating impressions (essentially the CSER prevalence metric).[693]

318. In response to the enormous disparity between Meta's internal research and the external CSER data, certain Meta employees advocated for a new framework that eventually came to be known as the *Bad Experiences and Encounters Framework* ("BEEF"). Building on prior tracking surveys such as NETS and TRIPS, and adopting a number of the same survey questions, BEEF was designed to create a singular well-being metric that would better inform product design choices and reform Meta's products.

319. A key proponent of BEEF was former Meta senior engineer and consultant, Arturo Béjar,[694] who went to Meta's top executives to explain the necessity for resourcing the BEEF survey. In a 2020 email to Chris Cox, Mr. Béjar wrote, "[t]oday we don't understand well the relationship between bad experiences or harm from our user's perspective… and prevalence (policy violating content)."[695] Mr. Béjar noted that this gap in understanding was important because policy violations may fail to capture legitimate bad experiences like "mass harassment," "non-credible or non-violent threats," or "thinspiration."[696] To better understand this gap, he and several other staff on the well-being team proposed BEEF.[697]

320. The framework, developed by former Meta researcher Dr. Kyle Andrews with input from Mr. Béjar, surveyed and measured "bad experiences" that users had on Instagram.[698] It aimed to

693 META3047MDL-019-00094148, "'Bad Experiences' Measurement: Plan for a 2021 plan," November 19, 2020.
694 Deposition of Arturo Béjar, April 7, 2025, 36, 41, 43-48, 75.
695 Deposition of Arturo Béjar, April 7, 2025, 276-283, Exhibit 20.
696 Deposition of Arturo Béjar, April 7, 2025, Exhibit 19.
697 Deposition of Arturo Béjar, April 7, 2025, 282-283, Exhibits 19-20.
698 Deposition of Kyle Andrews, PhD, November 19, 2024, 179; Deposition of Arturo Béjar, April 7, 2025, 283.

take a broader and "more robust"[699] assessment of user experience by including bad experiences that weren't necessarily violating any platform rules, such as negative social comparison and unwanted advances.[700] Like NETS and TRIPS before it, the survey also addressed bad experiences associated with violations of community standards such as bullying and self-harm.[701] And whereas the prevalence metric provided in CSERs captured the proportion of total views that were of violating content, the final BEEF survey results provided the percent of respondents who had experienced a bad experience in the previous seven days.[702]

321. Internally, Meta regarded the BEEF survey as one of its most significant sources of information for understanding user experience and exposure to harmful content. Lending to its importance was the fact that BEEF examined a "statistically significant" group of 237,923 users of Instagram, and thus its findings could be extrapolated across the platform as a whole.[703] Employees of the company embraced the data upon their internal release, using BEEF results to inform team objectives and make product recommendations.[704] Several teams at Meta adopted the first version of BEEF in the second half of 2021, including the Creators team (which used BEEF data to address the priorities of content creators on the platform), the Relevance Integrity team (which used BEEF data to validate and improve their models that found objectionable or reported content), the Equity team (which used BEEF data to inform goals for 2022), and the Youth team (which used BEEF data to inform policies on early teens).[705]

322. The results from the first version of BEEF echoed prior NETS and TRIPS results by

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699 Deposition of Arturo Béjar, April 7, 2025, 283.
700 Deposition of Kyle Andrews, PhD, November 19, 2024, 187:1-6 and Exhibit 14.
701 Deposition of Kyle Andrews, PhD, November 19, 2024, Exhibit 14.
702 Deposition of Kyle Andrews, PhD, November 19, 2024, 223-242; *see also* Exhibit 14.
703 Deposition of Arturo Béjar, April 7, 2025, 295:21-296:19, Exhibit 21.
704 Deposition of Kyle Andrews, PhD, November 19, 2024, 257:19-258:9, Exhibit 17.
705 Deposition of Kyle Andrews, PhD, November 19, 2024, 257:19-258:9, Exhibit 19.

demonstrating that harmful experiences were dramatically more common than the CSER prevalence metric suggested. BEEF found that nearly 1 in 5 users (19.2%) reported experiencing negative social comparison in the previous seven days. [706] It also found that, in the previous seven days, 16.3% of users encountered posts with nudity, 11.9% experienced unwanted advances from other users, 28.3% witnessed bullying, 8.1% experienced being the target of bullying, and 6.7% encountered posts containing self-harm.[707]

323. Moreover, some respondents reported experiencing these negative encounters more than once in the past seven days. For example, of the 19.2% who experienced negative social comparison, 39.1% experienced it 2-3 times, and 16.6% experienced it over 10 times; of the 11.3% who experienced unwanted advances, 40% experienced it 2-3 times, and 8.4% experienced it 10+ times; of the 28.3% who witnessed bullying, 39.6% witnessed it 2-3 times, and 16.6% witnessed it 10+ times; of the 8.1% who experienced being the target of bullying, 34% experienced it 2-3 times, and 11.8% experienced it 10+ times.[708] This reporting is significant, as it captures a more complete picture of the depth and frequency of harm. For example, the simple estimate that 28.3% of users witnessed bullying does not capture just how frequently users were exposed to bullying, with nearly 40% witnessing 2-3 instances of bullying during the previous seven days.

324. BEEF results also demonstrated that bad experiences were most common among young people. Dr. Andrews' report on the initial results stated that the percentage of respondents experiencing one or more issues is "highest among those age 15-17 (57.3%), followed by 18-21

706 Deposition of Kyle Andrews, PhD, November 19, 2024, 223:12-17, Exhibit 14.
707 Deposition of Kyle Andrews, PhD, November 19, 2024, 223:18-224:10, Exhibit 14.
708 Deposition of Kyle Andrews, PhD, November 19, 2024, 224:12-226:11, Exhibit 14.

(55.7%), and 13-15 (54.1%)."[709]

325. Similar to NETS and TRIPS, the BEEF data paint a far graver picture than do the CSERs, indicating that harmful experiences are much more common on the platforms than the impression Meta created through its publicly-promoted CSER reports. Indeed, relative to the 0.04-0.09% CSER prevalence statistics presented earlier, the BEEF statistics presented above are almost *500 times higher*. Yet, with both sets of measurements in hand, Meta chose to communicate only the prevalence metrics, a set of statistics that function to minimize the appearance of harm on Meta's platforms as much as possible, and that some of Meta's own employees, such as Mr. Béjar, had advocated against.

326. Although many Meta employees appreciated the data collected by BEEF, at least a subset of Meta's executives did not. This lack of appreciation was visible as Mr. Béjar presented these results along with recommendations to company leaders, including Adam Mosseri, Mark Zuckerberg, and Chief Product Officer Chris Cox, in 2021.[710] Mr. Béjar's recommendations were dismissed by Mr. Mosseri, who did not promise to make any commitments about safety,[711] and Mr. Zuckerberg did not respond to an email from Mr. Béjar's that described the results and associated gap in the company's understanding of harm.[712] Mr. Cox, meanwhile, indicated that he was deeply familiar with the BEEF survey and its results even before Mr. Béjar had shared his findings, which indicated that Mr. Cox was aware that the platforms were exposing their users to considerable harm.[713] During deposition testimony, Mr. Béjar described being "very surprised"

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709 Deposition of Kyle Andrews, PhD, November 19, 2024, Exhibit 14.
710 Deposition of Arturo Béjar, April 8, 2025, 452-466, Exhibits 43, 44, 45; Deposition of Kyle Andrews, PhD, November 19, 2024, 258-259, Exhibit 19.
711 Deposition of Arturo Béjar, April 8, 2025, 456, 496, Exhibit 44.
712 Deposition of Arturo Béjar, April 8, 2024, 493.
713 Deposition of Arturo Béjar, April 8, 2025, 456-460.

by Mr. Cox's familiarity with the harm statistics because:

> "[Mr. Béjar's] working assumption…was that the reason that Instagram was not working on effective features to reduce harm and was not studying the harm as it was imposing on the product [sic] was because there was a disconnect between [what] the people on the ground [knew] and [what] the executive team [knew]."[714]

Mr. Béjar was astonished that Meta's head of product could be aware of the high rates of harm captured by BEEF, while continuing to say in essence "so what"[715] in response to those harms.

c. Meta never released NETS, TRIPS, or BEEF data to the public

327. In contrast to the high rates of harm demonstrated by Meta's NETS, TRIPS, and BEEF survey data, the company selectively presented consumers with a sanitized picture that omitted the alarming results of its internal research. It appears that such a decision was intentional, despite a desire from some Meta researchers to share TRIPS data with the public. A 2020 research note states that Meta's researchers did "not expect to share TRIPS numbers publicly" noting that "our external transparency efforts are based on violating prevalence [CSER]."[716]

328. Dr. Allison Lee, the former Senior UX researcher on Relevance Integrity for Instagram Reels,[717] testified that such selective publication of information regarding users' exposure and experience of harm presented an "incomplete picture of the risks on the platform" that ultimately "tells a story in Meta's favor."[718]

329. As the discussion above demonstrates, Meta relied on CSERs and the associated prevalence metric to advance a public narrative according to which user experiences on its

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714 Deposition of Arturo Béjar, April 8, 2025, 459:9-16.
715 Deposition of Arturo Béjar, April 8, 2025, 458:19.
716 META3047MDL-031-00075082, "Bullying: Why TRIPS? What's it for?" June 24, 2020.
717 Deposition of Allison Lee, February 6, 2025, 26:12-15, 31:7-32:12.
718 Deposition of Allison Lee, February 6, 2025, 259:6-18.

platforms were overwhelmingly positive. Meanwhile, Meta's NETS, TRIPS, and BEEF data—which presented a much more negative experience—were omitted, giving consumers a vastly different impression of the rate of harm on Instagram. Table 11 below demonstrates the stark differences between CSER and BEEF statistics.

Table 11. Perceived Rates of Harm as Presented by CSER and BEEF

CSER Issue	CSER Prevalence[719]	BEEF Issue	BEEF Overall Rate[720]	Difference in Magnitude between BEEF and CSER Rates of Harm
Adult Nudity and Sexual Activity	0.02-0.03%	Nudity	16.3%	BEEF rates are **543-815** times greater
Hate Speech	0.02%	Hate Witness	25.3%	BEEF rates are **1,265** times greater
Bullying and Harassment	0.05-0.06%	Bully (Target, Witness)	8.1%, 28.3%	BEEF rates are **135-162** times and **471-566** times greater, respectively
Violence[721]	0.03-0.04%	Violence	12.8%	BEEF rates are **320-426** times greater

330. Although the statistics associated with each metric are not strictly comparable—CSER's prevalence metric focuses on a narrower set of policy-violating experiences than do the NETS', TRIPS', and BEEF's more comprehensive "bad experiences" metrics—both capture the extent to which Meta's platforms expose their users to harm. In other words, receiving NETS, TRIPS, or BEEF data would have provided valuable information to users, as those data provided insights on user experience that are *directly* relevant to consumers' decisions to engage or not engage with Meta's platforms, and/or to their decisions about whether, and to what extent, to allow

719 Meta, Community Standards, https://web.archive.org/web/20220217122638/https://transparency.fb.com/sr/community-standards/. Accessed July 14, 2025.

720 Deposition of Kyle Andrews, PhD, November 19, 2024, Exhibit 14.

721 Includes both "Violence and Incitement" and "Violent and Graphic Content."

youth to engage with Meta's platforms. NETS, TRIPS, and BEEF sought to understand harm from a user's perspective, while CSERs measure harm on Meta's platforms through narrow, mathematically deflated, incomplete proxies for bad experiences focused on views of content that violated Meta's community standards.

331. Moreover, as explained by Mr. Béjar, these community standards were too narrowly defined.[722] In his deposition, Mr. Béjar explained that Meta didn't "remove threats or violence or hate speech in a timely fashion. And they do allow attacks. And part of that is because of the way that these things are implemented, where what it takes to get a piece of content removed is very narrow."[723] However, given that bad experiences are subjective and context-dependent, the BEEF survey would have provided consumers with a more relevant piece of information: the rate at which users reported having bad experiences on the platform.

332. Meta's decision to withhold this information from consumers, while at the same time pushing a highly favorable narrative based on the prevalence metric, has the tendency mislead consumers about the safety of its platforms. Mr. Béjar recognized that this omission was extremely important, stating that without BEEF data, "[y]ou are blindfolded as a parent."[724] He expanded on this observation during his deposition:

> So, the internal data is saying 1 in 3 kids see bullying happening… in the last 7 days. And the external representation says out of 10,000 views, only 5 or 6, right, like a fraction of a percent. And so I think that this is a material or a critical gap of what teens are communicating they've experienced versus what the company is representing people see.[725]

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722 Deposition of Arturo Béjar, April 7, 2025, 204.
723 Deposition of Arturo Béjar, April 7, 2025, 215:21-216:1.
724 Deposition of Arturo Béjar, April 7, 2025, 330:12; *see also* Deposition of Kang-Xing Jin, November 8, 2024, 527:6-529:25.
725 Deposition of Arturo Béjar, April 7, 2025, 367:18-368:2.

333. Mr. Béjar explained that, by omitting BEEF data while simultaneously implying that CSER data definitively captured harm rates on Instagram, Meta "mislead[s] parents, and… the rest of the world as to what is the actual unfolding harm on Instagram."[726]

d. Meta's internal policies and standards failed to prevent harmful content from reaching users

334. Despite its claims to the contrary, Meta often failed to keep harmful content from reaching its platforms. A prime example of this failure can be found in the context of Meta's policies on suicide and self-injury content.

335. Meta was particularly concerned about suicide and self-injury content following the death of [redacted], a UK teenager who took her own life in 2017 after viewing a considerable amount of such content on Instagram.[727] At the time, Meta's content policy allowed users to post images of self-harm so long as they were not promoting self-harm.[728] However, as Monika Bickert, Head of Global Policy, identified in a 2019 email to Sheryl Sandberg, there were multiple issues with Meta's policy implementation.[729] These issues included the fact that Meta did not run a self-harm classifier[730] on Instagram, allowed content related to suicidal ideation or admission to be discovered via search, and allowed graphic images of self-harm to be

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726 Deposition of Arturo Béjar, April 7, 2025, 33:5-9.

727 Sept. 30, 2022, [redacted] inquest: Schoolgirl, 14, died by self-harm while suffering 'negative effects of online content', coroner finds," *SKY.com*, [redacted]

728 Mosseri, Adam, Feb. 7, 2019, "Instagram vows to remove all graphic self-harm images from site," *BBC,* video, https://www.bbc.com/news/uk-47160460. In the video embedded in this article, Mr. Mosseri explained, "We have allowed content that's related to self-harm that's admission, because people sometimes need to tell their story, but we haven't allowed anything that promoted self-harm."

729 Deposition of Nick Clegg, March 20, 2025, Exhibit 3 at 8-9.

730 A classifier is an algorithm which scans posts and pro-actively detects problematic content so that it can be removed or have its reach limited.

displayed without a caption.[731]

336. To address public concerns, Mr. Mosseri went on a UK press tour where he announced changes to Meta's suicide and self-injury content policies.[732] Going forward, Meta committed to removing all graphic depictions of suicide and self-injury from their platforms, regardless of whether they were promoting self-harm or serving as a cry for help.[733] Additionally, they would be removing all suicide and self-injury- related content from search, hashtags, and recommendations.[734] Notably, this included eating disorder content which encouraged harmful behaviors such as "drastic and unhealthy weight loss,"[735]

337. However, some Meta employees felt that the company failed to deliver on these promises. In a 2020 email, [redacted], a former Head of Communications, expressed concern that suicide and self-injury and eating disorder-related content could still be easily discovered using account search.[736] For example, if a user were to search an eating disorder-related term, like #proana (short for pro-anorexia), the results on the hashtags and explore pages would be blocked. However, under the accounts page, accounts associated with #proana would still appear, allowing users to search for and discover harmful eating disorder-related content.[737] As Ms. Jayakumar stated in her deposition, "there was a very large universe of easy [sic]

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731 Deposition of Nick Clegg, March 20, 2025, Exhibit 3. Monika Bickert specifically called out Meta's allowance of suicide and self-injury content without a caption, stating that "IG's product is essentially violating our content policies by displaying self-injury images without captions." Deposition of Nick Clegg, March 20, 2025, Exhibit 3 at 9.

732 Mosseri, Adam, Feb. 7, 2019, "Instagram vows to remove all graphic self-harm images from site," *BBC,* video, https://www.bbc.com/news/uk-47160460.

733 Mosseri, Adam, Feb. 7, 2019, "Instagram vows to remove all graphic self-harm images from site," *BBC,* video, https://www.bbc.com/news/uk-47160460.

734 Mosseri, Adam, Feb. 7, 2019, "Instagram vows to remove all graphic self-harm images from site," *BBC,* video, https://www.bbc.com/news/uk-47160460.

735 Deposition of Vaishnavi Jayakumar, January 30, 2025, Exhibit 22.

736 Deposition of Vaishnavi Jayakumar, January 30, 2025, 236:13-237:21.

737 Deposition of Vaishnavi Jayakumar, January 30, 2025, 238:17-239:14.

identifiable ED content."[738]

338. The lack of follow-through on Mr. Mosseri's promises was also documented in a study conducted in 2023 by the Molly Rose Foundation, and reviewed by Mr. Béjar, that concluded that the prevalence of suicide and self-injury content had "remained largely unchanged… despite high levels of public scrutiny and multiple commitments from Instagram to improve their response…"[739] The study also noted that Instagram Reels only exacerbated the prevalence of the content. After conducting an analysis of 100 algorithmically recommended videos, the researchers concluded that "almost all of the content we were algorithmically shown (99 percent) contained material that promoted or glorified suicide or self-harm; referenced suicide or self-harm ideation; or otherwise featured highly intensive themes of depression, hopelessness and misery."[740] Given these findings, it appears that Mr. Mosseri's stated policy changes did not result in effective changes to the platform.

339. Meta's response to suicide and self-injury content fits into a broader pattern of ignoring content that was harmful but did not explicitly violate company policies, described internally as "borderline content."[741] As [redacted], at the time the Director of Youth Safety Policy, explained in a 2022 email, "borderline content in other issue areas like SSI, ED, graphic violence, nudity, still remains ungated and we do not yet have age-appropriate recommendation algorithms in most issue areas."[742] Similar to borderline content, Meta also struggled to regulate "problematic aggregated content," or a collection of content where no individual piece is problematic on its own but, taken together, becomes problematic. For example, it is not against

738 Deposition of Vaishnavi Jayakumar, January 30, 2025, 690:6-7.
739 Deposition of Arturo Béjar, April 7, 2025, 415:14-18, Exhibit 37.
740 Deposition of Arturo Béjar, April 7, 2025, 416:25-417:4, Exhibit 37 at 20.
741 Deposition of Vaishnavi Jayakumar, January 30, 2025, 115:13-21.
742 Deposition of Vaishnavi Jayakumar, January 30, 2025, 117:19-24.

Meta's policies—nor is it considered borderline content—to post a picture of a teenage girl at the beach. However, an account which is dedicated to posting pictures of teenage girls at the beach would be considered highly problematic.[743] The same may be true for a teenage girl whose explore page is dominated by dieting tips, makeup tutorials, and models. Though no single piece of content is violating, the collection may cause harm related to body image. Meta ultimately struggled to detect and address these instances of harm on Instagram.

e. Meta consistently downplayed the findings of its research that suggested harm occurred on the platform

340. Internal documents demonstrate that Meta consistently downplayed research results that its own personnel believed were alarming, both externally and within its own organization, and regularly withheld the results of internal research from the public. One instance of such downplaying occurred in September 2021, following the leak of internal documents to T*he Wall Street Journal* and *The Wall Street Journal's* publication of its *The Facebook Files* series.[744] In response to these leaks, Meta released annotated versions of two of the leaked slide decks which formed the basis of *The Wall Street Journal*'s reporting.[745] One slide of this annotated deck, along with the text of Facebook's annotation, is shown in Figure 10 below.

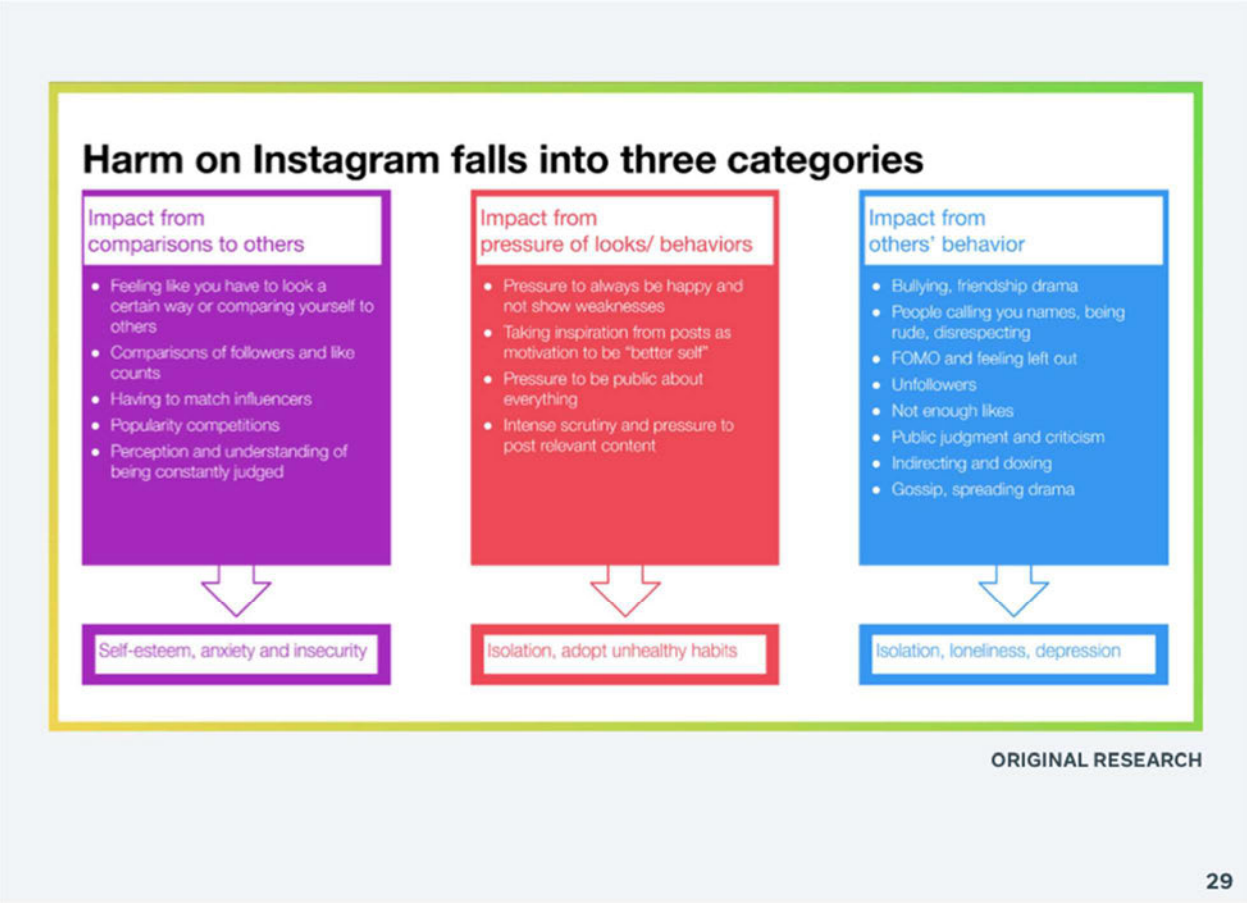
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743 Deposition of Vaishnavi Jayakumar, January 30, 2025, 64:16-65:24.

744 Horwitz, Jeff, Sept. 13, 2021, "Facebook Say Its Rules apply to All. Company Documents Reveal a Secret Elite That's Exempt.," *The Wall Street Journal,* https://www.wsj.com/articles/the-facebook-files-11631713039.

745 Raychoudhury, Pratiti, Sept. 26, 2021, "What Our Research Really Says About Teen Well-Being and Instagram," *Meta*, https://about.fb.com/news/2021/09/research-teen-well-being-and-instagram/. Accessed July 14, 2025.

Figure 10. "Teen Mental Health" Annotated Deck, Slide 29[746]



> FACEBOOK ANNOTATION**:** Throughout, the deck uses the term "harm" — evaluating harm really isn't the purpose of the study. When reporting on qualitative research results, some conclusions and statements may be researcher speculation versus what was actually reported by participants.[747]

341. Dr. Gross, one of authors of the deck, took issue with the characterization of her work, and stated that the annotation "makes it sound like I was just guessing or making things up rather than finding the common themes across qual[itative] groups."[748] Researchers also felt the focus of Meta's response was inappropriate. In a work chat with other researchers, Shruti Bhutada, a

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746 Oct. 2019, "Teen Mental Health Deep Dive," *FB.com*, https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-2.pdf. Accessed July 14, 2025.

747 Oct. 2019, "Teen Mental Health Deep Dive," *FB.com*, https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-2.pdf. Accessed July 14, 2025.

748 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 26 at 4.

Senior UX Researcher, felt that Meta shifted "the focus [to be] on how the research was done, rather than the external critique which is about why nothing was done as a result."[749] Dr. Cheng agreed with Bhutada, writing "+1000."[750] Other researchers who worked on these decks seemed to be similarly displeased with Meta's public response. For example, Dr. Lee testified that these annotations were "diminishing the utility and the insights" that were being generated by the research team, leading consumers to "either doubt or not take seriously the results."[751]

342. Meta's Antigone Davis also downplayed this leaked research at her September 2021 congressional testimony. Ms. Davis insisted that "this research is not a bombshell," referring to the leaked well-being decks.[752] Yet, when discussing this exchange with colleagues, Dr. Gross stated that "it's not a bombshell internally but it is a bombshell that these internal research decks exist."[753] In other words, while research on platform harms may have been common knowledge internally, the fact that Meta knew and concealed this information would have been a bombshell to the public.

343. In the wake of the *Wall Street Journal* leaks, Meta tightened up its research production and sharing strategy to prevent future damaging leaks.[754] As Dr. Cheng testified, the internal accessibility of his previous research notes was immediately restricted, future research notes were required to be reviewed by the communications department before they could be published internally, and he was no longer able to publish his research externally.[755] As such, it appears

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749 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 26 at 5.
750 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 26 at 5.
751 Deposition of Allison Lee, February 6, 2025, 139:12-140:7.
752 *Protecting Kids Online: Facebook, Instagram, and Mental Health Harm*, Hearing Before the Subcomm. on Consumer Prot., Prod. Safety, & Data Sec. of the S. Comm. on Com., Sci., & Transp., 117th Cong. 1 (Sept. 30, 2021), https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf.
753 Deposition of Wendy Gross, PhD, January 28, 2025, Exhibit 26 at 4.
754 Deposition of Justin Cheng, March 13, 2025, 492:7-493:8, 498:1-21.
755 Deposition of Justin Cheng, March 13, 2025, 492:7-493:8, 498:1-21.

that Meta's primary priority was protecting the company and its platforms from reputational damage, rather than ensuring its current and potential future users could adequately gauge the harms and risks associated with using those platforms.

344. Meta also internally censured results from and discussion of the BEEF survey. In its original design, BEEF included a question that asked users about the emotional impact and severity of a bad experience: "Which specific emotions did you feel? Please select all that apply."[756] However, Meta's legal team asked Dr. Andrews to "delete and not analyze the emotions data from the BEEF survey."[757] This request to "not analyze" the data at all demonstrates that Meta preferred not to measure and document the harms its platforms were causing, prioritizing legal maneuvering and willful ignorance over the well-being of its users. Additionally, Mr. Béjar was required to send his final internal Workplace post to Meta's legal and policy department for review. Legal "refuse[d] to allow [Béjar] to include the BEEF survey data that showed the harms to kids on Instagram" and made him change his post about protecting users to be hypothetical, rather than actual.[758]

vi. Conclusion

345. As described in this section, Meta made external statements asserting, explicitly or implicitly, that: research shows that the overall effect of Meta's platforms on user well-being is neutral or positive rather than negative; harmful content and experiences on Meta's platforms are rare; and Meta's internal policies keep its platforms safe for users. These statements were part of a broader effort by Meta to shape the external narrative surrounding its platforms, and to reassure consumers that the platforms were safe and suitable for young users. To support these

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[756] Deposition of Arturo Béjar, April 7, 2025, 293:13-14, Exhibit 22 at 1.
[757] Deposition of Arturo Béjar, April 8, 2025, 498:17-18.
[758] Deposition of Arturo Béjar, April 8, 2025, 498-501.

statements, Meta employees implemented social influence tactics, including omitting research findings about the negative effects of the platforms, emphasizing the company's efforts and investments, side-stepping criticism, and deploying proof points to support their claims, including favorable metrics in the form of CSERs. As with other external statements from the company, and given the nature of its platforms as credence goods, consumers would have been more reliant on Meta to provide accurate, honest, and relevant information about its products. Thus, consumers are likely to take away a false net impression of Meta's platforms and their capacity to impose harmful content and experiences on their users.

D. Meta conveyed to consumers that it effectively prevents U13s from using its platforms

346. In this section I address Meta's public statements regarding its efforts to prevent children under age 13 ("U13s") from using its platforms, how those statements are likely to shape consumer perceptions, and how evidence from Meta employees and documents reveals an internal narrative about Meta's platforms which is in stark contrast to the narrative one presented publicly. A summary of this section is presented below.

347. Meta or high-ranking Meta employees including Meta's CEO, Head of Instagram, Global Head of Safety, Deputy Chief Privacy Officer, and Instagram's Head of Public Policy, have made public statements that fall into one of the two following categories:

a. U13s are not allowed to use, and do not use, Meta's platforms; and

b. Meta invests in and is engaged in age-gating, age-assurance[759], age-enforcement,

[759] Meta employees define "age assurance" as "an umbrella term that [the company] uses to essentially understanding users' age" which can include "age-gating", "age verification" and "collecting age." Deposition of Michael "Miki" Rothschild, January 21, 2025, 604:5-11; Deposition of Adam Mosseri, March 17, 2025, 700:2-16.

age-detection, and removal efforts to inhibit U13 use in connection with its policy of prohibiting U13s on its platforms.

348. The above statements have a tendency to mislead because:

a. A reasonable consumer would falsely believe that Meta did not have knowledge that U13s are on the platform and its registration process enables such underage use, when it in fact the company has such awareness; and

b. A reasonable consumer would falsely believe that Meta meaningfully invests in underage enforcement and its efforts in age-gating, age-enforcement, age-detection, age assurance, and underage removal were effective at inhibiting U13 use, when in fact Meta internally did not prioritize investment in policing underage use and knew its efforts were not effective and behind industry standards.

349. Below, I focus my analysis on nine illustrative statements that I identified through a review of the operative complaints and my own independent investigation. I selected the statements discussed in the report based on several factors, including the nature of their deception, their likelihood of reaching consumers, and the ease of grouping them together for purposes of discussion. The list is not exhaustive, and Meta made many similar misleading statements especially pertaining to age-gating, age-assurance, age-enforcement, age-detection, and removal efforts to inhibit U13 use in connection with its policy of prohibiting U13s on its platforms. The absence of a particular statement from the tables below should not be taken to imply that the absent statement is not potentially deceptive.

350. I then analyze each grouping of statements to identify the tactics that Meta deployed and relied on to bolster the persuasiveness of its public narrative. Finally, I demonstrate how these

statements were false or misleading using the assumptions provide to me by counsel and examples from Meta's own internal documents and employee testimony.

i. Analysis of individual statements: *U13s are not allowed*

351. Meta representatives have stated on several occasions that U13s are not allowed to use, and do not use, Meta's platforms, as shown in 351 below:

Table 12. Meta's statements claiming that U13s are not allowed to use, and do not use, Meta's platforms.

No.	Date	Speaker	Statement	Context
D1	September 30, 2021	Antigone Davis, Meta's Global Head of Safety	"We do not market to eight- to 12-year-olds because they're not on Instagram."	Senator Blackburn asked Ms. Davis: "[b]ut we know that you are doing research on children as young as eight and are marketing to eight- to 12-year-olds, correct?"[760]
D2	July 17, 2018	Monika Bickert, VP Global Policy Management	"We do not allow people under 13 to have a Facebook account."	Ms. Bickert authored a post on Meta's website in response to a TV report on Channel 4 in the UK regarding Facebook's policies and enforcement.[761]
D3	September 28, 2021	Adam Mosseri, Head of Instagram	Meta publicly states that Under-13 users are "not allowed on Instagram and [] should not be using our service"	Georgia Wells and Jeff Horowitz, *Facebook's Effort to Attract Preteens Goes Beyond Instagram Kids, Documents Show*, The Wall Street Journal (Sept. 28, 2021).[762]
D4	December 8, 2021	Adam Mosseri, Head of Instagram	"Instagram is built for people 13 and older. If a child is under the age of 13, they are not permitted on Instagram."	Initial congressional testimony submitted by Mr. Mosseri.[763]

760 Sept. 30, 2021, "Hearings," *SENATE.gov,* https://www.commerce.senate.gov/2021/9/protecting-kids-online-facebook-instagram-and-mental-health-harms.

761 Bickert, Monika, July 17, 2018, "Working to Keep Facebook Safe," *FB.com*, https://about.fb.com/news/2018/07/working-to-keep-facebook-safe/. Accessed July 14, 2025.

762 Wells, Georgia, Sept. 28, 2011, "Facebook's Effort to Attract, Preteens Goes Beyond Instagram Kids, Documents Show," *The Wall Street Journal,* https://www.wsj.com/tech/facebook-instagram-kids-tweens-attract-11632849667.

763 Mosseri, Adam, Dec. 8, 2021, Testimony Before the Senate Committee on Commerce, Science, and Transportation Subcommittee on Consumer Protection, Product Safety, and Data Security, https://www.commerce.senate.gov/services/files/3FC55DF6-102F-4571-B6B4-01D2D2C6F0D0.

352. As reflected in Statement D1, Meta has expressly claimed that U13s are not present on the Instagram platform. Namely, on September 30, 2021, Meta's Global Head of Safety, Antigone Davis, was asked during congressional testimony about Instagram's marketing to eight- to 12-year-olds, to which she responded: "We do not market to eight- to 12-year-olds because they're not on Instagram."[764]

353. In Statement D2, which appeared in a July 2018 blog post responding to an investigative report into Facebook's content policies broadcast on Channel 4 in the UK, VP of Global Public Policy, Monika Bickert, wrote: "We do not allow people under 13 to have a Facebook account."[765] Similarly, in a statement to the *Wall Street Journal* published in September 2021 in response to an article discussing Meta's efforts to attract pre-teen users, Head of Instagram, Adam Mosseri claimed that "If kids are under 13, they're not allowed on Instagram and they should not be using our service."[766] Mr. Mosseri also reiterated that claim three months later in Statement D4, in congressional testimony on December 8, 2021, stating that "Instagram is built for people 13 and older. If a child is under the age of 13, they are not permitted on Instagram."[767]

354. The core message communicated by these statements is that U13s are not on the Instagram platform because Meta has a policy that people must be 13-years-old in order to use Instagram. The claim that U13s are "not allowed," "not permitted," and in fact are "not on" Facebook or Instagram is not merely a claim about the contents of Meta's official policies; it is a

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764 Sept. 30, 2021, "Hearings," *SENATE.gov,* https://www.commerce.senate.gov/2021/9/protecting-kids-online-facebook-instagram-and-mental-health-harms.

765 Bickert, Monika, July 17, 2018, "Working to Keep Facebook Safe," *FB.com,* https://about.fb.com/news/2018/07/working-to-keep-facebook-safe/. Accessed July 14, 2025.

766 Wells, Georgia, et al., Sept. 28, 2021, "Facebook's Effort to Attract Preteens Goes Beyond Instagram Kids, Documents Show," *WSJ.com,* https://www.wsj.com/tech/facebook-instagram-kids-tweens-attract-11632849667.

767 Mosseri, Adam, Dec. 8, 2021, Testimony Before the Senate Committee on Commerce, Science, and Transportation Subcommittee on Consumer Protection, Product Safety, and Data Security, https://www.commerce.senate.gov/services/files/3FC55DF6-102F-4571-B6B4-01D2D2C6F0D0.

factual claim about the *actual* composition of users on Meta's platforms. Meta's Global Head of Safety reinforced this as the intent of Meta's messaging when she explicitly stated, as a matter of fact, that U13s are "not on Instagram." Therefore, the most natural interpretation of these statements as a whole is that, because U13s are not permitted on the platforms, they are largely absent from the platforms and that Meta does not have internal knowledge that suggests otherwise. The repetition of the claim that U13s are not permitted on Meta's platforms is an instance of Meta's drumbeat messaging strategy, reinforcing over time the perception that U13s are not on Meta's platforms to any significant degree, and that any who are in contravention of Meta's policies are dealt with swiftly.

ii. Analysis of individual statements: Age-gating, Age Enforcement, and Removal Efforts

355. Meta representatives have also made public statements describing investment and engagement in various efforts to ensure that U13s are prevented from using Meta's platforms, as well as internal efforts at finding new methods and technologies to identify, remove, and/or police U13 users on the platforms, as shown in Table 13:

Table 13. Meta's statements claiming that Meta invests in and is engaged in effective age-gating, age-assurance, age-detection, and removal efforts to inhibit U13 use

No.	Date	Speaker	Statement	Context
D5	December 8, 2021	Adam Mosseri, Head of Instagram	"I am especially focused on the safety of the youngest people who use our services. This work includes keeping underage users off our platform."	*Hearing Before the United States Senate Committee on Commerce, Science, and Transportation Subcommittee on Consumer Protection, Product Safety, and Data Security*, 117 Cong. at 2 (2021) (Testimony of Adam Mosseri)[768]
D6	March 17, 2021	Meta	"we know that young people can lie about their date of birth. We want to do more to stop this from happening," "we are continuously looking for better ways to identify and remove underage accounts."	Included in an Instagram blog post titled "Continuing to Make Instagram Safer for the Youngest Members of Our Community."[769]
D7	July 27, 2021	Pavni Diwanji, VP of Youth Products	"This technology is also the basis of important changes we're making to keep young people safe […] We're also building similar technology to find and remove accounts belonging to people under the age of 13."	Ms. Diwanji authored a post on Meta's website titled "How Do We Know Someone Is Old Enough to Use Our Apps?"[770]
D8	March 25, 2021	Mark Zuckerberg, CEO of Meta	"if we detect that someone might be under the age of 13, even if they lied, we kick them off."	Senator Long asked Mr. Zuckerberg: "So a 13-year-old would never—I mean an 11-year-old would never put in the wrong birthday by 2 years and say they were 13? Is that kind of your policy?"[771]

768 Mosseri, Adam, Dec. 8, 2021, Testimony Before the Senate Committee on Commerce, Science, and Transportation Subcommittee on Consumer Protection, Product Safety, and Data Security, https://www.commerce.senate.gov/services/files/3FC55DF6-102F-4571-B6B4-01D2D2C6F0D0.

769 March 17, 2021, "Continuing to Make Instagram Safer for the Youngest Members of Our Community," *INSTAGRAM.com*, https://about.instagram.com/blog/announcements/continuing-to-make-instagram-safer-for-the-youngest-members-of-our-community. Accessed July 14, 2025.

770 Diwanji, Pavni, July 27, 2021, "How Do We Know Someone Is Old Enough to Use Our Apps?," *FB.com*, https://about.fb.com/news/2021/07/age-verification/. Accessed July 14, 2025.

771 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm. on Communications and Technology*, 117th Cong. (2021), https://www.congress.gov/117/meeting/house/111407/documents/HHRG-117-IF16-Transcript-20210325.pdf

No.	Date	Speaker	Statement	Context
D9	N/A	Meta	"we will delete the account if we can't verify the account is managed by someone over 13 years old."	Included in the section of Instagram's Help Center titled "Report a child under 13 on Instagram."[772]

772 "Report a child under 13 on Instagram," *Instagram,* https://help.instagram.com/517920941588885?helpref=faq_content. Accessed July 14, 2025.

356. Meta has made a number of representations related to its level of investment and efforts to inhibit and police U13 use. In Statement D5, Head of Instagram Adam Mosseri in his March 2021 written congressional testimony expressly stated that the company is "especially focused" on "keeping underage users" off the Instagram platform.

357. Similarly, in Statement D6, which appeared in a March 2021 blog post on the safety of young Instagram users, Meta stated that it "want[s] to do more" to stop young users from lying about their age, and that it was "continuously looking for better ways to identify and remove underage accounts."[773] Similarly, Meta made Statement D7 a few months later in a July 2021 blog post discussing Meta's development of AI-based age-detection technology, claiming that the company was "building similar technology to find and remove accounts belonging to people under the age of 13."[774] Such statements communicate proof points that are designed to demonstrate Meta's dedication to the safety of U13s, and the integrity of its processes for detecting and removing U13s.

358. Meta representatives have also made statements conveying that the processes it follows when removing suspected U13 accounts from its platforms are effective in removing an U13 account in a timely manner once identified. For example, in Statement D8, in response to a question before Congress about children lying about their age to access Meta's platforms, CEO Mark Zuckerberg stated that, "if we detect that someone might be under the age of 13, even if they lied, we kick them off."[775] Similarly, Statement D9, which appears in the section in

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773 Mar. 17, 2021, "Continuing to Make Instagram Safer for the Youngest Members of Our Community," *Instagram,* https://about.instagram.com/blog/announcements/continuing-to-make-instagram-safer-for-the-youngest-members-of-our-community. Accessed July 14, 2025

774 Diwanji, Pavni, July 27, 2021, "How Do We Know Someone Is Old Enough to Use Our Apps?," *FB.com*, https://about.fb.com/news/2021/07/age-verification/. Accessed July 14, 2025.

775 *Disinformation Nation: Social Media's Role in Promoting Extremism and Misinformation Before H. Comm.*

Instagram's Help Center titled "Report a child under 13 on Instagram," states that "we will delete the account if we can't verify the account is managed by someone over 13 years old."[776] These descriptions of Meta's process for removing suspected U13 accounts imply that any individuals who have slipped through the cracks are immediately removed from the platform as soon as Meta identifies them. As with the statements of Ms. Bickert and Mr. Mosseri discussed earlier (Statements D2 and D4),[777] the touting of Meta's removal processes creates the impression that suspected U13 users are anomalous and dealt with immediately when identified. Moreover, the message conveys that the default policy is that a user account will be removed unless Meta confirms that the user is over 13.

iii. Evaluation of consumer understanding

359. As the discussion of consumer information-processing in Section VIII explained, consumers generally assume with reason that a company's communications regarding issues of health or safety are *complete*, meaning that information relevant to consumers on those issues is not omitted from public statements. Given this default assumption, consumers are likely to understand Meta's statements that U13 users are "not allowed" or "not permitted" on Meta's platforms, coupled with statements that, as a matter of fact, U13s are "not on Instagram," as statements indicating that Meta's policy prohibiting U13s results in the absence of U13s on the platform. Any indication or evidence suggesting that Meta was aware that its official age policies were not meaningfully enforced or that its lax age-gating process enabled U13 to use the

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on Communications and Technology, 117th Cong. (2021), https://www.congress.gov/117/meeting/house/111407/documents/HHRG-117-IF16-Transcript-20210325.pdf

[791] "Report a child under 13 on Instagram," *Instagram,* https://help.instagram.com/517920941588885?helpref=faq_content. Accessed July 14, 2025.

[777] As discussed, Statements D2 and D4 both go on to describe review and removal processed for flagged U13 accounts.

platforms would be highly relevant to a consumer's understanding of the extent of underage use. As such, the absence of any statement disclosing that Meta is aware that, despite its U13 age policy, there are substantial numbers of U13s on the platform, combined with the implication that U13s who are able to sign up are quickly flagged and removed, encourages consumers to draw the conclusion that, in practice, improper underage use on Facebook or Instagram is not an issue of concern.

360. Similarly, as discussed above, consumers may also rely on processing heuristics to help make sense of the information they receive, especially when that information is complex or opaque in ways that make full understanding or verification difficult. As it did in many of its at-issue statements, Meta's statements that describe its "special[] focus" in "keeping underage users off our platform" as well as it investment and engagement in age gating, age verification, age enforcement, and the removal of U13s accounts, including the development of new AI-based technology (Statements D5-D9), imply that the company prioritized age enforcement and that such efforts were meaningfully effective in inhibiting and policing U13 use. Meta's touting of ongoing and planned efforts to introduce new tools and strategies are liable to prompt consumers to believe that Meta successfully keeps U13s off Facebook and Instagram, and improper underage use should not concern the audiences of the company's messages.

361. Finally, Meta's drumbeat messaging of the claims that U13 users are "not allowed" on its platforms, and that the company has processes in place to identify, verify, and remove U13 accounts, increases the likelihood of acceptance among consumers through repetition. As discussed in Section VIII.B.ii above, psychological research shows that repetition cements belief: the more often a claim is heard, the more familiar it begins to feel, which in turn increases the likelihood that it will be accepted as true.

iv. Examination of assumptions underpinning consumer deception

362. Counsel has asked me to assume that:

a. Meta knew U13s used its platforms and that it had an age-gating process that enabled U13 use;

b. Meta knew its efforts at age-gating, age-detection, age enforcement, age assurance, and removal were not effective at inhibiting, policing, or keeping U13s off the platforms and lagged industry standards;

c. Meta knew that its age classifiers were ineffective, and the company eventually abandoned this effort; and

d. Meta's enforcement and removal of U13 users was ineffective and under-resourced.

363. As with other sections of this report, I have assessed many of Meta's internal documents to understand the basis of these assumptions and to further contrast Meta's external statements with its internal knowledge. Given the difference between what Meta knew or discussed internally, and what it communicated externally, its external statements have a tendency to mislead consumers.

a. Internal evidence that Meta knew a substantial number of U13 accounts existed on its platforms

364. Multiple employees have expressed that it was "common knowledge" that U13 users were on Meta's platforms.[778] This includes Mark Zuckerberg himself, who stated that Meta has been "generally aware" of the fact that users under the age of 13 may lie about their age to join

[778] Deposition of Arturo Béjar, April 7, 2025, 185:24-187:16.

its platforms.[779] In 2021, Darius Kilstein, Director of Data Science at Meta,[780] explained that the company could not rely on the "stated" age of users claiming to be 13, because "they lie about it a TON."[781] Similarly, Meta employee [redacted] wrote in a 2021 email: "we know that stated age = 13 contains a lot of misrepresenters."[782] In fact, Meta staff on several occasions noted that around 50% of teens lied about their age to get on the platform. For example, Mr. Kilstein wrote in a chat with another Meta employee in 2023 that, "Either way, half of teens lie about their age, incentives or not :P."[783] Additionally, [redacted], Research Director at Instagram, wrote in an internal work group chat that "more than 50% of teens will lie about their age."[784]

365. Meta executives had reviewed reports indicating that large percentages of U13s were using its platforms. One survey published in May 2021 by Thorn, a nonprofit that aims to protect children from sexual abuse,[785] estimated that 45% of minors 9-12 used Facebook and 40% used Instagram at least once a day.[786] This report was seen by several top executives including Nick Clegg, Adam Mosseri, Antigone Davis, and Instagram's former Head of Policy, Karina Newton.[787]

366. By former Meta engineer Arturo Béjar's approximation, "millions" of U13s were on

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779 Deposition of Mark Zuckerberg, March 27, 2025, 426:10-17.
780 Deposition of Darius Kilstein, December 17, 2024, 44:7-10.
781 META3047MDL-003-00013951, "Message summary," [redacted], Jan. 22, 2021; *see also* Deposition of Darius Kilstein, December 17, 2024, 292:25-294:8 and Exhibit 22 at META3047MDL-003-00013952.
782 META3047MDL-003-00029704, "Re: [Pre-read] - for tomorrows Family Data Circle," Feb. 18, 2021.
783 META3047MDL-040-00650630, "Message summary," Darius Kilstein, Feb. 23, 2023; *see also* Deposition of Darius Kilstein, December 17, 2024, 304:5-306:10, Exhibit 53.
784 META3047MDL-003-00131572, "Message summary [{"otherUserFbId":100021642675928,"threadFbId":null}]," [redacted], Sept. 29, 2021, at 573.
785 "We're transforming how the world protects kids," *Thorn,* https://www.thorn.org/about/.
786 Deposition of Karina Newton, February 27, 2025, Exhibit 18 at 2, 15.
787 Deposition of Karina Newton, February 27, 2025, Exhibit 18 at 2.

Instagram alone.[788] Mr. Béjar claimed that the popularity of the platform among U13s was part of the reason for Meta's acquisition of Instagram.[789] In fact, Instagram has long been aware that its population of users includes many U13s, and it has tracked and attempted to measure that number as early as 2017, and as recently as 2021, as shown in Table 14, below. Meta consistently found that between a quarter and half of children around ages 10-12 in the United States were on Instagram.

Table 14. Meta studied the number of young users on Instagram, consistently finding a significant number of young users on the platform

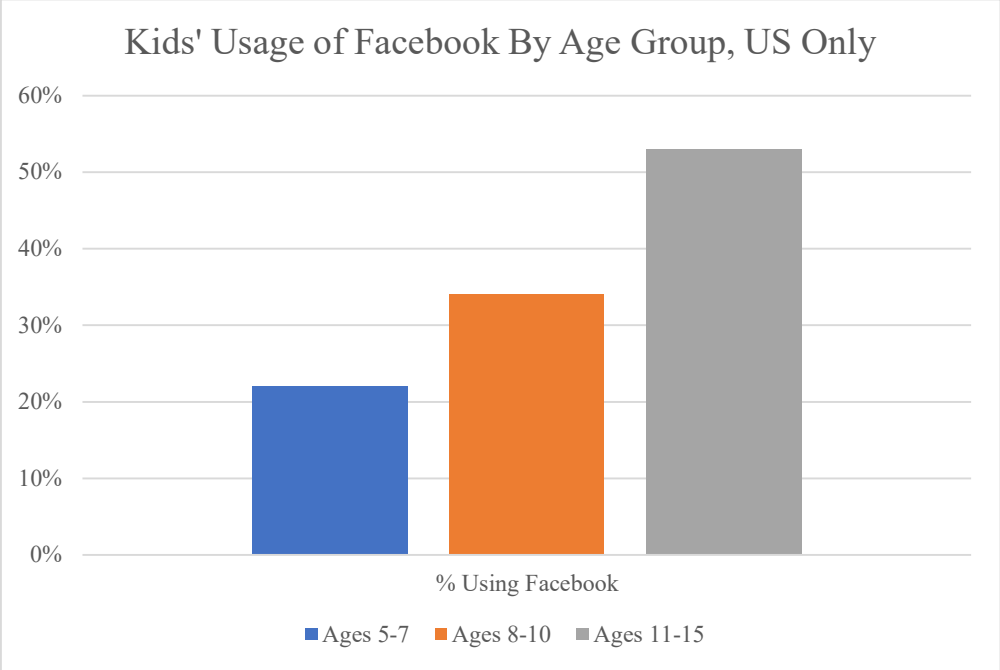
Year of Meta Study	Meta Estimate of Young Users
2017	"As age increases (5- to 12-year-olds), so does the self-reported proportion of U13 year olds with FB and IG accounts (**5-30%**)"[790]
2017	Meta survey of parents showed that "[b]y age 12, ~**25% of pre-teens** [were] (presumably) using Instagram" and that "by age 12, roughly 50% of 12 year olds either use an account or have asked for one."[791]
2018	"Looking at people we predict to be 13 and 14 today, we can estimate that there were **4M people under 13 in 2015 on IG** … around 30% of all 10-12 years old in the US."[792]
2020	**22% of 6- to 9-year-olds** and **35% of 10- to 12-year-olds** reported having used Instagram in the past month.[793]
2020	14% of 6-9-year-olds and 21% of 10-12-year-olds reported that **most of their friends were on Instagram**.[794]
2021	"[A] **majority of 12 year olds** and about **half of 11 year olds** screened are on IG already in some capacity."[795]

788 Deposition of Arturo Béjar, April 7, 2025, 188:20-190:9.
789 Deposition of Arturo Béjar, April 7, 2025, 185:24-187:16.
790 META3047MDL-003-00135848, "Re: Instagram Teens HPM - 23 Jan 2017.".
791 META3047MDL-047-00608197, "Project Neo Understand: IG-Relevant Data," at 197, 198, 199.
792 META3047MDL-014-00133662, "H2/H1 2018 Youth Team Review," at 666.
793 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," Oct. 2020, at 191.
794 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," Oct. 2020, at 207.
795 META3047MDL-004-00028888, "[redacted]'s post in Youth Team needs approval," Aug. 31, 2021; *see also* META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" Sept. 2020, at 411 (another 2020 Meta study of "children" and "tweens" aged 6-13 which reported similar usage rates among peers).

367. Meta's internal data similarly demonstrate that U13s were using Facebook. In the internal "Messenger Kids: Next Steps App Profile" presentation from 2020, Meta found that 31% of 6- to 9-year-olds and 44% of 10- to 12-year-olds reported using Facebook in the past month.[796] In that same presentation, 22% of 6- to 9-year-olds and 30% of 10- to 12-year-olds reported that "most" of their friends were on Facebook.[797] The 2020 internal presentation "Messenger Kids: What's in a Name?" reported that 6% of 6- to 9-year-olds and 20% of 10- to 13-year-olds believed that most children their age used Facebook.[798] Meta's internal "Youth Landscape and Opportunities for IG" study similarly confirmed that young users use Facebook.[799] The deck breaks down estimated Facebook use by young users of different age groups, reporting that 34% of 8- to 10-year-olds had used Facebook in the past month, along with 22% of children aged between 5 and 7 years of age (see Figure 11, below.)[800]

[796] META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," Oct. 2020, at 191.
[797] META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," Oct. 2020, at 207.
[798] META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" Sept. 2020, at 164.
[799] META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021, at 741.
[800] META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021, at 741.

Figure 11. Meta was aware of young users being on their platform and understood the share of their users who were U13[801]



b. Meta knew its age-gating, age verification, and age enforcement efforts were not effective

368. As an internal Meta document from 2018 sent to CEO Mark Zuckerberg acknowledged: "we do very little to keep U13s off our platform."[802] Up until December 2019, Instagram did not require users to disclose their age or date of birth to create an Instagram account[803] and Meta knew that its minimum age was "unenforced" which, according to Nick Clegg, "ma[d]e it difficult to claim we are doing all we can."[804]

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801 Graph recreated from META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021, at 741.

802 META3047MDL-004-00007079, "Content Governance and Enforcement: Transparency," 2018, at 088.

803 Meta's May 30, 2023 Response to Illinois Civil Investigative Demand, dated April 10, 2023, Interrogatory No. 8 at 11.

804 META3047MDL-003-00175144, "Re: Urgent - Sunday Times splash - action needed," January 27, 2019, at 153.

369. According to Meta employees, the company's policy regarding U13 users was "don't ask, don't tell," so long as the company had not confirmed that a user was under the age of 13, it did not take action.[805]

370. Prior to December 2019, this policy appears to have been reflected in the company's registration process. During that time, Meta did not attempt to collect users' ages nor age gate users during registration.[806] The lack of such age collection measures almost certainly contributed to U13 users joining the platform, and to the company having "very limited age information," as acknowledged by Ms. Newton in her deposition.[807] It also appears that the "don't ask, don't tell" policy extended beyond just the registration process, with Meta researcher [redacted] noting in a message chat that she was "not includ[ing] younger kids (10-12 yos) in [her] research" because although there were "definitely kids this age on IG," she was "concerned about risks of disclosure since they aren't supposed to be on IG at all."[808] Together, such evidence indicates that Meta's initial approach to handling U13 users on its platform was simply to avoid the issue to the extent possible.

371. As of December 4, 2019, following pressure from external sources, Meta began requiring all new Instagram registrants to enter their birthday upon signup.[809] In an email to colleagues sharing a communications report on the public announcement of this new requirement, Karina Newton wrote: "…we are ***finally*** collecting date of birth at account registration." [emphasis in

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805 Deposition of Arturo Béjar, April 7, 2025, 185:24-187:16.

806 Meta's May 30, 2023 Response to Illinois Civil Investigative Demand, dated April 10, 2023, Interrogatory No. 8 at 11; Deposition of Karina Newton, February 27, 2025, 69:3-7, 190:2-195:1, Exhibit 23 at 3 and Exhibit 24 at 1-3; Deposition of Robert Sherman, April 30, 2025, 168:5-169:25; and META3047MDL-034-00328795, "Re: Coverage report: age collection/DM reachability," December 5, 2019.

807 Deposition of Karina Newton, February 27, 2025, 69:3-7.

808 META3047MDL-003-00123666, "Message summary [{"otherUserFbld":100026735829495,"threadFbld":null}]" [redacted], February 6, 2021, at 666.

809 META3047MDL-034-00328795, "Re: Coverage report: age collection/DM reachability," December 5, 2019.

the original][810]

372. When Meta first launched its "age-gate" in December 2019, however, it designed it in a way that encouraged U13s to misrepresent their age. Specifically, Meta's account registration page contained a drop-down menu that automatically generated a date and year of birth representing the user to be 13 years old.[811]

373. Top executives were aware that this effort was ineffective at preventing U13s from joining the platform. In an email from February 2020 to Head of Facebook Fidji Simo and Head of Instagram Adam Mosseri, Meta's Vice President of Policy and Deputy Chief Privacy Officer, Robert Sherman,[812] explained that by providing "a default [age] over 13," Meta was "not taking sufficient steps to enforce" its minimum age rules or "meet obligations to keep under 13s off" its platforms, "especially given the general understanding that an unknown number of u13s are on FB and especially IG, and lying about their age." He further noted that "simply asking for age at registration is increasingly not viewed as sufficient." [813] Furthermore, Mr. Sherman stated in his deposition that Meta had received recommendations from experts "to do more" than just check users' ages and actually attempt to validate those ages.[814] As Mr. Sherman noted, Meta was keenly aware that any U13 signing up for one of Meta's platforms could easily lie about his or her age to bypass the age gate and use the platform.[815] Mr. Sherman recommended needed improvements such as "neutral age gating [i.e., not providing an auto-generated 13-year-old birthdate] to ensure that we make upfront efforts to enforce our age minimum [on Instagram] and

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810 META3047MDL-034-00328795, "Re: Coverage report: age collection/DM reachability," December 5, 2019, at 795.
811 MT-IG-AG-00171302, "Re: Age Management Decisions," February 28, 2020, at 303, 304.
812 Deposition of Robert Sherman, April 30, 2025, 14:12-14.
813 Deposition of Karina Newton, February 27, 2025, 204:8-10 and Exhibit 25 at 3.
814 Deposition of Robert Sherman, April 30, 2025, 40:3-42:10.
815 Deposition of Robert Sherman, April 30, 2025, 85:4-24.

that we do so in a way that does not defeat the purpose of the age gate by clearly signaling to a child the 'right answer.'"[816] He noted that "making the 'right answer' the default is inconsistent with existing guidance on age gating and undermines the value of asking for age."[817]

374. As a result, Mr. Sherman's February 2020 email flagged that a "key issue" for the company was that it was at risk of not being "seen as working on solutions to the problem of under-13s who falsify their age."

375. Continuing into 2021, Instagram's Head of Public Policy Karina Newton expressed general frustration about Meta's ineffective age-gating efforts and concern that the company was lagging behind industry standards in this regard. At the time, Meta aimed to release a new feature on Instagram similar to one offered by rival TikTok. [818] However, Instagram's version appeared to have fewer protections for young users, as TikTok had just announced new safety changes to ostensibly protect users 13-15.[819] Without similar protections on Meta's features, Ms. Newton feared, "now we're making the gap [between TikTok and Meta's safety features] even worse by introducing a similar feature with no controls where there will be a direct comparison…" Ms. Newton then turned to general concerns about the platform's failure to effectively age gate, stating, there are no "good age methods" and "now we're not using stated age, we don't have verification, we only have modeling working in one country and we have no defaults."[820] Ms. Newton concluded by writing, "everyone else in this space has at least two of those. we are the biggest target."[821]

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816 MT-IG-AG-00171302, "Re: Age Management Decisions," February 28, 2020, at 303.
817 MT-IG-AG-00171302, "Re: Age Management Decisions," February 28, 2020, at 303.
818 Deposition of Karina Newton, February 27, 2025, 207:21-208:25 and Exhibit 26 at 1.
819 Deposition of Karina Newton, February 27, 2025, 207:21-208:25 and Exhibit 26 at 1.
820 Deposition of Karina Newton, February 27, 2025, 207:21-208:25 and Exhibit 26 at 1.
821 Deposition of Karina Newton, February 27, 2025, 207:21-208:25 and Exhibit 26 at 1.

c. Meta knew that its age classifiers were ineffective, and the company eventually abandoned this effort

376. Meta publicly touted other methods of enforcing age restrictions beyond its registration requirements, including the use of age classifiers and age modeling. According to Mr. Sherman, the term "age modeling" describes "efforts to estimate or predict the likely age of an account independent of what [the account's owner] stated at registration."[822] One of the ways that Meta had proposed using age classifiers was by using machine learning or AI to predict if a user's stated age was accurate.[823] As the discussion of Statement C8 above (Ms. Diwanji's statement that Meta was "building . . . technology to find and remove accounts belonging to people under the age of 13") demonstrates, the company publicized these efforts as a way to prevent U13 users from accessing its platforms even if those users had lied to get past the initial age gate.

377. However, personnel at the company knew that it did not have effective classifiers and eventually abandoned the effort without informing the public.[824] Robert Sherman explained that Meta gave up on its efforts to create classifiers because it could not collect the data that would have been required to train the models due to legal restrictions that governed data collection from U13 individuals.[825] In an email from March 2020, Mr. Sherman wrote to other Meta employees, including Adam Mosseri, that Meta had made the decision to not build a classifier to identify U13 accounts, noting that it was unclear whether it would even be possible to build one at scale.[826] Instead, Mr. Sherman recommended advocating that age verification be handled by a

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822 Deposition of Robert Sherman, April 30, 2025, 56:11-19.
823 Deposition of Robert Sherman, April 30, 2025, 56:18-58:9.
824 Deposition of Karina Newton, February 27, 2025, Exhibit 27 at 1-2.
825 Deposition of Robert Sherman, April 30, 2025, 57:15-58:9; 107:16-19.
826 Deposition of Robert Sherman, April 30, 2025, 130:25-132:6; META3047MDL-065-00042982, "Re: WKLY Cross-Family Reviews | Escalation: Age Management," March 4, 2020.

device's operating system.[827] Additionally, Meta's policy team recommended that the company try to show that it was developing products appropriate for minors and that it be explicit that age modeling was not reliable for "hard" enforcement (i.e., the removal of underage users).[828]

d. Meta's enforcement and removal of U13 users was ineffective and under-resourced

378. Despite public claims to the contrary, internal sources reveal that Meta did not effectively enforce or remove U13 users. Beyond the limitations noted above, Meta internally acknowledged in a 2020 document titled "Child Safety – State of Play," which noted that "age assurance" was an area where Meta was "most vulnerable and need[ed] to step up our efforts," that one of its "vulnerabilities" was that it had a "[l]ack of U13 proactive age identification and enforcement mechanism[s]" and had identified as an "Area of Improvement" developing a "system for age verification to block U13s from our services[.]"[829] In a September 2020 email forwarding this document to Vice President of Global Affairs, Nick Clegg, a Meta strategic advisor noted that it was "quite worrying" and "tends to confirm the impression I have that this area of work is often sidelined" and "doesn't have the resources or consistent leadership support" needed. [830]

379. Evidence also indicates that Meta's internal policies regarding age verification differ from the policies it communicates publicly. In particular, Statement D9 found in Instagram's Help Center notes that "we will delete the account if we can't verify the account is managed by

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827 Deposition of Robert Sherman, April 30, 2025, 130:25-132:17; META3047MDL-065-00042982, "Re: WKLY Cross-Family Reviews | Escalation: Age Management," Match 4, 2020.

828 META3047MDL-034-00479217, "Re: WKLY Cross-Family Reviews: Youth Privacy Pre-read," January 21, 2021.

829 META3047MDL-004-00027356, "Child Safety - State of Play (7/2020)" July 2020; Deposition of Antigone Davis, March 4, 2025, 319:18-323:21.

830 Deposition of Antigone Davis, March 4, 2025, 316:3-13; META3047MDL-004-00027355, "Kids note," September 1, 2020.

someone *over* 13 years old." (emphasis added)[831] By contrast, in response to an interrogatory posed by the Plaintiffs in this matter, Meta stated that its internal policy is that "[w]here Meta has indicia that the user is not *under* the age of 13, Meta may automatically permit the user who has been flagged as potentially underage to continue using Instagram."[832] Whereas Meta's publicly communicated standard for retaining flagged accounts is verification that the flagged user is *over* 13, its internal policy, as enforced in practice, is that by default a user's account is not removed unless the company verifies that the user is *under* 13.[833] A default such as that allows many more U13 accounts to remain on the platform than if the company only allowed users on the platform who could affirmatively demonstrate that they are aged 13 years or older. Meta's default practice of allowing U13s on its platforms unless it can verify that the account holder is U13 is in clear contrast with other age-restricted activities such as gambling, smoking, and voting, where the default is that those wishing to engage in the activity must affirmatively prove they are old enough before being permitted to do so.

380. Meta's reporting flow for U13 accounts is also notably ineffective. According to Mr. Béjar, it is "almost impossible to report underage accounts."[834] In one email from 2019, Monica Bickert referred to the reporting flow as "broken," after she attempted to report a user for being underage and experienced an error.[835] In response to this discovery, Antigone Davis replied, "I agree it is more than pretty bad and suggests we want to deter underage reporting."[836]

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831 "Report a child under 13 on Instagram," *INSTAGRAM.com,* https://help.instagram.com/517920941588885. Accessed July 14, 2025.

832 Meta's Responses and Objections to the Illinois Civil Investigative Demand, dated April 10, 2023,at 5 (emphasis added).

833 Meta's Responses and Objections to the Illinois Civil Investigative Demand, dated April 10, 2023,at 5.

834 Deposition of Arturo Béjar, April 7, 2025, 195:7-24.

835 Deposition of Monika Bickert, May 1, 2025, Exhibit 51.

836 Deposition of Monika Bickert, May 1, 2025, Exhibit 51.

381. Multiple internal Meta documents cite substantial backlogs of underage reports that the company has failed to address in a timely manner. For example, an April 2021 "Underage & Age Verification Data 1-Pager" "identified a backlog of >2[million] reports" from underage reporting flows that have not been addressed, that "33% of IG users don't have a stated age" and that "[c]urrent underage review protocols might not be effective."[837] In another email in 2021, which included Instagram's Head of Public Policy Karina Newton, one Meta employee noted that there was a 1.42 million collective backlog in the age collection reporting flow.[838] Other documents also cite "[b]acklogs of actionable information about individuals who have failed age gates,"[839] including a "~700K [U13] job backlog."[840]

382. According to Mr. Béjar, the company's policies that govern U13 users in practice allow many such users on the company's platforms.[841] Not only did Mr. Béjar state that Instagram had the ability to build effective tools to prohibit U13s from using the platform, but also that executives who state that they don't allow U13s on Instagram are, in fact, "lying."[842] This lie is evidenced by the fact that it is not difficult to find U13 users on the platform today. Just weeks prior to Mr. Béjar's April 2025 deposition, he found tens of thousands of users engaging with a trend on Instagram while stating that they were aged, for example, "11, 9, 8, 7."[843]

v. Conclusion

383. The evidence described above demonstrates that Meta's public statements reassuring

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837 META3047MDL-020-00542010, "Underage & Age Verification Data 1-Pager," April 1, 2021.
838 Deposition of Karina Newton, February 27, 2025, Exhibit 20 at 3.
839 META3047MDL-004-00027355, "Child Safety – State of Play (720).docx," Sept. 1, 2020, Deposition of Antigone Davis, March 4, 2025, Exhibit 52.
840 META3047MDL-034-00027362, "Child Safety State of Play Interim update - September 2020," September 2020.
841 Deposition of Arturo Béjar, April 7, 2025, 192:24-25.
842 Deposition of Arturo Béjar, April 7, 2025, 188:20-190:9.
843 Deposition of Arturo Béjar, April 7, 2025, 195:16-24.

consumers that U13s are not allowed to use, and do not use, Meta's platforms, and that Meta invests in and is engaged in effective age-gating, age-verification, age-enforcement, age-assurance, age-detection, and removal efforts to inhibit U13 use had the tendency to mislead. On the basis of Meta's statements, a reasonable consumer would be likely to believe that Meta was unaware that its platforms hosted substantial numbers of U13s, and that its lax age-gating efforts enabled such underage use. However, Meta did, in fact, have such knowledge. Similarly, a reasonable consumer would be likely to believe that Meta meaningfully invested in age-assurance, and would expect Meta's efforts at age-gating, age-verification, age-detection, age assurance and removal to be effective at keeping U13s from using its platforms. Again, Meta did not in fact prioritize investment in policing underage use and knew its efforts were not effective and behind industry standards. In general, Meta's statements regarding its purported efforts to keep U13s off its platforms imply that the company was proactive in addressing the issue, whereas internal evidence indicates that Meta was reactive, at best, and in many cases failed to act altogether. Individual flagged U13 accounts were removed to some extent, but the company did very little to dissuade and prevent U13s from joining and using the platforms in the first place. Meta's reactive posture is also reflected in its default practice of allowing U13s to join and remain on the platforms unless Meta could verify their underage status, rather than requiring users to affirmatively prove their age before being permitted to sign up.

384. As a result, because Meta's statements omit important and highly relevant information about the extent of improper underage usage of its platform and ineffectiveness of its age-enforcement efforts, and therefore provided an overall impression that U13 use is essentially a "non-issue," they had the tendency to mislead consumers who might have otherwise acted differently in monitoring their U13's use or ensuring disuse.

XI. CONSUMERS WERE EXPOSED TO META'S HEALTH AND SAFETY MESSAGES

385. There is strong indication that the information contained in Meta's statements was transmitted to, and subsequently spread further by, consumers. This section outlines several factors that make it likely for Meta's statements to have diffused significantly throughout consumer audiences, increasing the total number of consumers exposed to Meta's communications. It also provides some illustrative examples of actual diffusion.

A. Factors affecting the likelihood of transmission

386. How likely a particular message is to be transmitted further through the media ecosystem and/or consumer audiences depends on a number of factors, including both contextual and message-based factors. In the case of Meta's statements, there are several factors that increase the likelihood that Meta's core messages diffused significantly, whether through verbatim re-publication in subsequent media stories or through the more informal transmission of message gists across audiences themselves. These factors include:

a. *Subject matter*. Meta's communications concern issues related to the health and safety of its platforms, a subject which is important to its audience.[844] This factor increases the likelihood of spread of Meta's claims in two ways: First, because importance to consumers indicates newsworthiness, Meta's statements are likely to be re-published in the popular press. Second, because consumers discuss high-importance issues among themselves, Meta's claims are also likely to spread through Word of Mouth (WOM).[845] The fact that a number of Meta's claims were made to Congress, as a regulator and influencer, underscores the importance of the issues addressed by Meta's claims.[846]

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844 See Section IX.A.

845 META3047MDL-047-00006936, "Youth + Well-Being Narrative: Problem space and past narrative work," February 17, 2022 ("Be cognizant that parent messaging trickles down to teens. Even messaging directed strictly to parents should not turn teens off in any way, as parents are likely to use messaging language as a guide or reference when approaching their teen about it.").

846 *See, e.g.*, Ortutay, Barbara and Jalonick, Mary Clare, Apr. 9, 2018, WATCH: Facebook CEO Mark Zuckerberg testifies before Senate committee, *PBS News*, https://www.pbs.org/newshour/nation/watch-live-

b. *Social nature of the issue.* Meta's messages pertain to an inherently social issue—an issue that involves peers or other people whose approach to those messages might materially affect the initial recipient's outcomes. This means that increased cooperation and deliberation among audiences is likely. Importantly, social media usage and how parents understand it are network-based phenomena,[847] meaning that both perception and behavior are influenced by actions and events at the group level.

c. *Uncertainty*. Similarly, high levels of consumer uncertainty regarding the safety or potential harms of social media platforms also increases the likelihood of collective discussion and interpretation of the message contents. As discussed above, in Section VI.C, social media platforms are a credence good associated with low consumer understanding of both technical details and use-related well-being outcomes.[848]

d. *Audience type*. As discussed above, in Section VI.B, the audience of Meta's statements extends beyond teen and youth users of its social media platforms and their parents, also including educators and school boards, healthcare professionals and organizations, public policy activist groups, government regulators, and others. These audience segments tend to have their own internal, top-down communications practices, meaning that any message relevant to stakeholders that reaches the top of the organizational pyramid will either be officially disseminated to the entire organization or trickle down on its own.

e. *Audience size*. Meta's communications are relevant to a large proportion of the overall population, and thus those messages are more likely to spread, all else equal, because there is a thick network of people who are interested in them. As mentioned above, Facebook had over three billion monthly active users as of April 2024.[849] In the U.S. alone, 68% of adults reports using Facebook, and 47% report using Instagram.[850] The more people to whom Meta's communications are relevant in some way, the greater the likelihood is that its messages will be disseminated further through WOM.

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facebook-ceo-mark-zuckerberg-testifies-before-senate-committee; Scola, Nancy, Apr. 11, 2018, 7 takeaways from 10 hours of Zuckerberg hearings, *Politico*, Apr. 11, 2018, https://www.politico.com/story/2018/04/11/zuckerberg-hearings-facebook-congress-477287.

847 Belleflamme, P., & Peitz, M. (2018). "Platforms and network effects." In *Handbook of Game Theory and Industrial Organization*, Volume II, Edward Elgar Publishing. pp. 286-317.

848 *See, e.g.*, Dulleck, U., & Kerschbamer, R. (2006), "On doctors, mechanics, and computer specialists: The economics of credence goods," *Journal of Economic Literature*, 44(1):5-42; Balafoutas, L., & Kerschbamer, R. (2020), "Credence goods in the literature: What the past fifteen years have taught us about fraud, incentives, and the role of institutions," *Journal of Behavioral and Experimental Finance*, 26:100285; Lassoued, R., & Hobbs, J. E. (2015), "Consumer confidence in credence attributes: The role of brand trust," *Food Policy*, 52:99-107.

849 Dixon, Stacy Jo, Mar. 27, 2025, "Facebook – statistics & facts," *STATISTA.com*, https://www.statista.com/topics/751/facebook/#topicOverview.

850 Nov. 13, 2024, "Social Media Fact Sheet," *PEW.com*, https://www.pewresearch.org/internet/fact-sheet/social-media.

B. Examples of message diffusion

387. The contextual and message-based factors described above provide theoretical support for the wide transmission of Meta's claims throughout the relevant consumer audiences. An informal search has revealed several such examples of transmission beyond the original venues in which the statements were made, for each of the statement categories identified in Section X above. For example, at-issue claims from the "priorities" category were published by The *Verge*,[851] *Newsweek*,[852] and *CBS This Morning*;[853] at-issue claims from the "addiction" category were published by *CNET*,[854] *Al Jazeera*[855] and *NBC Today*;[856] at-issue claims from the "harm" category were published by *The New York Times*,[857] *The Washington Post*,[858] and a local news station in Oakland, CA;[859] and at-issue claims from the "U13s" category were published by

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851 Robertson, Adil, Sept. 21, 2021, "Facebook says it's spent $13 billion on 'safety and security' since 2016," *THEVERGE.com*, https://www.theverge.com/2021/9/21/22685863/facebook-safety-security-staff-spending-misinformation-abuse-wall-street-journal-reports.

852 Slisco, Aila, Oct. 05, 2021, "Mark Zuckerberg Says Claim Facebook Pushes 'Angry Content' for Profit 'Deeply Illogical,'" *NEWSWEEK.com,* https://www.newsweek.com/mark-zuckerberg-says-claim-facebook-pushes-angry-content-profit-deeply-illogical-1635966.

853 June 26, 2019, "CBS This Morning," *CBS.com,* https://archive.org/details/KPIX_20190626_140000_CBS_This_Morning/start/1080/end/1140.

854 Keane, Sean, July 4, 2018, "Facebook, Twitter are designed to act like 'beahvioural cocaine,'" *CNET.com*, https://www.cnet.com/tech/services-and-software/facebook-twitter-are-designed-to-be-like-behavioural-cocaine-for-users-insiders/.

855 Stepansky, Joseph, Nov. 17, 2020, "Facebook, Twitter grilled on election response by US senators," *ALJAZEERA.com*, https://www.aljazeera.com/economy/2020/11/17/facebook-twitter-heads-testify-before-us-senate-live.

856 Dec. 7, 2021, "NBC Today," *NBC.com,* https://archive.org/details/KNTV_20211207_150000_Today/start/1860/end/1920.

857 Kang, Cecilia, et al., Nov. 18, 2021, "State attorneys general open an inquiry into Instagram's impact on teens.," *NYTIMES.com*, https://www.nytimes.com/2021/11/18/technology/meta-instagram-investigation-teens.html.

858 Dwoskin, Elizabeth, Nov. 9, 2021, "Facebook releases new reports on transparency and oversight amid criticism," *WASHINGTONPOST.com*, https://www.washingtonpost.com/technology/2021/11/09/facebook-community-standards-report-oversight/.

859 Sept. 30, 2021, "Fox 2 News at Noon," *KTVU.com*, https://archive.org/details/KTVU_20210930_190000_KTVU_FOX_2_News_at_Noon/start/420/end/480.

TechCrunch,[860] *People*,[861] and *NPR*.[862] These examples provide independent substantiation of the theoretical considerations outlined above.

388. Furthermore, Facebook posts made directly by Mark Zuckerberg received high levels of engagement, also reflecting wide transmission. Mr. Zuckerberg's October 5, 2021, post—in which he denied that Meta prioritized profits over user well-being—received over 795,000 reactions, 276,000 comments, and was shared 67,000 times.[863] Thousands of these views, reactions and/or comments to Mr. Zuckerberg's post comprised Massachusetts users.[864]

389. Meta was also aware that its statements to one set of audience members could trickle down to influence others, including those made before Congress. In one internal document, Meta's researchers recommended that its public statements should have broad appeal because "parent messaging trickles down to teens."[865] Noting that "even messaging directed strictly at parents should not turn teens off in any way, as parents are likely to use messaging language" when talking to their teens. Another internal document outlined the connection between "Policy Elites," parents, and teens, and hypothesized that boosting sentiment among the elites and parents could "help unblock new teens to join IG[.]"[866] Meta saw these entities as interconnected,

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860 Constine, Josh, July 19, 2018, "Facebook and Instagram change to crack down on underage children," *TECHCRUNCH.com*, https://techcrunch.com/2018/07/19/facebok-under-13/.

861 Hahn, Jason, Mar. 16, 2021, "Instagram Will No Longer Allow Adults to Message Minors Who Don't Already Follow Them," *PEOPLE.com*, https://people.com/human-interest/instagram-will-no-longer-allow-adults-to-message-teens-who-dont-already-follow-them/.

862 Associated Press, Dec. 8, 2021, "Instagram's CEO faces senators accusing his company of harming some young users," *NPR.org,* https://www.npr.org/2021/12/08/1062541547/instagrams-ceo-senators-testimony-mosseri.

863 Zuckerberg, Mark, Oct. 5, 2021, "Mark Zuckerberg's post," *FACEBOOK.com,* https://www.facebook.com/zuck/posts/10113961365418581. Accessed July 14, 2025.

864 *See* Meta's May 28, 2024, Second Supplemental Responses and Objections to the Commonwealth of Massachusetts' First Set of Interrogatories, Supplemental Response to Interrogatory No. 9.

865 META3047MDL-047-00006936, "Youth + Well-Being Narrative: Problem space and past narrative work," February 17, 2022.

866 META3047MDL-019-00069311, "Parent Sentiment Priorities & Efforts to Align."

and recognized that statements made in one context, for example "Policy Elites" in Congress, could in fact trickle down to the general public and teens more broadly.

390. As such, it appears the company attempted to align its outward communications to Congress and the public. For example, in September 2021, Nick Clegg expressed concern about a "tone deaf" Facebook post Mr. Zuckerberg was considering posting following a day of difficult questioning for Meta staff in front of Congress.[867] Mr. Clegg's concerns, as conveyed by another staffer to Mr. Zuckerberg, were: "today we've been pulled apart by US Senators on whether we care about children on our services. He thinks it will seem tone deaf for you make a surfing joke (and if you do, it'll likely come up in future testimonies 'were you taking this seriously etc') [sic]." [868]

391. Multiple other Meta internal marketing documents expressly stated that the company intended its external messaging related to the company's well-being and safety efforts to reach consumers and parents in local "prioritized markets," including, among others, Massachusetts, Illinois, Connecticut, New York, and California.[869]

C. Personal experience

392. Further, in my capacity as a researcher who has, for more than a decade, studied, written about, and spoken to numerous audiences about social media and its effects on children, I have witnessed the spread of such information. I have spoken at events across the U.S., in states and

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867 Deposition of Mark Zuckerberg, March 28, 2025, Exhibits 86-87.

868 Deposition of Mark Zuckerberg, March 28, 2025, Exhibits 86-87.

869 META3047MDL-146-00056954, "Parent Advocacy Network - Pilot Proposal"; META3047MDL-231-00001706, "U.S. Youth Campaign Targeting," June 2024; META3047MDL-047-00659172, "Youth updates for EA team biweekly (3/7)"; META3047MDL-129-00027832, "Re: [tasks] T189402400: Screen Smart Phase 3 Proposal," July 22, 2024; META3047MDL-129-00090614, Screen Smart info; and META3047MDL-146-00057583, "Instagram Teen Accounts Launch - Local Comms Plan."

districts including California, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Kentucky, Louisiana, Maryland, Massachusetts, Missouri, Nevada, New York, Ohio, Pennsylvania, South Carolina, South Dakota, Texas, Washington, Washington, D.C., and Wisconsin, and in virtual events that covered audiences across many of the remaining states. At each event, audience members—including parents, students, teachers, policymakers, and government officials—raised one and often many of the issues addressed in the at-issue statements associated with this matter.

393. Either in the form of verbatim re-publication or communication of the central gist of Meta's communications, several contextual and message-based factors indicate wide dissemination through the media eco-system and within segments of Meta's audience. Moreover, an informal search demonstrated clear dissemination of several of the at-issue communications in various venues, reinforcing the theoretical considerations described above and providing concrete evidence of further transmission. That evidence is itself further corroborated by several years' worth of personal experience engaging with relevant audiences.

XII. CONCLUSION

394. Meta intentionally engaged in an extended campaign to mislead the public about the safety and known harmful effects of Facebook and Instagram on young users, its platforms' addictive nature, its internal business efforts to prioritize safety and well-being, and its efforts related to prohibiting U13 use.

395. In particular, the company downplayed the harms associated with using both platforms, selectively omitting and misrepresenting internal and externally-commissioned research that measured and documented a wide range of social, physical, and psychological harms. It did so by minimizing the capacity for Facebook and Instagram to harm their users, and the tendency for

those platforms to inspire patterns of engagement that were addictive in nature. The company also stated that it prioritized the well-being of its users ahead of business and profit motives, despite pursuing strategies that prioritized platform growth and revenue over user welfare. Further, the company denied that Facebook and Instagram attracted and hosted users under the age of 13, though the company in fact designed those platforms to attract such users, and knew that such users regularly signed up for and used Facebook and Instagram. These misrepresentations served to both minimize the risks that Facebook and Instagram would harm young users, and to exaggerate the benefits of using both platforms. Collectively, these messages were designed to reassure young users, convince parents to allow young users to use Facebook and Instagram, and to signal to policymakers, government officials, and companies that paid to place advertisements on both platforms that Facebook and Instagram were safe and suitable for young users.

396. In fact, considerable evidence supports the assumptions I was provided that Meta personnel were aware that Facebook and Instagram were not safe for young users. Despite this knowledge, and internal concerns that the platforms were harmful, Meta personnel delivered a range of statements that overstated the safety of both platforms. These misrepresentations were delivered by at least a dozen Meta personnel, including Mark Zuckerberg and Adam Mosseri, as well as a range of senior executives focused on, among other issues, policy management, platform safety, product decisions, global affairs, and youth policy and safety. Those statements were made in prominent television, print, and online media outlets; on official Meta and platform-specific blogs and outlets; and in official Senate and Congressional testimony, and were further disseminated by traditional media outlets and on a range of social media platforms to reach a large audience of parents, youth, and other decision-makers.

397. Meta's misleading Statements capitalized on a range of persuasion tactics and tools of deception. Among other techniques, Meta: a) selectively published favorable data, such as regular CSERs, while omitting vital, contradictory internal research; b) selectively downplayed leaked research demonstrating a broad range of harms; c) consistently claimed that Facebook and Instagram are not addictive, and negative content and harmful experiences are rare, whereas the company knew both claims were untrue; and d) regularly attempted to deny or side-step criticism, while promoting false or misleading narratives designed to show that the company prioritized the well-being of its users over platform growth and profits.

398. Meta's specific statements, and the overall impression they created, indicated to consumers that : a) the company prioritized user welfare above profit and growth objectives; b) Facebook and Instagram do not inspire addictive usage patterns; c) Facebook and Instagram are safe for young users; and d) those platforms do not attract or retain users under the age of 13. Those statements were meaningful and impactful because parents, youth, and other decision-makers are inherently concerned about youth well-being and safety. Moreover, the Meta personnel who made those statements had knowledge, expertise, and access to data that made their statements authoritative and credible. As such, Meta's ongoing campaign to mislead the public about the safety of Facebook and Instagram was likely to deceive a considerable audience of parents, youth, and other policy- and decision-makers.

PART 2: CHILD-DIRECTEDNESS OF META PLATFORMS

XIII. ASSIGNMENT

399. In **Part 2** of this report, I have been asked by counsel to assess whether Instagram, Facebook, and/or 'portions' of each service, such as features or accounts, are directed to children, meaning that based on an assessment of the totality of the circumstances, children are a target audience of the service or portions of the service.

XIV. ROADMAP TO PART 2 OF THIS REPORT

400. In **Part 2**, I assess whether Instagram and Facebook, or portions thereof, are directed to children. To do so, I rely on my expertise as a marketing and consumer behavior expert, as well as my extensive experience studying social media platforms, and the features and content associated with these platforms that appeal to children. In addition, I have relied upon statements from Meta employees, including in internal communications, concerning the intended audience of Meta's platforms, and the observed incidence of child users on the platforms based on research conducted by Meta and by third parties.

401. I begin in Section XV by describing the academic literatures relevant to my assignment detailing the developmental phases associated with children, tweens, and teens, and the psychological characteristics of adolescence that describe adolescent behavior, interests, and aspirations. Having presented that literature, in Section XVI I present and examine evidence in this matter that captures Meta's attitude to children and child users, and how it has fostered, developed, and attempted to grow its audience of child users across time. Broadly, the evidence indicates that Meta construes attracting and growing its user base of young users—including child and tween users—as critical to the company's long-term prospects, which in turn has shaped the design and growth strategies that Meta has applied to Instagram and Facebook.

402. In Section XVII, I review the Instagram platform. I rely on a combination of internal documents from Meta and third parties, statements of Meta employees, and publicly available information, to derive Instagram's intended audience; to assess whether the platform's features and engagement tools appeal to children; to review the degree to which content on the site appeals to children; and to examine whether and the extent to which Instagram's current and historic audience includes children. Having conducted this platform-level review, I also review several individual accounts from Instagram that contain content that appeals to children.

403. In Section XVIII, I conduct a parallel assessment of the Facebook platform that mirrors my assessment of Instagram, examining the platform as a whole, and reviewing several individual accounts from Facebook that contain content that appeals to children.

404. Throughout my analysis, I use several terms with specific definitions in mind. I use the term "child" or "children" to refer to youths under the age of 13. I use the term "adolescence" to refer to the period from 10-19 years of age.[870] I use the term "tween" to refer to those in early adolescence (ages 10-12 years); "young teen" to refer to middle adolescence (ages 13-15); and "older teen" to refer to late adolescence (ages 16-19 years). I use "teen" to refer, collectively, to those in middle and late adolescence, *excluding* tweens. At times, Meta's internal documents use the terms tween and teen to refer to age ranges that differ slightly from those described above; I note those differences, where relevant, in my analysis.

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[870] These age brackets are in common use, including in the following sources: National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Division of Behavioral and Social Sciences and Education; Board on Children, Youth, and Families; Committee on the Neurobiological and Socio-behavioral Science of Adolescent Development and Its Applications; Backes EP, Bonnie RJ, editors. *The Promise of Adolescence: Realizing Opportunity for All Youth*. Washington (DC): National Academies Press (US); 2019 May 16. 2, Adolescent Development. Available from: https://www.ncbi.nlm.nih.gov/books/NBK545476/.

XV. ACADEMIC FRAMEWORK

405. In this section, I review the academic literatures that address three topics relevant to my opinions in this matter: (A) the social and cognitive psychological development of children, tweens, and teens, and how such developmental patterns influence how people within those age brackets typically behave and experience the world; (B) the tendency for tweens and young teens to look up to older teens as sources of aspirational influence (whereas older teens tend to look towards their own peers, but not downward, towards younger teens or tweens); and (C) the tendency for certain forms of online content to target tweens and young teens given the social and cognitive developmental milestones typical of those periods.

A. Tweens are developmentally distinct from younger children and teens, and are particularly attracted to the characteristics typical of social media platforms

406. My analyses are grounded in the well-established tendency for children and tweens to seek out certain features and content that are prominent components of Facebook and Instagram, among other Meta social media platforms. In this section, I describe the developmental milestones typical of children, tweens, and teens as they apply to the experience of using social media platforms during those developmental periods. Though some humans advance through these periods somewhat earlier or later than do others, the stages I describe below, and the tendency to move through them sequentially, are typical of normally developing humans.[871]

407. As children approach adolescence, peer relationships become progressively more central

[871] The milestones and stages described here have been studied extensively, and they have been described in the major treatises in developmental psychology, including: Lerner, R. M. (Ed.),(2015), *Handbook of Child Psychology and Developmental Science (7th ed.),* John Wiley & Sons Inc: Hoboken, NJ; Steinberg, L. (2020), *Adolescence (12th ed.)*, McGraw-Hill Education, New York, NY; Killen, M., & Coplan, R. J. (Eds.), (2011), *Social Development in Childhood and Adolescence: A Contemporary Reader*, Wiley-Blackwell: Hoboken, NJ; Lerner, R. M., & Steinberg, L. (Eds.), (2009), *Handbook of Adolescent Psychology (3rd ed.)*, John Wiley & Sons Inc: Hoboken, NJ.

to their identities, whereas family relationships become progressively more peripheral.[872] Tweens and young teens derive increasing self-worth from their social relationships, gauging their self-esteem in large part according to the quality and strength of their friendships.[873] Younger children, in contrast, tend to learn from and compare themselves to authority figures, including parents and teachers, whereas tweens tend to look laterally to their peers for social feedback and social guidance. They also tend to look with aspiration to older adolescents, and so are often influenced by the actions and behaviors of older teens, including older siblings.[874] As peer relationships become more important, they also become more complex. Tweens become increasingly sensitive to the ramifications of forming friendships with relatively popular and unpopular peers, and to the reputational standing they attain or fail to attain within their peer groups.[875]

408. Tweens are also particularly fragile, because they retain many of the developmental characteristics of children, while facing the complexities of adolescence. They tend to distance themselves from parental and familial comforts while their emotional coping skills remain inchoate, and simultaneously begin to form increasingly complex and demanding social bonds. Whereas children experience and express their emotions openly,[876] tweens experience greater

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872 Laursen, B., & Veenstra, R. (2021), "Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research," *Journal of Research on Adolescence,* 31:889–907.

873 See, e.g., Brown, B. B., & Larson, J. (2009), "Peer relationships in adolescence," In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology: Contextual Influences on Adolescent Development* (3rd ed., pp. 74–103). John Wiley & Sons, Inc: Hoboken, NJ.

874 See, e.g., Low, S., Snyder, J., & Shortt, J. W. (2012), "The drift toward problem behavior during the transition to adolescence: The contributions of youth disclosure, parenting, and older siblings," *Journal of Research on Adolescence,* 22:65–79.

875 See, e.g., Brown, B. B., & Larson, J. (2009), "Peer relationships in adolescence," In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology: Contextual Influences on Adolescent Development* (3rd ed., pp. 74–103). John Wiley & Sons, Inc: Hoboken, NJ; Finders, M. J. (1997), *Just Girls: Hidden Literacies and Life in Junior High.* New York: Teachers College Press, New York, NY.

876 E.g., Denham, S. A. (1998), *Emotional Development in Young Children,* New York: Guilford Press.

emotional complexity, greater self-consciousness, and are more deeply concerned by how others perceive them.[877] This vulnerability is driven in part by fundamental neurological changes that begin around the early tween years, in which tweens become progressively more sensitive and attuned to social rewards and the approval of peers.[878] Adolescent development is also a period of significant identity flux, leaving tweens and teens particularly vulnerable to social feedback, and to the approval and rejection they perceive from peers.[879] Tweens and young teens increasingly view the social universe as hierarchical, with some peers occupying superior positions to others. This era is marked by intense social comparisons, which heighten self-awareness, and sometimes inspire mental health challenges including anxiety and depression.[880]

409. Tweens and young teens are particularly attuned to the behavior of their peers in part because they are increasingly driven to conform to social norms that they derive from peers and older teens. This drive for conformity is especially urgent when tweens and teens are surrounded by or exposed to the behavior of their peers.[881] This attunement is matched by a rise in emotional

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877 See, e.g., Harter, S. (2012), *The Construction of the Self: Developmental and Sociocultural Foundations.* New York: Guilford Press.

878 See, e.g., van Hulst, B.M., de Zeeuw, P., Lupas, K., Bos, D.J., Neggers, S.F.W., & Durston, S. (2015), "Reward Anticipation in Ventral Striatum and Individual Sensitivity to Reward: A Pilot Study of a Child-Friendly fMRI Task," *PLoS ONE*, 10(11): e0142413; Altikulaç S., Bos M.G.N., Foulkes, L., Crone, E.A., & van Hoorn, J. (2019), "Age and Gender Effects in Sensitivity to Social Rewards in Adolescents and Young Adults," *Frontiers in Behavioral Neuroscience,* 13:171; Kwak, Y., & Huettel, S.A. (2016), "Prosocial Reward Learning in Children and Adolescents," *Frontiers in Psychology,* 7:1539; https://www.apa.org/news/apa/2022/social-media-children-teens, p.1.

879 Laursen, B., & Veenstra, R. (2021), "Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research," *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence*, 31(4):889–907.

880 Twenge, J. M., Joiner, T. E., Rogers, M. L., & Martin, G. N. (2017), "Increases in Depressive Symptoms, Suicide-Related Outcomes, and Suicide Rates Among U.S. Adolescents After 2010 and Links to Increased New Media Screen Time," *Clinical Psychological Science*, *6*(1), 3-17.

881 See, e.g., Brechwald, W. A., & Prinstein, M. J. (2011), "Beyond homophily: A decade of advances in understanding peer influence processes," *Journal of Research on Adolescence,* 21:166-179; Laursen, B., & Veenstra, R. (2021), "Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research," *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence*, 31(4):889–907, pp. 893-895.

sensitivity, such that tweens and young teens show greater emotional lability, or variability, in response to positive and negative feedback from their peers.[882] Meanwhile, tweens and young teens spend more time exposed to such social and emotional cues because they are less likely to be supervised by adults, and more likely to spend unstructured time alone, than are younger people.[883] As early as age 10, tweens assimilate to, or begin to consider themselves to be like, teens, and so become more aligned in their attitudes and beliefs with older peer groups than with their peers or with younger children.[884] Consequently, tweens view "teen culture" and teen-typical activities as aspirational, leading such tweens to frequently mimic the behavioral patterns of teens rather than peer tweens.

410. The tween and teen years are also focused on establishing and strengthening individual identity. Studies have shown that peer influence is greatest among those with uncertain identities in new and unfamiliar situations.[885] As adolescents transition from childhood to adulthood, their social experiences play a significant role in shaping how they understand themselves.[886] Historically, these social experiences tended to take place offline—at schools, within sports leagues, at religious institutions, and in other communal venues—but today many teens spend

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882 Laursen, B., & Veenstra, R. (2021), "Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research," *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence*, 31(4):889–907, p. 891.

883 Laursen, B., & Veenstra, R. (2021), "Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research," *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence*, 31(4):889–907 pp. 891-892.

884 See, for example, Sørenssen, I.K., (2018), "Disney's *High School Musical* and the construction of the tween audience," *Global Studies of Childhood,* 8(3); Sørenssen, I. K. "Tweens as a commercial target group: children and Disney filling the category", https://www.academia.edu/1976557/Tweens_as_a_commercial_target_group_children_and_Disney_filling_the_category.

885 Laursen, B., & Veenstra, R. (2021), "Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research," *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence*, 31(4):889–907, p. 892.

886 Laursen, B., & Veenstra, R. (2021), "Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research," *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence*, 31(4):889–907, p. 892.

hours each day on social media platforms, prompting many of these novel, formative experiences to emerge online rather than in person.[887] The types of social experiences that characterize the young adolescent time period now often happen online, and tweens are attracted to the online spaces where early teens engage in such social experiences.

B. Tweens and young teens look up to older teens as sources of aspirational influence

411. For many decades, psychologists believed that direct experience was the primary vehicle through which humans learned about the world. In the 1970s, however, Albert Bandura proposed his now seminal social learning theory,[888] in which he demonstrated that humans learn a great deal by observing the experiences of others.[889] Bandura argued that our attitudes, beliefs, values, and emotions are driven largely by other people, and that we tend to imitate observed attitudes and behaviors that seem valuable, while avoiding those that seem harmful or unproductive.

412. Role models play a particularly pronounced role in this social learning process, and across the lifespan the relative importance of different role models varies. Among children, parents and authority figures loom large, but tweens and teens begin to pay more attention to similar-age high-status peers, and to slightly older role models who derive status because their age lends them a sense of experience.[890] Behavioral research demonstrates that tweens and teens are especially attuned to peer and older-peer influence. For example, one recent study examined

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887 Fagell, P. (2019), "How childhood has changed for tweens," *Phi Delta Kappan*, 100(7), 8–12; https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/.

888 See, e.g., Kretchmar, J. (2024), "*Social Learning Theory: EBSCO*," EBSCO Information Services, Inc; Nabavi, R. T., & Bijandi, M. S. (2012), "Bandura's social learning theory & social cognitive learning theory," *Journal of Personality and Social Psychology*, 1:589.

889 Bandura, A. (1977), *Social Learning Theory,* Englewood Cliffs, NJ: Prentice-Hall.

890 See, e.g., Brown, B. B., & Larson, J. (2009), "Peer relationships in adolescence," In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology: Contextual Influences on Adolescent Development* (3rd ed., pp. 74–103); McArthur, B.A., Madigan, S., & Korczak, D. J. (2021), "Tweens are not teens: the problem of amalgamating broad age groups when making pandemic recommendations," *Canadian Journal of Public Health,* 112:984-987.

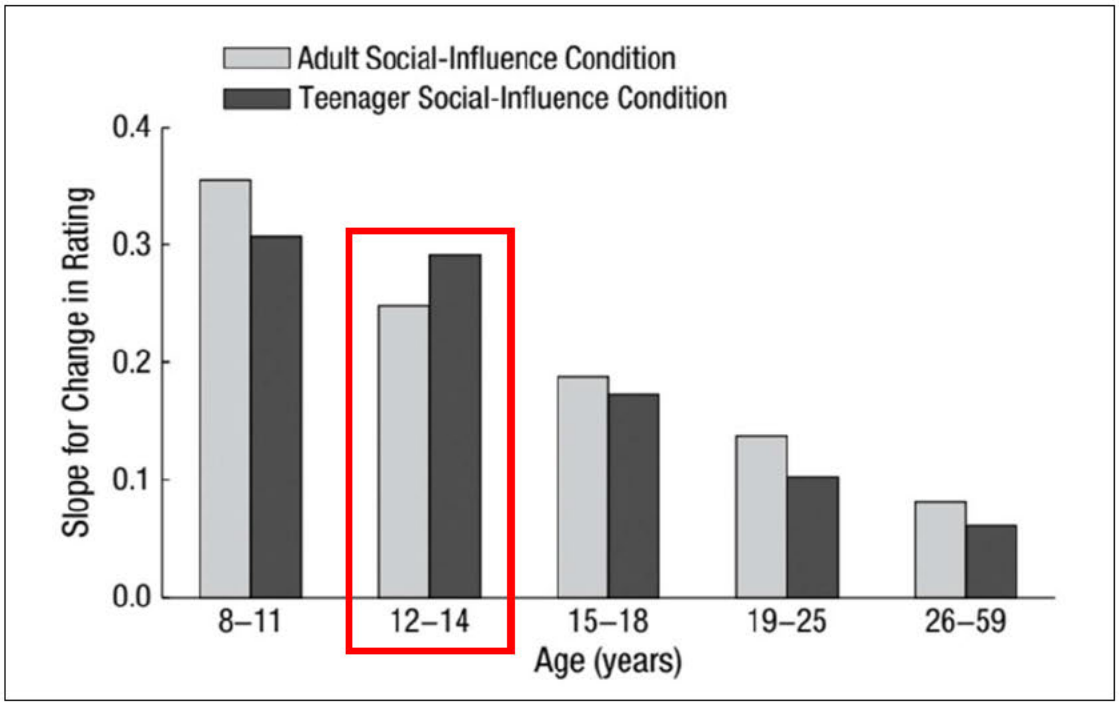
how people of different ages—from as young as 8 years old to 59-year-old adults—assessed the degree of risk inherent in a series of precarious behaviors (e.g., riding a bike without a helmet).[891] Participants were provided with information about how either a group of adults or a group of teenagers (12-18 years old) rated the riskiness of each situation, and then provided their own assessment. Most age groups were more heavily influenced by the adult ratings than by the teen ratings, mirroring the adults' assessments of the riskiness of the twelve situations. In contrast, tweens aged 12 to 14 years showed the opposite pattern of responses, as seen highlighted in Figure 12, below. Their ratings were more heavily influenced by the ratings of other teens than they were by the adult ratings. The authors of the study concluded that "early adolescence is a pivotal phase in which individuals begin to challenge the authority and experience of adults and place higher value on the opinions of other teenagers than on opinions of adults."[892]

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891 Knoll, L. J., Magis-Weinberg, L., Speekenbrink, M., & Blakemore, S.-J. (2015), "Social Influence on Risk Perception During Adolescence," *Psychological Science*, 26(5):583-592, p. 584.

892 Knoll, L. J., Magis-Weinberg, L., Speekenbrink, M., & Blakemore, S.-J. (2015), "Social Influence on Risk Perception During Adolescence," *Psychological Science*, 26(5):583-592, p. 590.

Figure 12. In contrast to younger and older audiences, only tweens are more heavily influenced by teenagers than by adults[893]



413. Much of this older-to-younger influence happens in the context of sibling relationships.[894] Older siblings model both desirable and undesirable behavior for their younger siblings, particularly as those younger siblings approach adolescence. Among other examples, researchers have shown that older siblings shape how their younger siblings perceive alcohol consumption,[895] risky sexual behavior,[896] and delinquent behavior,[897] and how they develop

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893 Knoll, L. J., Magis-Weinberg, L., Speekenbrink, M., & Blakemore, S.-J. (2015), "Social Influence on Risk Perception During Adolescence," *Psychological Science*, 26(5):583-592, p. 587, Figure 2c.

894 See, e.g., East, P. (2009), "Adolescents' relationships with siblings," In R. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed., Vol. 2, pp. 43–73). New York: Wiley; Kowal, A. & Blinn-Pike, L., (2004), "Sibling influences on adolescents' attitudes toward safe sex practices," *Family Relations,* 53:377–384; McHale, S. M., Updegraff, K. A., & Whiteman, S. D. (2012), "Sibling relationships and influences in childhood and adolescence," *Journal of Marriage and Family,* 74:913-930.

895 Whiteman, S. D., Jensen, A. C., Mustillo, S. A., & Maggs, J. L. (2016), "Understanding sibling influence on adolescents' alcohol use: Social and cognitive pathways," *Addictive Behaviors,* 53:1-6.

896 Whiteman, S. D., Zeiders, K. H., Killoren, S. E., Rodriguez, S. A., & Updegraff, K. A. (2014), "Sibling influence on Mexican-origin adolescents' deviant and sexual risk behaviors: The role of sibling modeling," *Journal of Adolescent Health,* 54:587-592.

897 Slomkowski C, Rende R, Conger KJ, Simons RL, Conger RD. (2001), "Sisters, brothers, and delinquency: evaluating social influence during early and middle adolescence," *Child Development,* 72(1):271-83.

social skills and empathy.[898] Older teen siblings also fast-track the development of their younger siblings' tastes, preferences, and behaviors by exposing their younger siblings to experiences and past-times that are designed for older teens. Put simply, tweens and younger teens observe the behavior of their older siblings, and learn to imitate or mimic the behaviors and attitudes expressed by their older siblings.[899]

414. Tweens also look up to desirable elders beyond their families, and businesses have long recognized that teen and adolescent influencers have the capacity to shape the behaviors and buying patterns of tweens. A recent and widely-circulated Vogue Business article[900] described so-called "Sephora Kids"—a large "gaggle" of tweens who, "mostly equipped with their parents' cash, love adult brands and products, from $90 Drunk Elephant serums and $30 Rare Beauty blushes to Sol de Janeiro body mists and Laneige lip masks in every colour of the rainbow."[901] These tweens are largely inspired to explore Sephora's make-up lines after they watch "how to" beauty tutorials and influencer content, often featuring teen and adolescent actors and models who are several years older than the viewers are themselves. E-cigarette brand JUUL similarly used older models to appeal to younger teens and tweens in its print and video campaigns.[902] JUUL recognized that tweens and younger teens were modeling their behavior substantially on

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898 Tucker, C. J., Updegraff, K. A., McHale, S. M., & Crouter, A. C. (1999), "Older siblings as socializers of younger siblings' empathy," *Journal of Early Adolescence,* 19, 176-198.

899 This is the heart of Bandura's social learning theory, which indicates that exposure to novel experiences is one critical driver of learning, and the development of new preferences: Bandura, A. (1977), *Social Learning Theory,* Englewood Cliffs, NJ: Prentice-Hall.

900 Radin, S. (January 28, 2025). The "Sephora Kids" aren't going anywhere. *Vogue Business.* Retrieved from: https://www.voguebusiness.com/story/beauty/the-sephora-kids-arent-going-anywhere.

901 Radin, S. (January 28, 2025). The "Sephora Kids" aren't going anywhere. *Vogue Business.* Retrieved from: https://www.voguebusiness.com/story/beauty/the-sephora-kids-arent-going-anywhere.

902 See, e.g., Huang, J., Duan, Z., Kwok, J., Binns, S., Vera, L. E., Kim, Y., Szczypka, G., & Emery, S. L. (2019), "Vaping versus Juuling: how the extraordinary growth and marketing of JUUL transformed the US retail e-cigarette market," *Tobacco Control,* 28:146-151; Chen-Sankey, J., Unger, J. B., Bansal-Travers, M., Niederdeppe, J., Bernat, D., Choi, K., & Villanti, A. C. (2019), "E-cigarette marketing exposure and subsequent experimentation among youth and young adults," *Pediatrics,* 144:e20191119.

the behavior of higher-status, older teens and adolescents, and so capitalized on this pattern in its marketing campaigns.

415. Whereas older teens influence younger teens and tweens, this pattern tends to be asymmetric; older teens learn from their peers, and to some extent from adults, but they are largely uninterested in the attitudes, values, and behavioral patterns of younger teens and tweens.[903] Social learning tends to be largely aspirational, particularly among adolescents, and children, tweens, and younger teens are not aspirational targets for older teens. This asymmetry is evident in the adult-mimicking behavioral patterns of teens, particularly as they develop and begin to take on the attributes associated with young adults.[904] Many businesses that seek to appeal to tweens and teens recognize this asymmetry, and accordingly target and position their products for tweens and young teens using material that may appear superficially designed for older teens.

C. Certain content is particularly appealing to tweens and young teens

416. Tweens are particularly drawn to content that fulfills their developmental needs. Among other types of content, they seek out: (a) age- and developmentally-appropriate entertainment; (b) social validation from peers; (c) creative and educational content that exposes them to new ideas and interests; (d) experiences and content that appeal to or feature teens; and (e)

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903 See, e.g., Bandura, A. (1977), *Social Learning Theory,* Englewood Cliffs, NJ: Prentice-Hall.

904 Again, the JUUL and Sephora examples illustrate this asymmetry, and more broadly the tendency for teens to assimilate to the behavioral patterns of young adults: Radin, S. (January 28, 2025). The "Sephora Kids" aren't going anywhere. *Vogue Business.* Retrieved from: https://www.voguebusiness.com/story/beauty/the-sephora-kids-arent-going-anywhere; Huang, J., Duan, Z, Kwok, J., Binns, S., Vera, L. E., Kim, Y., Szczypka, G., & Emery, S. L. (2019), "Vaping versus Juuling: how the extraordinary growth and marketing of JUUL transformed the US retail e-cigarette market," *Tobacco Control,* 28:146-151; Chen-Sankey, J., Unger, J. B., Bansal-Travers, M., Niederdeppe, J., Bernat, D., Choi, K., & Villanti, A. C. (2019), "E-cigarette marketing exposure and subsequent experimentation among youth and young adults," *Pediatrics,* 144:e20191119.

aspirational content that introduces them to new products and ideas.[905]

417. Many tweens engage with social media platforms for entertainment purposes, and much of that content is humor-based and short-form in nature. Researchers at Common Sense Media found that "watching online videos on sites such as YouTube or TikTok is the media activity young people enjoy doing the most, by far," with 64% of tweens aged 8-12 reporting watching videos online every day.[906] These sites provide short-form, engaging, and visually stimulating content, such as memes, comedic videos, and viral challenges. For example, tweens are attracted to, and have actively participated in, viral challenges like the "Try Not to Laugh" challenge, which feature short, comedic clips that encourage engagement through Likes, Comments, and "Duets" (response videos that play side-by-side with the original video).[907]

418. As the "Try Not to Laugh" challenge suggests, much of this entertainment is social in nature. Consistent with the developmental milestones of tweenhood, tweens become increasingly interested in online content that involves social engagement and social feedback cues. These social cues perform two roles: first, they enable tweens to form an increasingly solid sense of who they are as individuals, and as members of social groups that matter to them; and second,

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905 For broad discussions, see, e.g.: Bulger, M., Madden, M., Sobel, K., & Davison, P. (2021), "The missing middle: Reimagining a future for tweens, teens, and public media," *Joan Ganz Cooney Center at Sesame Workshop.* Retrieved from: https://joanganzcooneycenter.org/wp-content/uploads/2021/05/jgcc_missingmiddle.pdf; Livingstone, S. (2002), *Young people and new media: Childhood and the changing media environment.* London: SAGE Publications; Common Sense Media. (2022), "The common sense census: Media use by tweens and teens," *Common Sense Media.* Retrieved from https://www.commonsensemedia.org/research.

906 Common Sense Media. (2022), "The common sense census: Media use by tweens and teens," *Common Sense Media.* Retrieved from https://www.commonsensemedia.org/research.

907 Elgersma, C., (2019), "13 Online Challenges You Kid Already Knows About," *Common Sense Media*, https://www.commonsensemedia.org/articles/13-online-challenges-your-kid-already-knows-about. See, also, https://www.commonsensemedia.org/sites/default/files/research/report/2020_zero_to_eight_census_final_web.pdf; https://support.tiktok.com/en/using-tiktok/creating-videos/duets-settings.

they provide hedonic (or pleasurable) rewards for desirable behavior.[908] Indeed, considerable behavioral and neuroscientific research demonstrates that tweens and early teens are particularly sensitive to social feedback, experiencing amplified highs and lows in response to positive and negative feedback, respectively.[909] The unpredictable nature of this feedback, and the specter of negative feedback, function as motivational hooks, luring tweens and early teens to hunt for Likes and other positive feedback despite the threat of censure and disapproval.[910]

419. Many tweens also seek out content that exposes them to creative or educational content, focusing particularly on art and craft projects, gaming, coding challenges, and a wide range of do-it-yourself projects.[911] For example, the #slime hashtag on Instagram features thousands of posts created by and for tweens demonstrating slime recipes and projects.[912] These pursuits fulfill entertainment needs, but they also function to make tween and early teen creators more "interesting" to audiences of their peers, particularly on social media platforms.[913]

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908 See, e.g., Swann, W. B., Jr. (1983), "Self-verification: Bringing social reality into harmony with the self," In J. Suls & A. G. Greenwald (Eds.), *Social psychological perspectives on the self* (Vol. 2, pp. 33–66). Lawrence Erlbaum Associates; Cooley, C. H. (1902), *Human Nature and the Social Order,* New York: Charles Scribner's Sons; Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987), *Rediscovering the Social Group: A Self-Categorization Theory*, Oxford, UK: Basil Blackwell.

909 Crone, E.A., & Konijn, E.A. (2018), "Media use and brain development during adolescence," *Nature Communications,* 9:588; da Silva Pinho, A., Céspedes Izquierdo, V., Lindström, B., & van den Bos, W. (2024), "Youths' sensitivity to social media feedback: A computational account," *Science Advances,* 10:eadp8775; Burrow, A. L., & Rainone, N. (2017), "How many likes did I get? Purpose moderates links between positive social media feedback and self-esteem," *Journal of Experimental Social Psychology,* 69:232–236; Smith, D., Leonis, T., & Anandavalli, S. (2021), "Belonging and loneliness in cyberspace: Impacts of social media on adolescents' well-being," *Australian Journal of Psychology,* 73:12–23; Timeo, S., Riva, P., & Paladino, M. P. (2020), "Being liked or not being liked: A study on social-media exclusion in a preadolescent population," *Journal of Adolescence,* 80:173–181.

910 For an extended discussion of such variable reward cues, and how they function to ensnare social media users, see: Alter, A. L. (2017), *Irresistible: The rise of addictive behavior and the business of keeping us hooked,* New York: Penguin Press. For a classic treatise, see: Ferster, C. B., & Skinner, B. F. (1957), *Schedules of reinforcement,* New York: Appleton-Century-Crofts; for a more recent review, see: Staddon, J. E. R., & Cerutti, D. T. (2003), "Operant conditioning," *Annual Review of Psychology,* 54:115–144.

911 Lenhart, A. (2015), "Teens, social media & technology overview." *Pew Research Center.* Retrieved from https://www.pewresearch.org/internet/2015/04/09/teens-social-media-technology-2015/

912 https://www.today.com/parents/got-slime-trend-creating-tween-bosses-across-u-s-t108682.

913 Yau, J.C. and Reich, S.M. (2019), "'It's just a lot of work': Adolescents' self-presentation norms and practices on Facebook and Instagram," *Journal of Research on Adolescence,* 29:196-209.

420. Consistent with these self-presentation concerns, tweens tend to seek out aspirational content that introduces them to older teens, influencers, and celebrities. For example, girls tend to seek out older influencers who are perceived to be "experts" in fashion, beauty, and lifestyle trends.[914] The "Sephora Kids" described in the Vogue Business article discussed earlier exemplify this tendency. The term "Sephora Kids" broadly describes tweens who engage with high-end beauty brands and influencers who are significantly older than they are, and who demonstrate make-up and beauty routines that are positioned more squarely for older adolescent and young adult audiences.[915] Tween boys similarly seek out older influencers who introduce them to sports, gaming, and other content that might appear to be positioned for older audiences.[916]

421. Children and tweens possess a unique set of interests that ranges from more traditionally child-focused content, like cartoons and child celebrities, to content that helps them to identify with their emerging teen selves. Critically, this tendency to seek out content that may appear to target older audiences means that a platform may be directed to children based on the presence of late teen or adult influencers or celebrities who appeal to the aspirational interests of children and tweens.

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914 See, e.g., Rideout, V., & Robb, M. B. (2019), "The common sense census: Inside the 21st-century tween's digital life," *Common Sense Media.* Retrieved from https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-tweens-and-teens

915 Radin, S. (January 28, 2025). The "Sephora Kids" aren't going anywhere. *Vogue Business.* Retrieved from: https://www.voguebusiness.com/story/beauty/the-sephora-kids-arent-going-anywhere.

916 JUUL was one such lifestyle brand with older influencers that appealed to boys and girls: Huang, J., Duan, Z, Kwok, J., Binns, S., Vera, L. E., Kim, Y., Szczypka, G., & Emery, S. L. (2019), "Vaping versus Juuling: how the extraordinary growth and marketing of JUUL transformed the US retail e-cigarette market," *Tobacco Control,* 28:146-151; Chen-Sankey, J., Unger, J. B., Bansal-Travers, M., Niederdeppe, J., Bernat, D., Choi, K., & Villanti, A. C. (2019), "E-cigarette marketing exposure and subsequent experimentation among youth and young adults," *Pediatrics,* 144:e20191119.

XVI. META FOCUSES ON ATTRACTING CHILD USERS TO ITS PLATFORMS

422. In this section, I consider Meta's interest in studying, attracting, and retaining young users across its platforms and review its efforts to design separate social media platforms for children. This analysis of Meta's company-wide focus on child users and their value provides important context for my later evaluation of the Instagram and Facebook platforms, and the degree to which each is child-directed.

A. Meta focuses on young users as it prioritizes growth and engagement

423. To social media platforms like Meta's Platforms, a population of young users that replenishes itself over time as earlier cohorts age is critical because these users function as ambassadors for the freshness and currency of those platforms; they post content which in turn attracts new and existing users to the platforms;[917] and their relative youth gives them the capacity to produce more lifetime revenue than older demographic groups.[918]

424. Young users are so important to Meta that the company's executives encouraged its employees to share youth insights across Meta's family of apps. "Youth Research Unite," a presentation designed to unite the youth-focused teams across various departments at Meta, explained that a platform that attracted teens would also become more successful overall: "Teens are the linchpin to our success with Youth…Building to attract teens is the most strategic way to build for everyone in the family."[919] This focus on attracting young users dates back at least as early as 2013, when Mr. Zuckerberg noted that Facebook was competing for users under the age

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917 https://www.nytimes.com/2006/09/12/technology/12online.html.

918 META3047MDL-003-00085182, "Market Strategy Updates – 10/5/18" email, October 2018 at 184-186. See also, e.g., Clemons, E. K. (2009), "The complex problem of monetizing virtual electronic social networks," *Decision Support Systems,* 48:46-56; Tuten, T. L., & Solomon, M. R. (2021), *Social Media Marketing (4th ed.),* London: Sage Publications.

919 META3047MDL-014-00009592, "Youth Research Unite," June 2021, at 666.

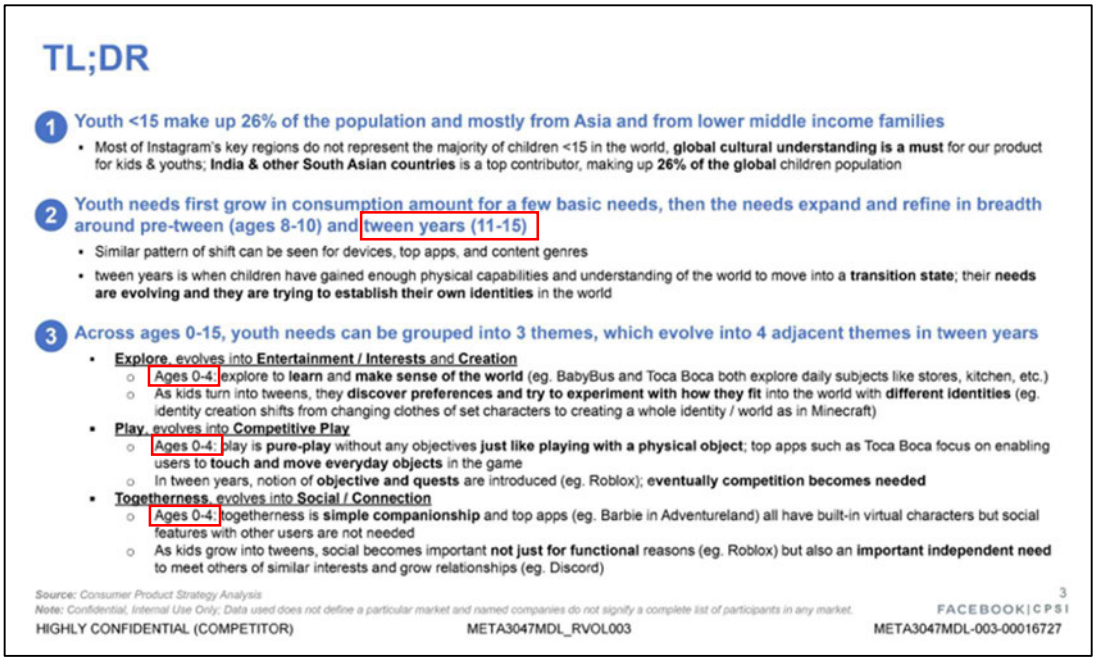
of 13 with Twitter, Snapchat, and "other services that fill [users'] social needs and don't ask them to specify their ages."[920] He went on to propose that the data showing that fewer people in the "youngest demographics" are signing up for Facebook "suggests there is a major strategic reason to make it possible for younger folks to sign up."[921] Meta also commissioned research and quantified the importance of acquiring users when they're teens or pre-teens in a 2018 internal presentation titled "Long Term Retention: The Young Ones are the Best Ones and Other Learnings," determining that users that signed up earlier continued to use the company's platforms more reliably, with 10-12-year-olds having the highest retention of any age group.[922]

425. Meta also regularly varied how it defined the terms "tween" and "young teen," sometimes including and sometimes excluding 13-year-olds from its definition of "tween," and sometimes combining tweens and young teens to form a single "youth" category. It did so, for example, in a 2021 study of the broader social media landscape among young users as part of a "Consumer Product Strategy Analysis."[923] In the presentation, Meta consistently defined "youth" as users under the age of 15, and aggregated ages 11 to 15 to form a monolithic group (see red boxes in Figure 13-Figure 15 below). Meta's tendency to group tweens and early teens together mirrors the academic research on adolescence I discussed in Section XV above, which describes tweens and teens as similar across many measures, dimensions, and characteristics.

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920 META3047MDL-050-00331053, "Re: Revisiting Project Family" email, July 14, 2013, at 054.
921 META3047MDL-050-00331053, "Re: Revisiting Project Family" email, July 14, 2013, at 054.
922 META3047MDL-047-00995641, "Long Term Retention: The Young Ones are the Best Ones and Other Learnings," November 2018 at 642.
923 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 725, 737, 742.

Figure 13. Slide from Youth Landscape deck analyzing interests of children as young as 0, and grouping ages 11-15 under the label "tween years"[924]



TL;DR

1. Youth <15 make up 26% of the population and mostly from Asia and from lower middle income families
   - Most of Instagram's key regions do not represent the majority of children <15 in the world, **global cultural understanding is a must** for our product for kids & youths; **India & other South Asian countries** is a top contributor, making up **26% of the global** children population
2. Youth needs first grow in consumption amount for a few basic needs, then the needs expand and refine in breadth around pre-tween (ages 8-10) and tween years (11-15)
   - Similar pattern of shift can be seen for devices, top apps, and content genres
   - tween years is when children have gained enough physical capabilities and understanding of the world to move into a **transition state**; their **needs are evolving and they are trying to establish their own identities** in the world
3. Across ages 0-15, youth needs can be grouped into 3 themes, which evolve into 4 adjacent themes in tween years
   - **Explore**, evolves into **Entertainment / Interests** and **Creation**
     - Ages 0-4: explore to **learn** and **make sense of the world** (eg. BabyBus and Toca Boca both explore daily subjects like stores, kitchen, etc.)
     - As kids turn into tweens, they **discover preferences and try to experiment with how they fit** into the world with **different identities** (eg. identity creation shifts from changing clothes of set characters to creating a whole identity / world as in Minecraft)
   - **Play**, evolves into **Competitive Play**
     - Ages 0-4: play is **pure-play** without any objectives **just like playing with a physical object**; top apps such as Toca Boca focus on enabling users to **touch and move everyday objects** in the game
     - In tween years, notion of **objective and quests** are introduced (eg. Roblox); **eventually competition becomes needed**
   - **Togetherness**, evolves into **Social / Connection**
     - Ages 0-4: togetherness is **simple companionship** and top apps (eg. Barbie in Adventureland) all have built-in virtual characters but social features with other users are not needed
     - As kids grow into tweens, social becomes important **not just for functional** reasons (eg. Roblox) but also an **important independent need** to meet others of similar interests and grow relationships (eg. Discord)

Source: Consumer Product Strategy Analysis
Note: Confidential, Internal Use Only; Data used does not define a particular market and named companies do not signify a complete list of participants in any market.

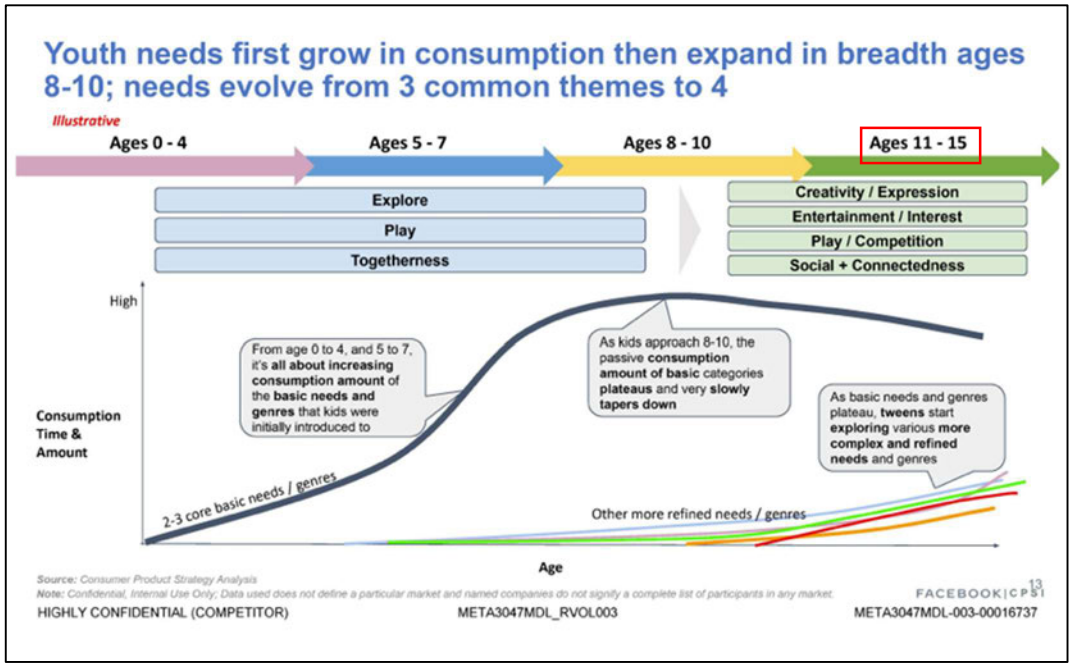
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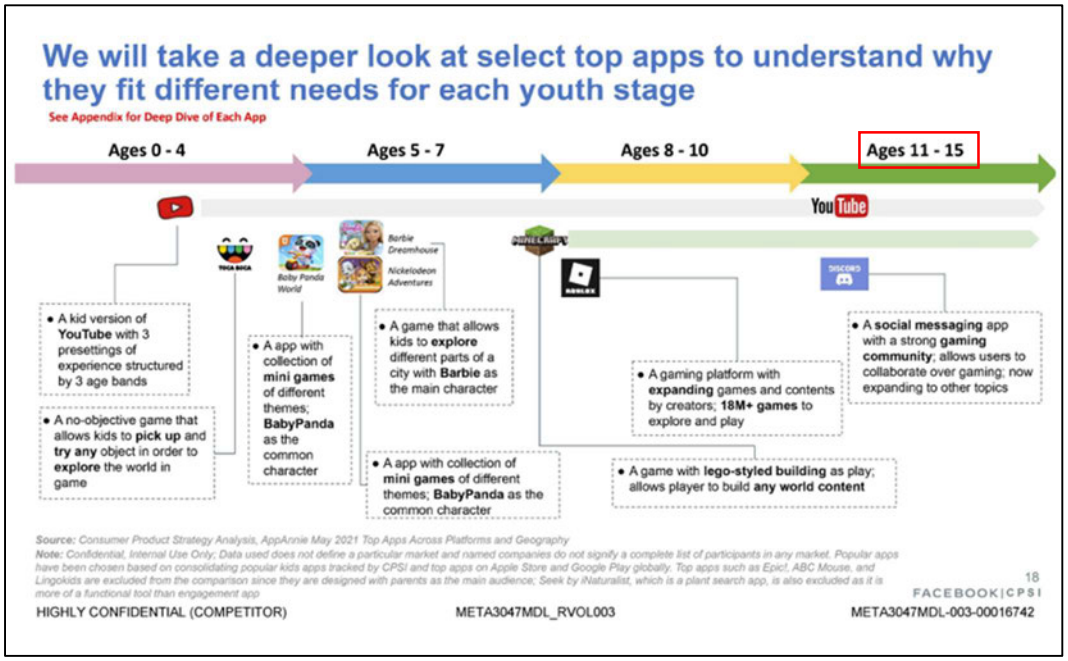
924 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 725.

Figure 14. 11-15-year-olds grouped together in a slide showing a graphic based on Facebook's Consumer Product Strategy Analysis[925]



925 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 737.

Figure 15. An additional slide based on the same analysis in the same slide deck grouping 11-15-year-olds together[926]



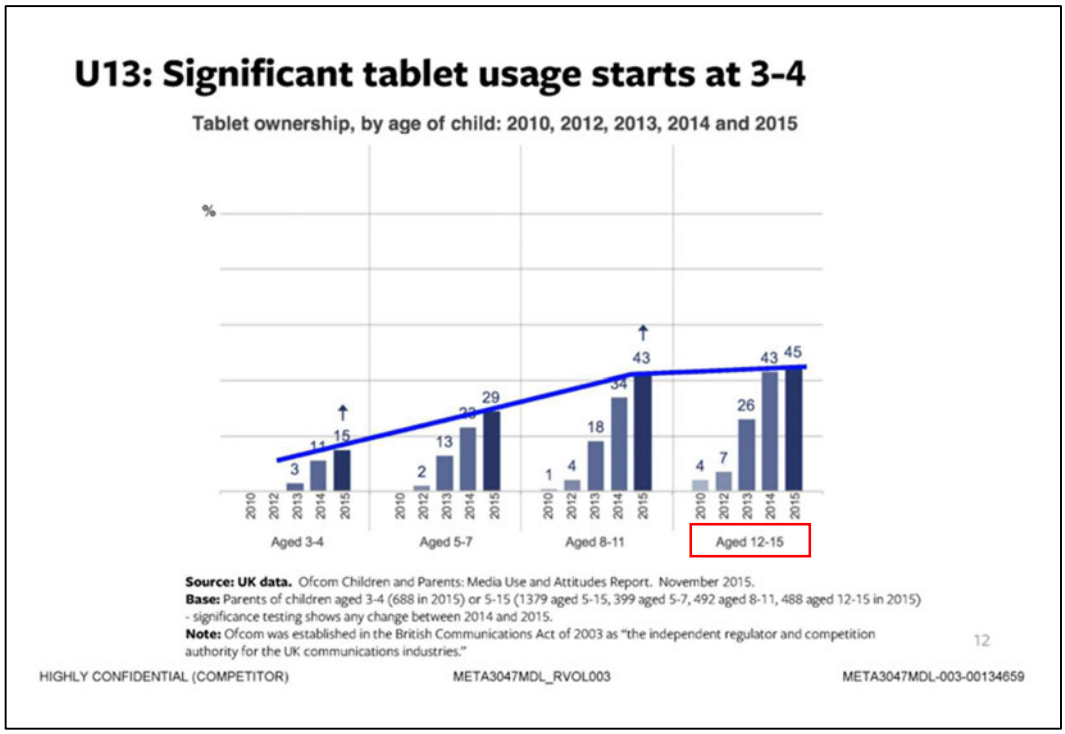
426. Each of these presentation slides illustrates that Meta repeatedly understood "young teens" to include both tweens (under-13s) and young teens (over-13s). When the company sought to design more compelling products for users between 11 and 15 years old, it described its understanding of the interests, needs, and online behaviors of those users monolithically, recognizing that its platforms similarly incorporated, and would in the future be designed to incorporate, features directed to 11- and 12-year-olds where it designed the platforms to appeal to early teens.

427. Other research at Meta used similar age brackets. One internal presentation titled "2017 Teens Strategic Focus" focused broadly on "align[ing] on goals for teens" and "shar[ing] initial research…on key age and geo segments,"[927] and aggregated 12-15-year-olds in a study of tablet

926 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 742.
927 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 649.

ownership rates (see Figure 16, below.)

Figure 16. Slide from internal presentation grouping 12-15-year-olds together[928]

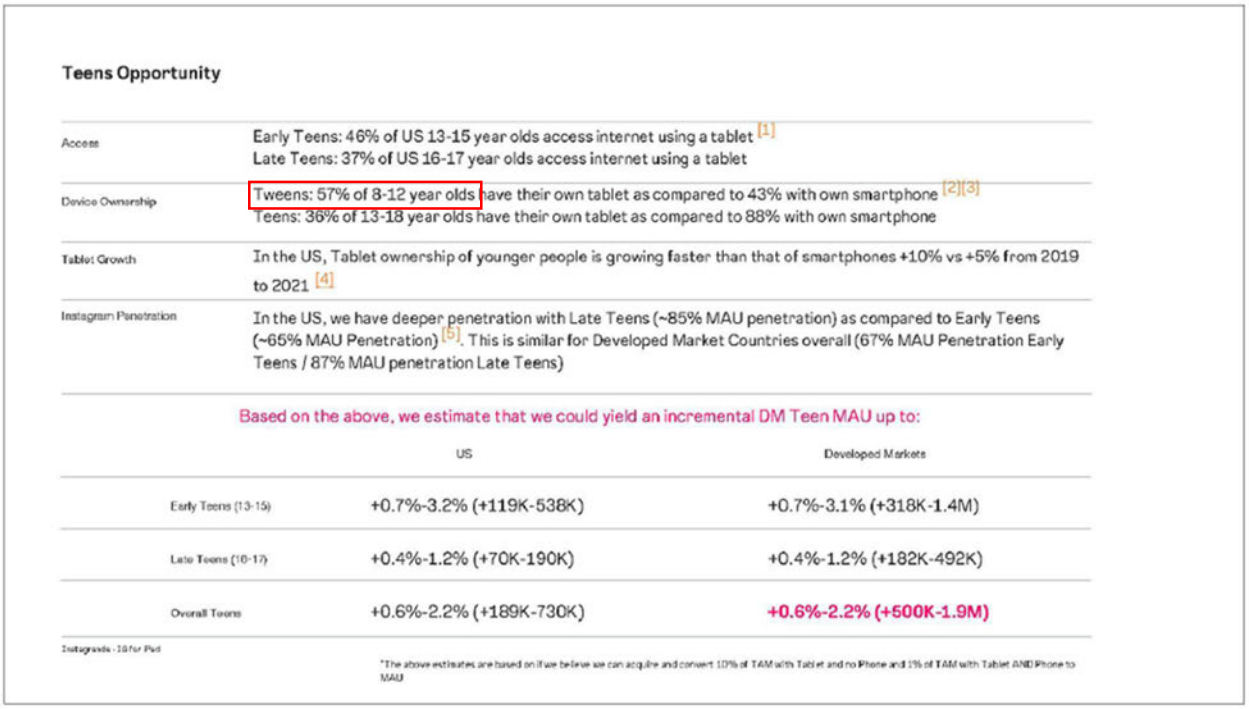


428. An internal Instagram presentation from early 2023 proposing the development of an Instagram app for iPad and other tablet devices posited that such an app would help to attract both tweens and teens to the platform.[929] According to the presentation, "When tweens and teens are exposed to IG on a tablet … before having a phone, their consideration and affinity for IG will increase, resulting in more early teens choosing IG when they get their phones."[930] A subsequent slide, seen in Figure 17, below, shows that tweens own more tablets than smartphones, which reverses when they become teens. Meta released an Instagram tablet app

928 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 659.
929 META3047MDL-050-00224219, "Instagrande: Instagram for iPad – Community Labs," at 223, 225, 227.
930 META3047MDL-050-00224219, "Instagrande: Instagram for iPad – Community Labs," at 225.

later that year.[931]

Figure 17. Slide showing stats on tablet ownership, including by tweens[932]



Teens Opportunity

Access	Early Teens: 46% of US 13-15 year olds access internet using a tablet [1] Late Teens: 37% of US 16-17 year olds access internet using a tablet
Device Ownership	Tweens: 57% of 8-12 year olds have their own tablet as compared to 43% with own smartphone [2][3] Teens: 36% of 13-18 year olds have their own tablet as compared to 88% with own smartphone
Tablet Growth	In the US, Tablet ownership of younger people is growing faster than that of smartphones +10% vs +5% from 2019 to 2021 [4]
Instagram Penetration	In the US, we have deeper penetration with Late Teens (~85% MAU penetration) as compared to Early Teens (~65% MAU Penetration) [5]. This is similar for Developed Market Countries overall (67% MAU Penetration Early Teens / 87% MAU penetration Late Teens)

Based on the above, we estimate that we could yield an incremental DM Teen MAU up to:

	US	Developed Markets
Early Teens (13-15)	+0.7%-3.2% (+119K-538K)	+0.7%-3.1% (+318K-1.4M)
Late Teens (16-17)	+0.4%-1.2% (+70K-190K)	+0.4%-1.2% (+182K-492K)
Overall Teens	+0.6%-2.2% (+189K-730K)	**+0.6%-2.2% (+500K-1.9M)**

Instagrande - iPad

*The above estimates are based on if we believe we can acquire and convert 10% of TAM with Tablet and no Phone and 1% of TAM with Tablet AND Phone to MAU

429. Meta has chosen to prioritize growth, because it recognizes that even a platform with billions of users needs to constantly attract new users to avoid declining over time. Users who join a platform young are much more likely to stay on that platform, making them particularly important to the platform's growth. Because attracting young users is so important to ongoing relevance and growth, even small shifts in the behavior of such users can motivate the company to investigate such shifts and their consequences. Discussions of declines in the pace of growth or "losing" young users do not mean there are no young users on the company's platforms—as discussed in Sections XVII.D and XIX.C, there is reliable empirical evidence that a significant

931 Ben Schoon, *Instagram finally has a tablet layout, but it's only on Android [U]*, 9to5Google (Sep. 1, 2023), https://9to5google.com/2023/09/01/instagram-tablet-foldable-layout-android/.

932 META3047MDL-050-00224219, "Instagrande: Instagram for iPad – Community Labs," at 227.

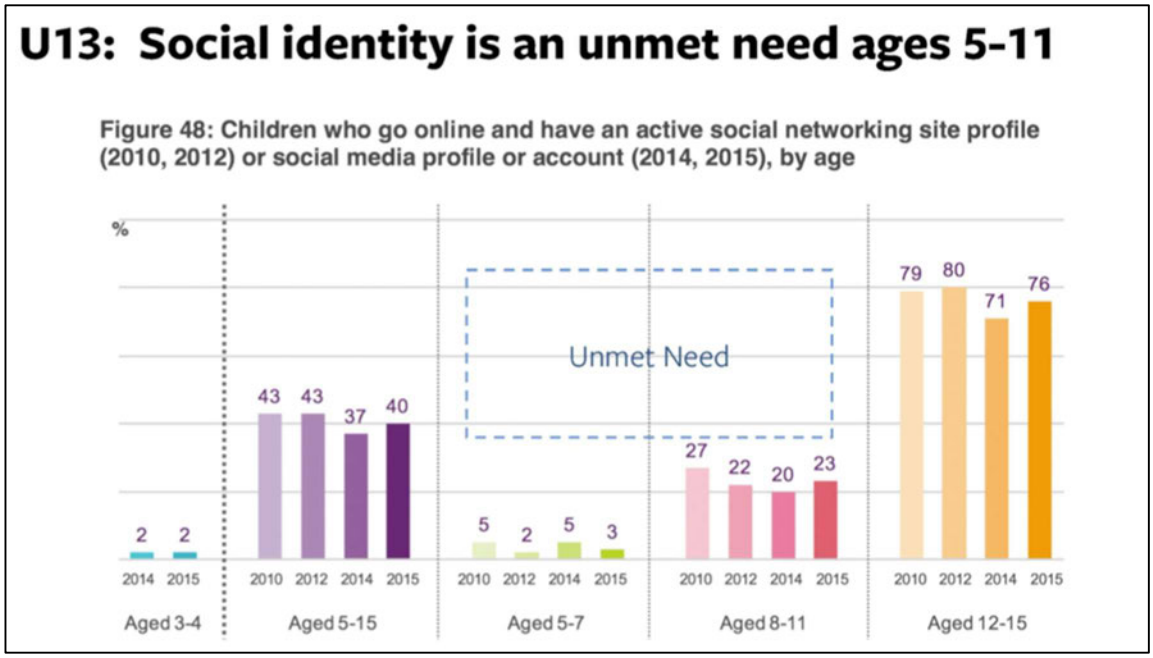
portion of all children in the United States are users of Instagram and Facebook—but instead reflects the company's vigilance in response to relatively minor changes that reflect increased competition and other internal and external catalysts. Though Meta's policies ostensibly prohibit children under the age of 13 from creating accounts on Facebook and Instagram,[933] the company nonetheless saw value in attracting under-13 users to, and retaining such users on, its family of apps. Among other strategies, Meta attempted to introduce children under the age of 13 to its platforms by developing Messenger Kids and Instagram Kids—platforms intended to explicitly targeted children.

B. Messenger Kids

430. In a 2017 presentation designed to "align on goals for teens," Meta described an "unmet need" for children between 5 and 11 who do not "have an active social networking site profile,"[934] but who are interested in the possibility of joining social media platforms, as shown in Figure 18 below. The same presentation noted that "significant tablet usage starts at 3-4" and that by the time children are 10 years old "smartphones dominate."[935]

933 See, https://help.instagram.com/3237561506542117 and https://www.facebook.com/help/958848942357089.
934 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 661.
935 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 659-660.

Figure 18. Graph from 2016 Meta presentation about strategic focus on teens identifies "unmet need" among children[936]



431. Meta was concerned with its ability to continue to capture child users on Facebook and Instagram because "smartphone and app adoption…is taking place earlier, leaving a minimum of 3 years where [Meta is not] actively building a relationship with [children]."[937] According to a script to be delivered by Mr. Zuckerberg at a 2017 company-wide presentation:

> But today, kids are getting their first devices at 7, 8, or 9. These kids are young enough that they need a different service. Right now they have good entertainment and games, but not great communication services where they can safely communicate with their parents, family and a few friends their parents can control.[938]

432. To address this "unmet need" among 5-11-year-olds, Meta began developing a new app named Messenger Kids (often abbreviated to "MK" in internal documents).[939] Meta stated that

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936 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 661.
937 META 3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 460.
938 META3047MDL-014-00381713, "Teens All Hands" email thread, May 2017 at 713.
939 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 663. Early documents appear to call this app "Facebook One," "Project Neo," and/or "Talk".

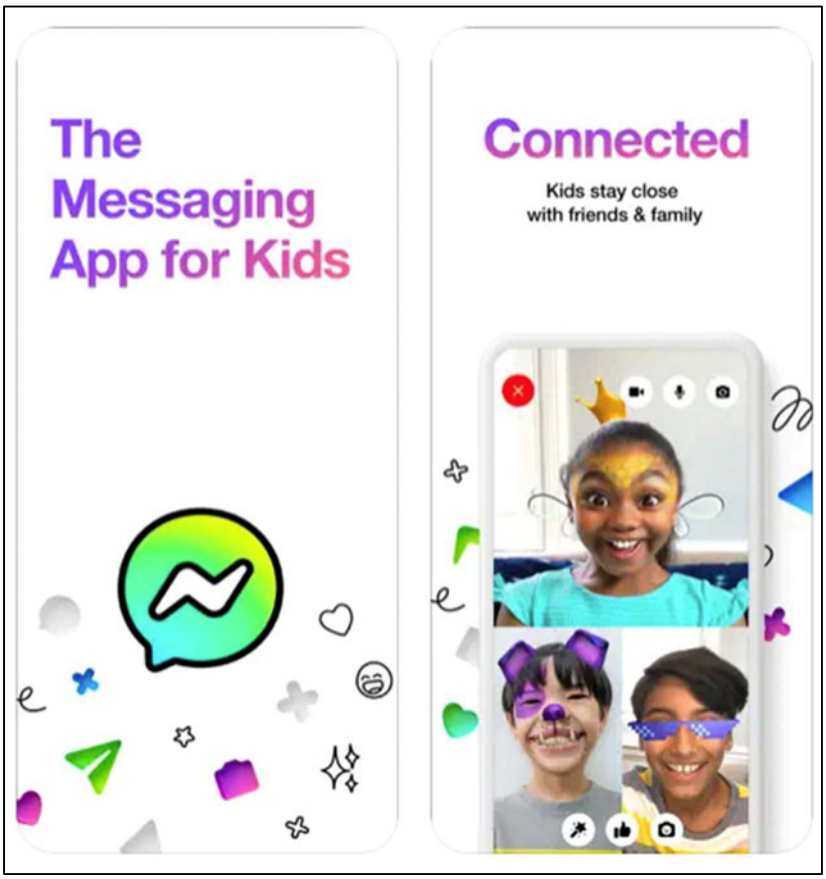
its plan for Messenger Kids included text and video messaging capabilities, as well as gaming features,[940] and explained its decision to introduce Messenger Kids internally by noting that an app for children "may give [Meta across its family of apps] an advantage to retain kids as they become teens."[941] In Meta's view, "it's easier to keep winning than to win back" and a user's "presence at [a] younger age can impact usage at older age."[942]

433. Messenger Kids launched as a separate app in December 2017.[943] In developing Messenger Kids, Meta conducted surveys of children as young as 6 years old in order to understand their interests.[944] Messenger Kids was embedded with elements that were intended to appeal to young children, including its bright, cartoonish logo, shown in Figure 19 below, and the design and aesthetics of the characters, stickers, filters, and games on the platform.[945] When Meta announced Messenger Kids publicly, it advertised a "library of kid-appropriate and specially chosen GIFs, frames, stickers, masks and drawing tools," and "playful masks, emojis and sound effects [that] bring conversations to life."[946] Internally, Meta noted that the app's "visual identity is young and it feels like a 'tether' to childhood."[947]

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940 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 663.
941 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 663.
942 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 677.
943 https://techcrunch.com/2017/12/04/facebook-messenger-kids/ and https://about.fb.com/news/2017/12/introducing-messenger-kids-a-new-app-for-families-to-connect/.
944 META3047MDL-014-00071450, "Q&A Briefing before December 14, 2017."; META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile."
945 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 423- 435.
946 https://about.fb.com/news/2017/12/introducing-messenger-kids-a-new-app-for-families-to-connect/.
947 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 424.

Figure 19. Images of Messenger Kids app in the Apple app store[948]



434. Messenger Kids has attracted a significant number of users. The platform has been downloaded over 50 million times in the Google Play Store,[949] and is ranked 6th in social messaging apps on the Apple App Store.[950] Internal Meta data showed that Messenger Kids had 9 million monthly active users in May of 2020.[951] Meta appraised this success in internal documents as "[proof] that MK can be used to acquire young kids,"[952] and that Messenger Kids sets children on the path to building networks within Meta's platforms, even if those networks

948 https://apps.apple.com/us/app/messenger-kids/id1285713171.
949 https://play.google.com/store/search?q=messenger%20kids&c=apps&hl=en.
950 As of March 2024. https://apps.apple.com/ca/app/messenger-kids/id1285713171.
951 META3047MDL-046-00285727, "IG Youth Proposal," undated, at 730.
952 META3047MDL-003-00160444, "Fwd: MK account + Instagram = Future FB users," October 9, 2020, at 444.

are "initially limited to parents and siblings."[953]

435. According to Meta personnel, Messenger Kids was designed to appeal to young children who would one day import their Messenger Kids networks to Facebook and Instagram,[954] thereby ensuring that young, first-time Facebook and Instagram users would derive immediate value from those platforms as "connectedness correlates with retention."[955] As Meta personnel observed, users will tend to form strong relationships with social media platforms that deliver immediate value, whereas a new user who has no connections and is not fed tailored content will tend to abandon the site permanently.[956] To that end, for example, one Meta document notes that the onboarding process at Instagram invites users to import networks from Facebook or their phone and that, "without a network, IG feels empty."[957]

436. For Instagram in particular, Meta noted the importance of ensuring that new users connect with family members, friends, and interests as quickly as possible. The company found that "early teens" were less likely to connect to Instagram via Facebook than were older users, in part because early teens tended to have "loose ties" on Facebook that included distant relatives and teachers who were less likely to deliver value on Instagram.[958] The company observed that one benefit of Messenger Kids would be allowing users to retain their contacts from Messenger Kids, allowing them to age up to Instagram more seamlessly by ensuring users enter with a robust network of peers and near-peers.[959] Meta accordingly believed that young users who

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953 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 677.
954 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020, at 239, 251.
955 See, for example, META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 461.
956 META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017," at 848, META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 461, META3047MDL-019-00122026, "IG Graph Strategy 2022," December 2021 at 68-87.
957 META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 461, 463.
958 META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 461.
959 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020, at 239 and 251.

began on Messenger Kids would enjoy Instagram more readily than would those who arrived on the platform without an existing online social network.

437. Though Meta was perhaps more focused on how Messenger Kids users "aged up" to Instagram, Messenger Kids also provided direct links to Facebook.[960] In order for a child to use Messenger Kids, at least one of his or her parents needed a Facebook account, as "[a]dding and removing contacts [could] only take place from the parent dashboard within Facebook."[961] In addition to connecting with other children with Messenger Kids accounts, users can connect with contacts over 13 years of age on Messenger Kids, such as grandparents, siblings, and older friends, as long as those users also have a Facebook account.[962] Critically, those older contacts have Facebook accounts, rather than Messenger Kids accounts, enabling children who use Messenger Kids to age up to Facebook with a network of "friends" that overlaps significantly with their existing network on Messenger Kids.

438. In the course of developing Messenger Kids, Meta conducted research on the behaviors of tweens and younger children. This research revealed that tweens often acted differently from the younger children using Messenger Kids.[963] For example, one 11-year-old respondent to a Meta survey about Messenger Kids stated, "In general, [Messenger Kids is] very kiddie. The pictures and fonts go really well together. People who are in kindergarten, 5-7 years olds [would really like this]. Since I'm a 5th grader, this is a little too young for me."[964] Dovetailing with academic research on adolescent development, Meta's data showed that the platform "drop[ped]

960 https://www.facebook.com/help/messenger-app/732544310273905.
961 https://www.facebook.com/help/messenger-app/2561872534065550/?helpref=related_articles.
962 https://www.facebook.com/help/messenger-app/732544310273905.
963 See META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 431.
964 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 431.

down in usage ranking as kids move from child to tween,"[965] starting around age 10.[966] By 2020, Meta recognized that, despite its success with children under 10, Messenger Kids ultimately is "not an upwardly aspirational app…[as]…it gives tweens a way to talk but nothing to *talk about*."[967]

439. Messenger Kids therefore partly succeeded and partly failed in promoting Meta's goal of introducing children to its network of apps. Though it succeeded in attracting millions of children to the earliest stages of Meta's social media pipeline, it also failed by losing the attention and interest of many of those young users before they were ready to graduate to Instagram and Facebook. As Meta observed, there was a conspicuous "tween gap" during which tweens were too old for Messenger Kids, but too young for Instagram and Facebook.

C. Instagram Kids

440. To address its tween gap, Meta pursued a fresh strategy. In an email titled "MK [Messenger Kids] + Instagram = Future FB Users," Meta employees proposed "transition[ing] MK users to Instagram in their tween years as they get a cellular phone" in order to "age up MK users" to Meta's apps,[968] rather than waiting until those tweens turned 13. The email went on to state that "[it was] time we show we can maintain those kids [currently using Messenger Kids] as tweens. This requires Instagram to support kids."[969]

441. In the fall of 2016, Instagram staff said in an internal report that acquisition of the app

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965 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 491.
966 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020, at 184.
967 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 404 and 393, emphasis in original.
968 META3047MDL-003-00160444, "Fwd: MK account + Instagram = Future FB users," October 9, 2020, at 445.
969 META3047MDL-003-00160444, "Fwd: MK account + Instagram = Future FB users," October 9, 2020, at 444.

was "softening relative to [the] growing market" and that in terms of retention it was "worsening and worse relative to adults."[970] Four years later, an internal "end of year" assessment of Instagram's 2020 accomplishments and challenges reported, "We…aren't as strong as we once were" with tweens who "spend as much as three times more time on TikTok and YouTube" than on Instagram.[971] The four-page end-of-year review concluded by laying out the problem and some possible solutions:

> We don't yet have a cohesive age-up strategy across the family. The particularly concerning gap is with 10-12 year olds, and that puts the next generation of teens at risk of going elsewhere. We see working with the Messenger Kids team, establishing a family youth account, and building out an Instagram youth product as a massive opportunity.[972]

442. Meta believed that Instagram was losing its share of teen users in part because tweens were churning, or leaving Meta's family of apps, before they could graduate to Meta's other platforms. The solution was to create an experience that squarely targeted tweens and young teens to ensure that they did not decamp to TikTok, YouTube, and Snapchat when they outgrew the child-targeted features Meta had designed for Messenger Kids. Though evidence shows that many tweens create accounts on Instagram without "aging up" through Messenger Kids,[973] a large enough group of tweens seemed to leak from Meta's pipeline to prompt a reexamination of Meta's strategies for attracting, retaining, and growing its young teen user base.

443. A few months after Meta personnel reiterated this need, in March 2021, Instagram's internal focus on tweens was formalized.[974] Instagram decided to introduce a "cohesive age-up

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970 META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 449.
971 META3047MDL-003-00161086, "Instagram 2020 H2/ 2021 H1," 2020, at 086.
972 META3047MDL-003-00161086, "Instagram 2020 H2/ 2021 H1," 2020, at 089.
973 See Section XVII.B, above.
974 https://www.buzzfeednews.com/article/ryanmac/facebook-instagram-for-children-under-13.

strategy" to close the "10-to-12 year old gap" by creating a special tween-only version of the app.[975] Instagram created a dedicated "youth team" to develop this new version of the app that would come to be known as Instagram Kids (also referred to as Instagram Youth or IGY, internally).[976] The youth team was headed by Pavni Diwanji, who had joined Instagram the previous November after having created and run Google's hugely successful YouTube Kids initiative.[977]

444. Meta believed that Instagram Kids should appeal to children across a broad range of ages. Though much of the discussion focused on its suitability for tweens, the Instagram youth team believed that it would also appeal to children who were not yet able to read. Specifically, the app was designed to be a "Visual & Audio First Experience," incorporating "[i]ntuitive design with visual and audio cues instead of written instructions as many children cannot read yet, especially English. Having globally recognized audio cues and visual cues behind buttons and features to enhance usability."[978]

445. Despite this discussion of younger child users, the app was primary designed to appeal to tweens. To that end, Meta produced a 36-page study in 2021 titled, "Instagram Youth: Tween Needs."[979] The report began with a distillation of the study's purpose, expressed as three high-

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975 META3047MDL-003-00161086, "Instagram 2020H2 / 2021H1," at 189.

976 META3047MDL-004-00003084, "[PM Open Roles] Director of Product, Instagram Youth," March 19, 2021.

977 Mac and Silverman, "Facebook Is Building An Instagram for Kids Under the Age of 13," *Buzzfeed* https://www.buzzfeednews.com/article/ryanmac/facebook-instagram-for-children-under-13. Pavni Diwanji, LinkedIn, https://www.linkedin.com/in/diwanji/. By 2023, one study indicated that 62% of US kids aged 3-5 had the YouTube Kids app installed on the device where they watched videos. Pablo Durañona, "YouTube or YouTube Kids? Reaching the right audience effectively and safely," October 25, 2023, KidsCorp, https://www.kidscorp.digital/resources/blog/youtube-or-youtube-kids-reaching-the-right-audience-effectively-and-safely.

978 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 752.

979 META3047MDL-004-00003522, "IG Youth: Tween Needs," approximate date spring 2021. The slide deck itself is undated, but contains dated research, the most recent of which is April 2021.

level questions:

"How might we help tweens discover, curate, and go deep on their interests on IG?";

"How might we help tweens play, create, and collaborate on IG?";

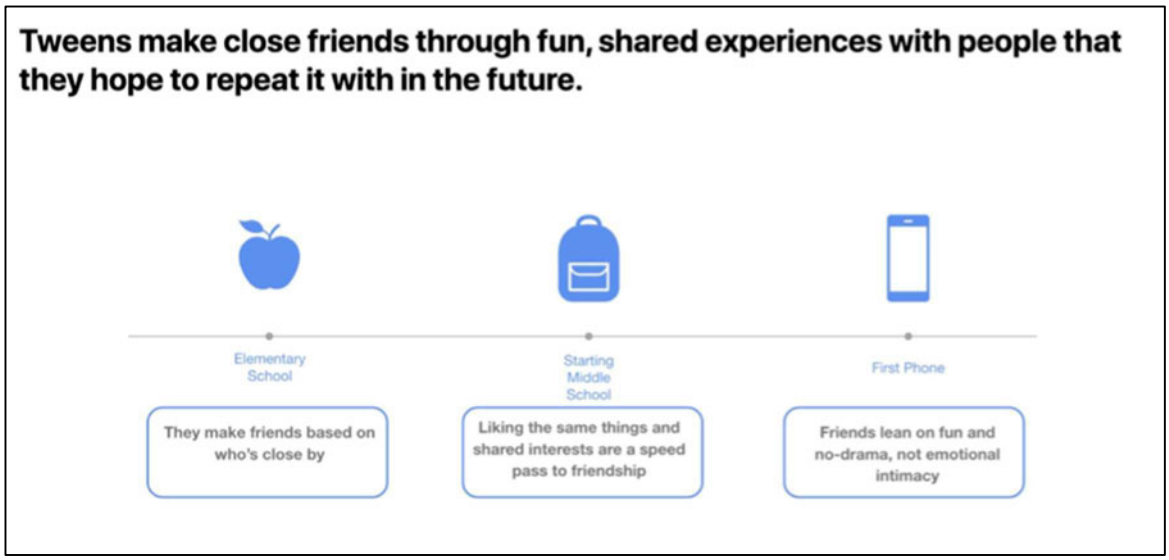
"How might we help tweens feel like their close friends/family are nearby?"[980]

These guiding research questions provide clear evidence that Meta sought to understand tweens, specifically, and to understand what features of a social media network would appeal to tweens.

446. Meta's analysis was based on a survey of "younger" and "older" teens who use Instagram, defined as 13-14 and 15-17, respectively, but the presentation repeatedly uses the term "tweens" and references other research within the company on 10-12-year-olds.[981] One example examining the needs and experiences of tweens can be seen in Figure 20, below, where the presentation focused on children leaving elementary school and entering middle school, when they typically started using smartphones.

[980] META3047MDL-004-00003522, "IG Youth: Tween Needs," at 523.
[981] See, for example, META3047MDL-004-00003522, "IG Youth: Tween Needs," at 524, 530, and 534.

Figure 20. Meta Presentation about Instagram focuses on those under 13[982]

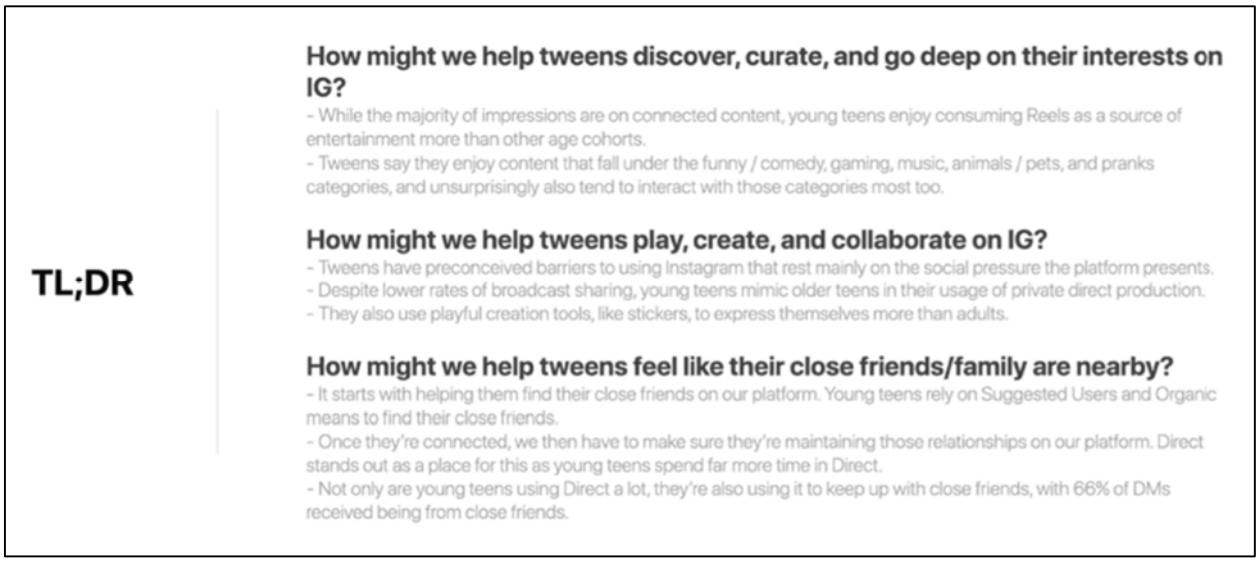


447. The research document went on to provide a detailed analysis of "tween needs" in each of four categories — "entertainment," "creativity & expression," "play," and "togetherness & connection"[983]—and provided data on which age groups of Instagram users like which categories of entertainment,[984] which "connection features" they find valuable,[985] and which accounts they tend to follow and message.[986] The study made a number of recommendations about how the new platform might appeal to the needs of tweens, as seen in Figure 21, below. For example, it noted that "young teens enjoy consuming Reels as a source of entertainment more than other age cohorts," and that "tweens say they enjoy content that fall [sic] under the funny / comedy, gaming music, animals / pets, and pranks categories, and unsurprisingly also tend to interact with those categories most too."[987] The presentation also noted that tweens "use playful creation tools,

982 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 542.
983 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 525.
984 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 529.
985 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 535.
986 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 544, 545, 546.
987 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 523.

like stickers, to express themselves more than adults," that "young teens are using direct [messages] a lot," and Meta's role "starts with helping them find their close friends on our platform."[988]

Figure 21. The Instagram youth team identified features to appeal to tweens[989]



448. When Meta revealed its plans to launch Instagram Kids, many audiences believed that an Instagram platform designed for children would create significant risks to the mental health and well-being of the children who used the platform. Amidst other expressions of concern, more than 180,000 people signed a petition calling on Meta to abandon the proposed platform.[990]

449. In response to considerable opposition, Meta "paused" the development of Instagram

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988 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 523.

989 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 523.

990 See, https://www.usatoday.com/story/tech/2021/05/25/instagram-kids-facebook-mark-zuckerberg-petition/7419278002/. Additionally, Attorneys General from 44 states urged Meta to abandon their plan for the tween-oriented app, writing: "It appears that Facebook is not responding to a need, but instead creating one," the Attorneys General wrote, "as this platform appeals primarily to children who otherwise do not or would not have an Instagram account.…an Instagram platform for young children is harmful for myriad reasons." See, National Association of Attorneys General, Letter to Mark Zuckerberg Re: Facebook's Plans to Develop Instagram for Children Under the Age of 13, May 10, 2021, https://www.naag.org/wp-content/uploads/2021/05/NAAG-Letter-to-Facebook-Final-1.pdf.

Kids in September 2021, six months after it officially began exploring the platform.[991] (As far as I am aware, the project remains dormant as of this report's submission.) When Adam Mosseri, the head of Instagram, announced the platform's hiatus publicly, he made clear that Instagram knew children were on "apps that are meant for those 13 or older":

> Critics of 'Instagram Kids' will see this [pause] as an acknowledgement that the project is a bad idea. That's not the case. **The reality is that kids are already online**, and we believe that developing age-appropriate experiences designed specifically for them is far better for parents than **where we are today**.[992] (emphasis added)

450. Two months later, in an internal chat with two fellow senior Meta executives, Mr. Mosseri reiterated Meta's understanding that children continue to use Instagram, to find the platform appealing, and to misstate their ages to gain access:

> **[W]hat we're actually doing is pretty different than creating youth specific experiences. Tweens want access to Instagram, and they lie about their age to get it now.** We'd like it if they aged up from an age appropriate version to the full [version] of Instagram, so the explicit strategy – which is on pause – is to let them download the main app and cater the experience to their age.[993] (emphasis added)

451. Together, this combination of public and private messages authored by Mr. Mosseri demonstrates that Meta's most senior personnel understood that Instagram both appealed to children and attracted and retained child users. As discussed in more detail in Section XVI.C, below, while Meta ultimately did not launch a specific "Instagram Kids" product, the company did incorporate features recommended by its research on tweens for the Instagram Youth app into its primary Instagram platform.

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991 Adam Mosseri, "Pausing 'Instagram Kids' and Building Parental Supervision Tools," September 27, 2021, Instagram blog, https://about.instagram.com/blog/announcements/pausing-instagram-kids.

992 Adam Mosseri, "Pausing 'Instagram Kids' and Building Parental Supervision Tools," September 27, 2021, Instagram blog, https://about.instagram.com/blog/announcements/pausing-instagram-kids.

993 META3047MDL-003-00171553, Direct Messages, November 10, 2021.

452. Meta has consistently emphasized the strategic importance of attracting child and tween users for ongoing growth and success of its social media platforms.[994] It has studied extensively the role that child users play in building and sustaining its family of apps, paying particular attention to the ongoing relationships those children form with Meta's platforms as they become teens and then young adults.[995] To drive child users to engage with its platforms, Meta has both studied the needs of children and tweens, and actively designed and launched Messenger Kids, a youth-focused social media app designed to capture the youngest users with the aim of graduating them to Meta's primary platforms as they age[996] and looked into developing a children-only version of Instagram.[997] As Meta noted in internal documents, its view was that "the young ones are the best ones…[with respect to] long-term retention."[998]

453. In Section XVII, below, I examine evidence indicating that Meta indeed pursued this strategy, shaping Instagram to be directed to children. In Subsection A, below, I examine similar evidence indicating Meta sought to shape Facebook to be directed for children.

XVII. EVALUATION OF INSTAGRAM'S CHILD-DIRECTEDNESS

454. In this section, I examine whether Instagram, as a platform, is directed to children. There are two broad categories of information that demonstrate whether a platform is child-directed: First, evidence that either the platform in its entirety or portions of the platform were intended to

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994 See, for example, META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, META3047MDL-003-00029661, "Aging-up of Youth," and META3047MDL-003-00160444, "Fwd: MK account + Instagram = Future FB users," October 9, 2020.

995 See, for example, META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 454 and META3047MDL-003-00029661, "Aging-up of Youth."

996 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 661 and META3047MDL-003-00160444, "Fwd: MK account + Instagram = Future FB users," October 9, 2020, at 446, 447.

997 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 523; META3047MDL-046-00285727, "IG Youth Proposal," at 727-729.

998 META3047MDL-003-00084997, "Rob's Youth Update," September 2018, at 000.

and do include features and content that appeal to children; and second, empirical or quantitative evidence that the platform in its entirety, or portions of the platform, actually attract child users. A platform that attracts and retains users who are children is empirically more likely to be child-directed because it in fact attracts and retains such users.

455. To assess whether and to what extent Instagram is child-directed, I rely on the following evidentiary components: the extent to which Meta viewed having child users on Instagram as desirable (Subsection A); the extent to which Instagram incorporates features (Subsection B) and content (Subsection C) that are child-oriented and appealing to children; and the extent to which empirical evidence demonstrates that Instagram actually attracts and retains child users (Subsection D).

A. Meta has valued attracting tween users to Instagram

456. At least since Instagram was purchased by Meta in 2012, various publications have noted the platform's tendency to attract tweens and other youth. Coverage of the purchase noted Instagram's popularity among "young" users,[999] and Instagram was described as "the social network for tweens" in an article discussing several 12-year-olds with accounts on the site. For example, one article on the tech platform CNET, published in September 2012, discussed "Instagram's ubiquity as a tweenage social network," describing the "meteoric rise in Instagram's popularity among tweens."[1000] According to that article, Nielsen ranked Instagram as the number one "photography site" for teens ages 12 to 17, with 1 million teen visitors in July of 2012.[1001] A

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[999] Dara Kerr, "Instagram users are young and Facebook users are old," *CNET*, April 10, 2012, https://www.cnet.com/tech/services-and-software/instagram-users-are-young-and-facebook-users-are-old/.

[1000] Michelle Meyers, "How Instagram Became the Social Network for Tweens," September 8, 2012, *CNET,* https://www.cnet.com/tech/services-and-software/how-instagram-became-the-social-network-for-tweens/.

[1001] Michelle Meyers, "How Instagram Became the Social Network for Tweens," September 8, 2012, *CNET,* https://www.cnet.com/tech/services-and-software/how-instagram-became-the-social-network-for-tweens/.

December 2012 article which described Instagram as the "latest social media craze" reported that it was "especially popular with tweens and teens."[1002] Within the company itself, in 2013 Mr. Zuckerberg sent an email to high-ranking Meta executives, including Sheryl Sandberg and Alex Schultz, discussing the declining rates of 13- and 14-year-olds signing up for Facebook. In it, he hypothesized that "fewer people in the youngest demographics sign up for Facebook because they've already signed up for Instagram," acknowledging that Instagram was attracting young users even before many of them had turned 13.[1003]

457. In researching youth preferences for Instagram, Meta repeatedly recognized that the Instagram features that appealed to 12- and 13-year-olds were largely indistinguishable. Mr. Zuckerberg explicitly stated, "11 and 12 year olds aren't so different from 13 or 14 year olds," in a script written for a company-wide meeting.[1004] Meta used research about young teens to provide insights into tweens because it did not recognize a defined boundary between 11- and 12-year-olds, on the one hand, and 13- and 14-year-olds on the other. In other words, Meta believed the same features that would appeal to 13- and 14-year-olds would also appeal to tweens aged 12 and younger. One internal instant message conversation on how young people used messaging services explicitly described "an analysis with 13-14 year olds as a tween proxy."[1005] As such, Meta personnel made decisions and drew insights on the basis of two critical beliefs: that tweens and teens were in many respects indistinguishable, and inhabited similar psychological universes; and that a platform build to appeal to teens would also appeal to

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1002 Shellie Bailey-Shah, "Your Kids are using Instagram: Is it safe?" December 27, 2012, *KATU2ABC,* https://katu.com/news/local/your-kids-are-using-instagram-is-it-safe.

1003 META3047MDL-050-00331053, "Re: Revisiting Project Family" email, July 14, 2013, at 054.

1004 META3047MDL-014-00381713, "Teens All Hands" email thread, May 2017, at 713.

1005 META3047MDL-003-00015900, direct message summary, April 28, 2021, at 900.

the large and growing audience of tweens Meta knew to be using its platform.[1006] These concepts are supported by both Meta's own internal data,[1007] and the academic literature on adolescent psychology that I discussed earlier in this report.

458. This young age group was, and remains, important to Instagram because of the view that tweens are the "funnel" through which teen and young adult users emerge. A research presentation from 2016 posed what it described as "The Big Question"—specifically, "What are the primary funnel drivers that are broken for US teens?"[1008] The presentation identified several key issues that hampered Meta's attraction and retention of tweens and young teens, including the observation that "point-of-market entry for smartphone and app adopting in our landscape is [under] 13, but we can't/don't have an acquisition strategy for these youngest of teens."[1009] Meta knew children were getting smartphones earlier, noting that 40% to 50% of 10-11-year-olds had a smartphone.[1010] Meta also cited external statistics that 40% of tweens had a social media account by age 11, and more than half had one by age 12.[1011] The focus on acquiring users "<13" emerged years before Meta embarked on its effort to develop a separate Instagram platform for children, indicating that the company's focus on tweens was designed to attract that audience to the main Instagram platform.

459. Another Instagram research effort the following year—in October 2017—included an extensive survey of tween use of social media, "meant as an introduction to the tween

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1006 See, for example, META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017," at 851.

1007 See, for example, META3047MDL-004-00003522, "IG Youth: Tween Needs," at 530; META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021, at 736; META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 395.

1008 META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 454.

1009 META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 465.

1010 META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 460; META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017 at 695.

1011 META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 460.

demographic and their social media use" within Meta's family of apps.[1012] The presentation described tweens as "similar to older peers in their phone usage."[1013] It noted that tweens had positive associations with Instagram which they learned from their "parents, older siblings or friends with older siblings," and quoted tweens aged 12 and 11, respectively, stating that "most of my friends are on Instagram" and "more people my age are into Instagram."[1014] The presentation concluded by noting that, "tweens are making do with what's been created for kids and/or teens," but that "none of the existing apps truly fulfill tweens' needs."[1015] Meta's concern was that the absence of such a product compromised the company's ability to form and retain relationships with tween users who would then graduate to use Meta's primary platforms.[1016] The solutions the presentation identified included "enable[ing] logged out consumption,"[1017] presumably so that children too young to have their own accounts under Meta's policies could still view content on and engage with Instagram.

460. Despite raising concerns about the decline of its appeal to young users, Instagram employees celebrated a measure of success in 2016 by stating that the platform had "made huge inroads into [the tween] space."[1018] Nonetheless, the company acknowledged increased competition from Snapchat and TikTok—discussed in more detail later in this report—which had "growing Tween follower base[es]" and "big press stories as the 'kingmakers of the Tween.'"[1019]

[1012] META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 678.
[1013] META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 690.
[1014] META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 707.
[1015] META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 714.
[1016] META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 454.
[1017] META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 460.
[1018] META3047MDL-047-00730463, "Teen Outreach XFN H1 2017 Goals," at 464.
[1019] META3047MDL-047-00730463, "Teen Outreach XFN H1 2017 Goals," at 464.

461. Immediately after acquiring Instagram, Meta focused on attracting, engaging and retaining young users.[1020] As discussed previously, attracting young users was valuable because those users provided direct value to Meta's platforms, but also because the time and attention those users devoted to Meta's platforms meant they were not habitually using and developing relationships with competing platforms.[1021] Tween users hold immediate value, but they also hold long-term value unmatched by other cohorts because they offer the possibility of many decades of unbroken engagement.[1022] Evidence of the strategic goal to understand and retain tweens pervades Meta's internal communications, which include shorthand phrases like "u13 research,"[1023] and "age up."[1024] In the time since its acquisition of Instagram, Meta has also implemented and maintained many features on Instagram that its research had shown would appeal to tweens, and actively sought out Instagram content that it knew would appeal to tweens.

B. Instagram contains many features that make the platform appeal to tweens

462. In this section, I examine Instagram's features to assess whether the platform appeals to children. When Meta acquired Instagram in 2012, the platform as it existed then contained features that appealed to and acted as a hook for young users. Meta quickly expanded Instagram's features to include videos and live broadcasting which proved to be particularly appealing to young users. Over time, Meta incorporated features similar to those on other social media platforms, including Snapchat and TikTok, with which it competed for tween users.

1020 See, for example, META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 454.
1021 See, for example, META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016.
1022 See, for example, META3047MDL-047-00995641, "Long Term Retention: The Young Ones are the Best Ones and Other Learnings," November 2018, at 642, and META3047MDL-003-00029661, "Aging-up of Youth," at 663.
1023 See, for example, META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017," at 851.
1024 See, for example, META3047MDL-003-00160444, "Fwd: MK account + Instagram = Future FB users," October 9, 2020, at 445.

Moreover, after Meta abandoned its plans to develop a separate app for tweens, as detailed above in Section XVI.C, the company introduced new features on Instagram that were inspired by its research into tween behavior and engagement patterns.

i. Instagram's original features appeal to tweens

463. Many of Instagram's foundational features appealed and continue to appeal to children under the age of 13. As noted above, in the early 2010s, Instagram was perceived to be particularly appealing to tweens.[1025]

464. One foundational component of Instagram that appeals to children is the "Like" feedback button. As noted above, adolescents are particularly interested in and responsive to peer feedback,[1026] and research shows that "Likes" and other positive responses on social media exploit this psychological need.[1027] The Like button, introduced in 2010, prior to Meta's purchase of Instagram,[1028] provided tweens with a vehicle for the social feedback rewards that users of their demographic tend to crave.[1029] During its research into a children's version of

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[1025] See, for example, Michelle Meyers, "How Instagram Became the Social Network for Tweens," September 8, 2012, *CNET,* https://www.cnet.com/tech/services-and-software/how-instagram-became-the-social-network-for-tweens/.

[1026] Crone, E.A., & Konijn, E.A. (2018), "Media use and brain development during adolescence," *Nature Communications,* 9:588; da Silva Pinho, A., Céspedes Izquierdo, V., Lindström, B., & van den Bos, W. (2024), "Youths' sensitivity to social media feedback: A computational account," *Science Advances,* 10:eadp8775; Burrow, A. L., & Rainone, N. (2017), "How many likes did I get? Purpose moderates links between positive social media feedback and self-esteem," *Journal of Experimental Social Psychology,* 69:232–236; Smith, D., Leonis, T., & Anandavalli, S. (2021), "Belonging and loneliness in cyberspace: Impacts of social media on adolescents' well-being," *Australian Journal of Psychology,* 73:12–23; Timeo, S., Riva, P., & Paladino, M. P. (2020), "Being liked or not being liked: A study on social-media exclusion in a preadolescent population," *Journal of Adolescence,* 80:173–181.

[1027] For an extended discussion of such variable reward cues, and how they function to ensnare social media users, see: Alter, A. L. (2017), *Irresistible: The rise of addictive behavior and the business of keeping us hooked,* New York: Penguin Press. For a classic treatise, see: Ferster, C. B., & Skinner, B. F. (1957), *Schedules of reinforcement,* New York: Appleton-Century-Crofts; for a more recent review, see: Staddon, J. E. R., & Cerutti, D. T. (2003), "Operant conditioning," *Annual Review of Psychology,* 54:115–144.

[1028] https://instagramseo1.medium.com/the-evolution-of-instagram-likes-from-double-taps-to-emojis-6ac83f502397.

[1029] See, e.g., Swann, W. B., Jr. (1983), "Self-verification: Bringing social reality into harmony with the self," In

Instagram, Meta learned that children were drawn to return to the site in part because they were compelled by the experience of chasing Likes; a 2020 research presentation at Instagram on "Teen Fundamentals" noted that, "Approval and acceptance are huge rewards for teens and interactions are the currency on IG. DMs, notifications, comments, follows, likes, etc. encourage teens to continue engaging and keep coming back to the app."[1030]

465. Instagram was also among the first social media platforms to adopt and prioritize video functionality. According to one Meta study, "Videos are the first [category of app] to be introduced and capture usage of kids…video has evergreen popularity [among children and teens]."[1031] Further research directed by the company demonstrated the appeal of online video-based content among children, including several internal studies concluding that YouTube was among the most popular apps among under-13 users.[1032] Meta added video functionality to Instagram in 2013, and in 2016 introduced a feature named "Live," which allowed users to broadcast live content to their followers.[1033]

466. Instagram's original design appealed to tweens by offering a visual, user-friendly, mobile-first platform that emphasized creativity, social validation, and peer connection.[1034] The app's interface and intuitive features allowed young users to enhance and share their photos, fostering a sense of artistic expression and individuality. The ability to gain Likes and followers

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J. Suls & A. G. Greenwald (Eds.), *Social psychological perspectives on the self* (Vol. 2, pp. 33–66). Lawrence Erlbaum Associates; Cooley, C. H. (1902), *Human Nature and the Social Order.* New York: Charles Scribner's Sons; Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987), *Rediscovering the Social Group: A Self-Categorization Theory.* Oxford, UK: Basil Blackwell.

1030 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 793.

1031 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 741.

1032 META3047MDL-020-00428695, "Tweens and Early Teens," August 2021, at slide 6.

1033 https://www.big3.sg/blog/a-brief-history-of-instagram-and-its-rise-to-popularity.

1034 See, for example, https://time.com/3559340/instagram-tween-girls/ and Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology: Contextual Influences on Adolescent Development* (3rd ed., pp. 74–103).

provided immediate social feedback, which was particularly appealing to tweens seeking affirmation from their peers.[1035] Moreover, Instagram's focus on image-based visual storytelling, and later introduction of video functionality, resonated with tweens' interest in creative self-expression and social interaction.[1036]

ii. Instagram mimicked Snapchat features that appeal to tweens

467. Over time, Meta also attempted to retain young users on Instagram by introducing features that were borrowed or adapted from its tween-focused competitors.[1037] Instagram competitor Snapchat launched in 2011 and focused on allowing users to message each other ephemeral content ("Snaps") that disappeared after being viewed, which appealed to users who were aware of the effect their digital footprints could have on their futures.[1038] "The biggest problem [people had] with Instagram is feeling the pressure of sharing really amazing photos," said Instagram CEO Kevin Systrom in 2017.[1039] Snapchat introduced Stories, disappearing posts that last for 24 hours, in 2013.[1040] Snapchat was known for its popularity among children and tweens,[1041] and Meta accordingly identified Snapchat as an important part of the "tween and early teen social media app landscape."[1042]

1035 See, for example, Rides, G., Pote, H., & Watling, D. (2024), "Adolescents' perceptions of using likes, comments, and other reactions—A qualitative investigation," *British Journal of Developmental Psychology*, 00:1–16; da Silva Pinho, A., Céspedes Izquierdo, V., Lindström, B., & van den Bos, W. (2024), "Youths' sensitivity to social media feedback: A computational account," *Science Advances,* 10:eadp8775; Burrow, A. L., & Rainone, N. (2017), "How many likes did I get? Purpose moderates links between positive social media feedback and self-esteem," *Journal of Experimental Social Psychology,* 69:232–236; Timeo, S., Riva, P., & Paladino, M. P. (2020), "Being liked or not being liked: A study on social-media exclusion in a preadolescent population," *Journal of Adolescence,* 80:173–181.

1036 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 750.

1037 META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 459.

1038 https://www.thestreet.com/technology/history-of-snapchat.

1039 https://www.vox.com/2018/8/8/17641256/instagram-stories-kevin-systrom-facebook-snapchat.

1040 https://www.thestreet.com/technology/history-of-snapchat.

1041 See, for example, META3047MDL-020-00428695, "Tweens and Early Teens," August 2021, at slide 6.

1042 META3047MDL-020-00428695, "Tweens and Early Teens," August 2021, at slide 5.

468. Meta personnel noted that Snapchat was particularly popular among tweens,[1043] driven in part by the capacity for features including disappearing content and camera filters to appeal to young users.[1044] One Meta presentation on tween social media use explained, "Snapchat is for tweens" because "it's fun, funny, silly and creative – seemingly made just for them" and noted that the "temporariness of it all" was an "experience that result[s] in this [young] user base."[1045] Meta knew that, despite being rated "Teen 12+," Snapchat "clearly ha[s] content and marketing dedicated to tweens,"[1046] thereby implying that, at least from Meta's perspective, Snapchat was appealing to children aged 11 years and under. A 2020 internal Instagram presentation explained that "Snapchat ha[s] started replacing Instagram for […] teens…" and that "Teens prefer using Snapchat for close communication with best friends,"[1047] providing direct competition for the most valuable young users in terms of long-term retention.

469. Having identified Snapchat's appeal to children and tweens, Meta introduced a number of features to Instagram that were almost identical to tween-centric Snapchat features. For example, the Stories feature on Instagram, where posts disappear after 24 hours, mirrored the ephemerality of posts on Snapchat, which also expire by default after 24 hours. Stories enabled users to post content without the pressure of knowing that such posts were permanent.[1048] Instagram hoped to use Stories, rolled out in 2016,[1049] to appeal to these tween and early teen users and to increase the frequency with which these users posted. In 2017, Instagram laid out a series of related

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1043 META3047MDL-004-00005406, "% Listing App as Top 5 App Used by Child" graph.
1044 https://www.indestry.com/blog/the-brief-history-of-social-media-ar-filters.
1045 META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017 at 708.
1046 META3047MDL-047-01045079, "Messenger Kids & Youth Strategy," March 2021, at 5107.
1047 META3047MDL-003-00020907, "The Power of Identities: Why Teens and Young Adults Choose Instagram," at 926 and 972.
1048 See, for example, https://www.vox.com/2018/8/8/17641256/instagram-stories-kevin-systrom-facebook-snapchat.
1049 https://about.instagram.com/blog/announcements/introducing-instagram-stories.

youth-centric research goals: "to determine tween/teen (a) perception of IG (b) the role of Stories (c) how Stories can expand use of IG for in-between moments."[1050] Research indicated that Stories was very effective, and the feature's introduction was highlighted as a "teen-focused product launch" success of 2016: "150M+ people use Instagram Stories every day… and we know teens are top users of stories."[1051]

470. Instagram also incorporated disappearing content into its direct messaging function, rolling out "Vanish Mode" in 2020.[1052] Meta continued to highlight the importance of privacy to retaining young users following the feature's introduction on Instagram. In response to a 2021 internal message asking "do we have data or research you can point to around early teens (or tweens) trends on messaging and competition? Specifically … how tweens and early teens use snap, [sic]" one Meta employee reported "when we look at consideration vs preference for connecting with friends & messaging, Snap has a better conversion […] and snap [sic] is viewed as fun, for young people, and private."[1053] This conversation also once again referenced use of "13-14yrs old [sic] as a tween proxy" and defined tweens as "10-12"-year-olds.[1054] One of the features that made Snapchat private was its disappearing direct messages.[1055]

471. Instagram further introduced a suite of face camera filters in 2017 (see Figure 22, below). At the time, the consensus in the press was that Instagram introduced these features to mimic Snapchat's photo filters, which were popular among its young user base.[1056] Internally,

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1050 META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017," at 851.
1051 META3047MDL-047-00730463, "Teen Outreach XFN H1 2017 Goals," at 464.
1052 https://about.instagram.com/blog/announcements/new-messaging-features-now-available-on-instagram-and-messenger.
1053 META3047MDL-003-00015900, direct message summary, April 28, 2021, at 900.
1054 META3047MDL-003-00015900, direct message summary, April 28, 2021, at 900.
1055 https://help.snapchat.com/hc/en-us/articles/7012334940948-When-does-Snapchat-delete-Snaps-and-Chats.
1056 See, for example, https://www.inverse.com/article/31645-instagram-copies-snapchat-face-filters,

employees had similarly invoked Snapchat when describing its photo filters,[1057] and had conducted research on Snapchat's creative tools and how they were being used.[1058]

Figure 22. Instagram's "playful" camera filters[1059]



472. Described in the announcement as "playful,"[1060] Instagram's camera filters allowed users to "transform into a variety of characters that make you smile or laugh."[1061] The announcement went on to suggest that, "when you're done recording, you can send it to your best friends through Instagram Direct or add it to your story."[1062] This rollout and suggested application aimed to directly mimic the success Snapchat had found with young users.[1063] In 2022, Instagram

https://www.abc10.com/article/news/instagram-rolls-out-snapchat-style-face-filters/103-440209245, https://petapixel.com/2017/05/16/instagram-copies-snapchat-launches-face-filters/, https://money.cnn.com/2017/05/16/technology/instagram-face-filters/index.html, and https://fortune.com/2017/05/16/instagram-face-filters-snapchat/.

1057 META3047MDL-111-00169453, "Teen Content Engagement Landscape," at 453; META3047MDL-111-00358044, "Snapchat/IG Stories Guidelines," at 044.

1058 See, for example, META3047MDL-046-00490059, "Research: Snapchat Creative Tools Usage," August 4, 2016; and META3047MDL-003-00085182, "Market Strategy Updates – 10/5/18" email, October 2018 at 184.

1059 https://about.instagram.com/blog/announcements/introducing-face-filters-and-more-on-instagram.

1060 https://about.instagram.com/blog/announcements/introducing-face-filters-and-more-on-instagram.

1061 https://about.instagram.com/blog/announcements/introducing-face-filters-and-more-on-instagram.

1062 https://about.instagram.com/blog/announcements/introducing-face-filters-and-more-on-instagram.

1063 https://petapixel.com/2017/05/16/instagram-copies-snapchat-launches-face-filters/. See also,

also introduced Instagram Avatars, described by some commentators as derivative of Snapchat's bitmoji avatars, which allow users to make cartoon versions of themselves for use in messages and videos.[1064] These augmented-reality digital effects meet the tween-focused needs of "self-expression" and "creativity" that Meta identified as central to attracting tween audiences.[1065]

iii. Instagram mimicked TikTok features that appeal to tweens

473. By the late 2010s, TikTok was one of Meta's main competitors for the attention of child users.[1066] TikTok became popular in the United States in 2018 shortly after it acquired Musical.ly,[1067] a social media network popular with children.[1068] Instagram had partnered with Musical.ly in 2016, before it was absorbed into TikTok, to reach tweens.[1069] Justin Antony, Director of Creative Partnerships for North America for Meta, worked with creators from Musical.ly, including creators under the age of 13, and characterized them as "some of the most popular creators in the world."[1070] TikTok was extremely popular with children, with one report citing that 70% of 10-year-old girls with smartphones used the app in 2019.[1071] A 2020 internal Meta presentation stated that "TikTok […] ha[s] started replacing Instagram" and that "TikTok's popularity is in part due to it being perceived as entertaining and fun."[1072] Meta reasoned that "TikTok's popularity is also due to its casual nature – users feel they can let loose and make

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META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 459, and META3047MDL-111-00358044, "Snapchat/IG Stories Guidelines," at 044.

1064 https://www.inverse.com/input/culture/instagram-avatar-feature-ripoff-snapchat-bitmoji

1065 See, for example, META3047MDL-004-00003522, "IG Youth: Tween Needs," at 548, 551, 554

1066 META3047MDL-091-00020735, "Early Teens IG Reels Experience Research Spring [WiP] [A/C Priv]," at 735, 738, 739.

1067 https://edition.cnn.com/2018/11/21/tech/tiktok-app/index.html.

1068 https://www.nytimes.com/2016/09/17/business/media/a-social-network-frequented-by-children-tests-the-limits-of-online-regulation.html.

1069 META3047MDL-047-00730463, "Teen Outreach XFN H1 2017 Goals," at 466.

1070 Deposition of Justin Antony, March 3, 2025, at 77:9-23

1071 https://www.wsj.com/articles/tiktok-wants-to-grow-up-but-finds-it-tough-to-keep-kids-out-11581858006

1072 META3047MDL-003-00020907, "The Power of Identities: Why Teens and Young Adults Choose Instagram," at 926 and 928.

mistakes on the platform."[1073] Meta later observed that TikTok was "already popular with tweens"[1074] and noted that "today, only 25% of teens considers IG as a place for entertainment or [Short-Form Video], compared to ~60% for TikTok…"[1075] Like Snapchat, TikTok's success in attracting children threatened Meta's goal of attracting young users. One 2021 Meta study found that half of all surveyed children aged 8 to 12 had used TikTok in the previous month.[1076]

474. In August 2020, in response to perceived competition for tween and young teen users with TikTok, [1077] Instagram introduced "Reels,"[1078] strings of short-form videos that were algorithmically recommended to the user. The Reels format copies almost identically TikTok's core functionality, including the functionality to respond to another Reel side-by-side (termed "remix" on Instagram; almost identical to TikTok's "Duet" feature).[1079] The directive to compete with TikTok through Reels came from the company's most senior personnel, including Mr. Zuckerberg, who explained on a quarterly earnings call: "People have a lot of choices for how they want to spend their time and apps like TikTok are growing very quickly. And this is why our focus on Reels is so important over the long-term…"[1080]

475. Meta strategy documents asserted: "Short-form video is the future of Instagram,"[1081] and "teens are a critical audience not just for the success of Reels, as a product, but for Instagram as a whole and Meta as a company."[1082] Meta found that the youngest account holders engaged more

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1073 META3047MDL-003-00020907, "The Power of Identities: Why Teens and Young Adults Choose Instagram," at 977.
1074 META3047MDL-003-00030985, "Youth Vision Kickoff," March 2021, at 986.
1075 META3047MDL-047-00637064, "IG Reels Campaign Strategy," at 067.
1076 META3047MDL-020-00428695, "Tweens and Early Teens," August 2021, at slide 6.
1077 See, for example, META3047MDL-020-00428695, "Tweens and Early Teens," August 2021, at slide 6; and META3047MDL-003-00132740, "Teen Fundamentals," at 796.
1078 https://about.instagram.com/blog/announcements/introducing-instagram-reels-announcement.
1079 https://www.theverge.com/2021/3/31/22360544/instagram-reels-remix-tiktok-duet-feature-launch.
1080 META3047MDL-047-00637064, "IG Reels Campaign Strategy," at 079.
1081 META3047MDL-047-00637064, "IG Reels Campaign Strategy," at 079.
1082 META3047MDL-047-00637064, "IG Reels Campaign Strategy," at 065.

with these short-form videos than did older age groups,[1083] observing in one presentation that, "as new young teens onboard to the platform, they are stronger Reels adopters than the prior cohorts."[1084] Creating and investing in Reels was a way to engage and attract tween and teen users broadly, as one Meta study explained: "acquiring and maintaining [teens] continues to be a priority, reflected by investment in new features like Reels."[1085] Meta reported internally in 2023 that Reels were successful at engaging and retaining teen users: "IG time spent for US Teens [was] at a record high… primarily driven by increases in Reels."[1086]

476. Given TikTok's vast popularity with under-13 users, the Reels feature also attracts and appeals to tweens. As discussed previously, given the similarities between young teens and tweens, and both groups' interests in the kinds of content interactions Reels facilitates, Reels' popularity with young teen users also indicates that the feature is attractive to tweens. Indeed, when Instagram unveiled its Reels feature, it focused not just on the feature's short-form video structure, but also Reels' role in fostering creativity, noting that users can "[r]ecord and edit 15-second multi-clip videos with audio, effects, and new creative tools."[1087] As Meta's own research demonstrated, tween users were interested in creative tools that allowed such self-expression.[1088]

iv. Instagram incorporated features that arose from its research into tweens during Meta's halted attempt to create an Instagram Youth app

477. In addition to features directly drawn from Meta's competitors, new Instagram features emerged from Meta's research for its proposed but as yet unrealized Instagram Youth app. After

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1083 See, for example, META3047MDL-020-00428695, "Tweens and Early Teens," August 2021, at slide 11; and META3047MDL-091-00020735, "Early Teens IG Reels Experience Research Sprint [WiP] [A/C Priv}."
1084 META3047MDL-019-00121952, "IG Teens Product-Market Fit Follow-Ups," at slide 8.
1085 META3047MDL-020-00719795, "The Role of the Teen in Shaping a Household's Experience of Instagram".
1086 META3047MDL-047-00343173, "Teen Feed Deep Dive," at slide 6.
1087 https://about.instagram.com/blog/announcements/introducing-instagram-reels-announcement.
1088 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 750.

pausing the effort, Meta executives reorganized the Instagram youth team so that it fell under Mr. Mosseri's direct supervision, according to news coverage at the time.[1089] This decision—to terminate the Youth platform but not the Youth team, and to tether its functions to the head of Instagram directly—meant that employees who had been researching how to appeal to *tween* audiences, specifically, would be in charge of the company's broader, ongoing youth-focused initiatives. In an internal post explaining the reorganization to Meta personnel, the company said, "this structural change in no way minimizes the importance of the Youth and Communities work, nor is it meant to suggest any sort of slow down. The work of this team is vital to the day-to-day and long term [sic] success of Instagram, along with other Meta platforms."[1090] The insights and recommendations originally developed for the child-focused version of Instagram ultimately shaped the evolving design of the overall Instagram platform, which includes features tailored to the values, attitudes, and needs of younger, and sometimes underage, users.

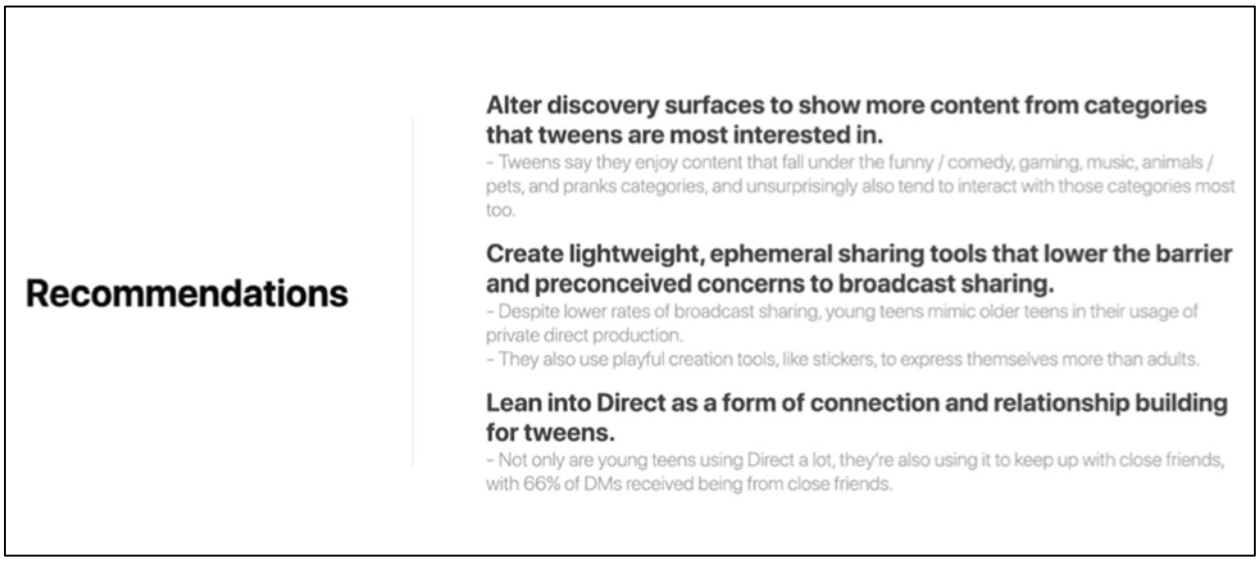
478. In the spring of 2021, an internal research deck titled "IG Youth: Tween Needs" recommended that Instagram might target tweens by creating tools that were "playful," and that the platform should "lean into direct [messaging] as a form of connection and relationship building,"[1091] as shown in Figure 23, below.

[1089] Ryan Mac, "Meta's head of youth product initiatives departs the company," March 9, 2022, *The New York Times*, https://www.nytimes.com/2022/03/09/technology/metas-pavni-diwanji-departs.html.

[1090] META3047MDL-031-00246280, "[Flagging] Youth Team changes, leak preparation" email, March 4, 2022, at 281.

[1091] META3047MDL-004-00003522, "IG Youth: Tween Needs," at 554.

Figure 23. Recommendations for appealing to Tweens[1092]



479. Instagram includes many features that incorporate colorful, playful visuals that allow users to express themselves without words. One study conducted by Meta as part of the exploration of a potential Instagram Youth platform highlighted expressive tools as a key vehicle for "help[ing] kids build up to social with adjusted IG features."[1093] This presentation proposed using "culturally relevant stickers, gifs, and camera effects" and "esp for tweens: creative and intuitive tools to […] create art, stickers and effects."[1094] The deck emphasized the increased desire of children to create and share their "unique expression" as they got older.[1095] Meta subsequently rolled out several "fun" and "playful" visual features to the main Instagram platform, increasing its appeal to users under 13.

480. In November 2021, after pausing the Instagram Kids effort, Instagram introduced the "Add Yours" feature, which allowed users to invite their followers to respond to their Stories

1092 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 554.
1093 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 750.
1094 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 750.
1095 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 750.

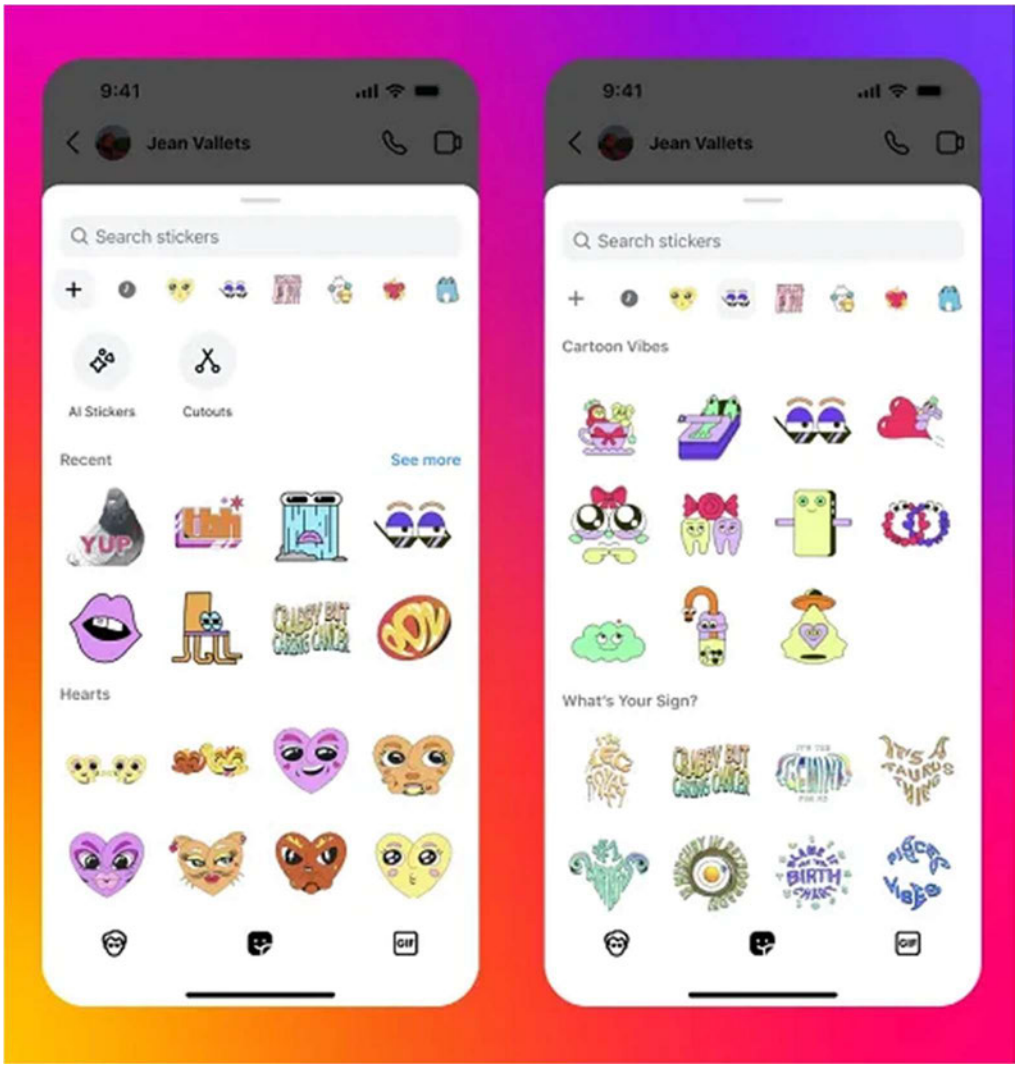
with stickers and other forms of engagement (e.g., Likes and emojis such as the heart-eyes emoji or the gasping face emoji).[1096] Meta's research found that young teens "use playful creation tools, like stickers…far more than adults."[1097] Meta's introduction of stickers, music overlays, and other "playful creation tools" focused on tween-centric preferences, encouraging teens to engage with their friends.[1098]

1096 Andrew Hutchinson, "Instagram Launches 'Add Yours' Sticker to Facilitate More Engagement in Stories," November 1, 2021, *Social Media Today*, https://www.socialmediatoday.com/news/instagram-launches-add-yours-sticker-to-facilitate-more-engagement-in-sto/609267/.

1097 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 539.

1098 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 539.

Figure 24. New Instagram stickers appeal to tweens' creativity[1099]



481. Stickers were a significant focus among Instagram's new features. In early 2024, Instagram added "cutouts," a way for users to create their own stickers by outlining and lifting elements from their photos to become custom stickers,[1100] mirroring the kind of playful creativity

[1099] Andrew Hutchinson, "Instagram Enables Users To Create Custom Sticker From Still Image Posts," January 17, 2024, *Social Media Today*, https://www.socialmediatoday.com/news/instagram-enable-users-create-custom-sticker-still-image/704854/.

[1100] Andrew Hutchinson, "Instagram Enables Users To Create Custom Sticker From Still Image Posts," January 17, 2024, *Social Media Today*, https://www.socialmediatoday.com/news/instagram-enable-users-create-custom-sticker-still-image/704854/.

tool the 2021 "IG Youth" study had recommended.[1101] At the end of 2024, Instagram added 17 new "sticker packs" with images like oversized lips, and exaggerated hearts with comical facial expressions (see Figure 24 above). This update also introduced a series of features that Instagram included knowing they were particularly appealing to tweens.[1102] These features, which emphasized playful creativity and connection-building among friends and friend groups, included: a menu of stickers within the direct message function, which made it easier for users to include stickers in their DMs, and the ability for users to adopt nicknames in their DMs.[1103]

482. Instagram identified "social+connectedness" as a need for 11- to 15-year-olds in its research for the effort to create an Instagram platform for children, saying that "Social becomes so important that it can be the main activity."[1104] In the presentation "Instagram Youth: Tween Needs," Meta noted that "once [young teens] are connected, we then have to make sure they're maintaining those relationships on our platform. Direct stands out as a place for this…"[1105] and recommended that Instagram "[l]ean into Direct as a form of connection and relationship building for tweens."[1106]

483. Direct is Instagram's direct messaging function within the platform—a feature that allows users to send text-like messages directly to each other and share Instagram content without leaving the platform.[1107] In comparing itself to Snapchat in 2020, Instagram noted that Direct "lacks the response urgency of Snap and conversation depth fulfilled by text

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1101 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 554.
1102 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 548, 551, 554.
1103 Andrew Hutchinson, "Instagram Adds New Stickers, Location Sharing in DMs," November 25, 2024, *Social Media Today,* https://www.socialmediatoday.com/news/instagram-new-stickers-location-sharing-dms/733927/.
1104 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 737 and 745.
1105 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 547.
1106 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 554.
1107 https://about.instagram.com/features/direct.

messaging."[1108] Subsequently, Instagram added features to its Direct platform that appealed to tweens. The ability to see who was online and free to chat was added to Direct in 2022 along with the ability to reply to messages without having to switch into the messaging section of Instagram, ending the need to interrupt the browsing experience.[1109] According to the blog post announcing these features, they were intended to make it "more convenient to chat while on the app."[1110] In 2024, users were given the ability to "pin" a conversation to the top of the Direct feed.[1111] The ability to share live locations was also introduced, where a "pin" identifying the users location could be dropped and shared for "hangouts made easier,"[1112] similar to Snapchat's Snap Map which allows users to see the locations of their contacts.[1113] The ability to toggle read receipts off was also introduced, meaning the person who sent a message could no longer automatically see that the recipient had read it, an enhancement to privacy.[1114] Meta hypothesized that teens were using Instagram less because they were worried about who would see their posts.[1115] Meta's research found that there was a need for teens to share separately from adult audiences, suggesting that "We should invest in better audience tools […] for new teen users…"[1116] Close Friends was launched as a feature on Instagram in 2018 as a way to allow users to limit who could see some of the stories they posted.[1117] According to Instagram's blog announcing the launch, "Instagram Stories has become the place to express yourself and share everyday moments, but our community has grown and sometimes what you want to share isn't

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1108 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 759.
1109 https://about.instagram.com/blog/announcements/introducing-new-dm-features.
1110 https://about.instagram.com/blog/announcements/introducing-new-dm-features.
1111 https://about.instagram.com/blog/announcements/new-dm-improvements.
1112 https://about.instagram.com/blog/announcements/new-instagram-dm-features-update/.
1113 https://help.snapchat.com/hc/en-us/articles/12142629111444-How-do-I-drop-a-pin-on-Snap-Map
1114 https://about.instagram.com/blog/announcements/new-dm-improvements.
1115 META3047MDL-003-00135149, "Teens Team: 2017 H1/H2," 2017, at 167.
1116 META3047MDL-003-00135149, "Teens Team: 2017 H1/H2," 2017, at 163.
1117 https://about.instagram.com/blog/announcements/curate-instagram-stories-for-close-friends-only.

for everyone. With Close Friends, you have the flexibility to share more personal moments with a smaller group that you choose."[1118]

484. Another trend among tween and young teen users was the creation of second accounts, which allowed those users to post some content to different audiences of followers, and to generally shield that content with an additional layer of privacy. In 2020, Instagram reported internally that teens were very concerned about what they posted on their Instagram. [1119] When surveyed by Instagram, many teens indicated that they sometimes chose not to post because Instagram was too public, they didn't want to share every post with every follower, and they were concerned their photos or videos would "bore people who didn't share their interests."[1120] These secondary accounts, known as Finstas or Fake Instagrams, are used by teens and tweens to create a space where they can express a distinct identity among a smaller circle of followers.[1121] According to the "Teens Fundamentals" presentation, teens were "interested in building small spaces to express themselves,"[1122] and Instagram found it lent itself "well to identity exploration," noting that Finstas "allow[] teens to show different sides of themselves and explore [their] identity."[1123] According to Instagram's internal research, in 2017, 24% of U.S. teens were using multiple accounts every week, and teens were "posting over ~2x the amount of feed media to their finstas than to their main accounts every week."[1124] Instagram found that "the ability to

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1118 https://about.instagram.com/blog/announcements/curate-instagram-stories-for-close-friends-only.

1119 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 772.

1120 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 772.

1121 https://www.merriam-webster.com/wordplay/what-does-finsta-mean-fake-instagram. When questioned at a Senate hearing in 2021 about teens use of Finstas, Antigone Davis, Vice President and Global Head of Safety at Meta for Safety Policy, said "Finstas are not something that we actually built, they built [them]. They did it to actually provide them with themselves with a more private experience….", Exhibit 8 to A. Davis Deposition, Senate Testimony from September 30th, 2021, at 1272694.17.

1122 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 783.

1123 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 780.

1124 META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017," at 851.

create multiple accounts gives teens the ability to experiment with showing a different side of themselves through more frequent authentic expressions to smaller audiences,"[1125] and provided a method to do this to young users through Finstas, appealing to tweens and teens.

485. Another child-oriented feature on Instagram is its new secret game, which Instagram introduced in 2024.[1126] The game, a pong-like game, is played using an emoji in the direct messaging portion of Instagram.[1127] An Instagram spokesperson said that "the company is always working on new ways to make 'Instagram feel more fun,' which is why it rolled out the game."[1128] Meta also knew that tweens in particular enjoy discovering "easter egg" experiences[1129] in an app, explaining, "Tweens […] also like the experience of finding the 'hidden parts' of an app."[1130]

486. These features were ultimately incorporated into Instagram, but they were first considered when Instagram was attempting to augment its appeal to children, tweens, and young teens. Moreover, many of these features were inspired by and adapted from similar features on platforms designed by Meta's competitors—competitors whom Meta recognized as having significant tween user bases, and who were steadily siphoning away many of Instagram's youngest users. As such, the incorporation of these features into Instagram's primary app demonstrates that Meta designed Instagram to be appealing and directed to tweens and children.

1125 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 780.
1126 https://techcrunch.com/2024/03/07/bored-go-play-this-hidden-game-in-your-instagram-dms/.
1127 https://techcrunch.com/2024/03/07/bored-go-play-this-hidden-game-in-your-instagram-dms/.
1128 https://techcrunch.com/2024/03/07/bored-go-play-this-hidden-game-in-your-instagram-dms/.
1129 An "Easter egg" experience in an app refers to a hidden feature, message, or interactive surprise that developers intentionally include for users to discover, often in a playful or secretive way.
1130 META3047MDL-020-00428695, "Tweens and Early Teens," slide 21 notes.

C. Instagram contains content that appeals to under-13 users

487. In addition to the features Meta incorporated into the Instagram platform, the company has also studied and catalogued the content, or subject matter, that tends to appeal to tweens, and has sought to incorporate such content on Instagram. Further, as discussed in more detail below, advertisers viewed Meta as a valuable channel for reaching users as young as 6 years old, thereby introducing and encouraging further content that appealed to children.

i. Meta identified and promoted content and influencer accounts that appealed to tweens

488. Meta recognized that tweens were most likely to join and remain on its platforms if those tweens were almost immediately exposed to content they would enjoy, so the company focused on improving its ability to expose teens to such content, and on partnering with creators who appealed to tweens. In particular, Meta leveraged its algorithm on Instagram's Explore page, a personalized discovery feed designed to help users find new content that aligns with their interests.[1131] The Explore page is separate from a user's individual Home Feed page, which shows content from accounts they follow.

489. Meta's research found that the recommended content for tweens included videos that were humorous, or that focused on gaming, music, animals, pets, and pranks."[1132] Meta leveraged its new user onboarding process and algorithm to connect new users with entertainment that mirrored their interests and sought to partner with influencers popular among young teens, many of whom were themselves under the age of 13.

490. Meta's focus on content that appealed to tweens dates back at least as far as 2017. Meta

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[1131] https://about.instagram.com/features/search-and-explore.

[1132] META3047MDL-004-00003522, "IG Youth: Tween Needs," at 554.

studied the social media habits and interests of tweens in order to provide "an introduction to the tween demographic and their social media use."[1133] The resulting research noted that "the real driver of tween social media engagement is entertainment,"[1134] and indicated that content focused on "entertainment and emotional connections" was likely to drive tween engagement on Meta's platforms.[1135] Meta recognized that the content on its site was critical to attracting and engaging tween users, writing in a presentation about tweens that, "Content is currency — it's staying up with trends, fitting in, self-expression, finding new interests, and a reason to connect with friends."[1136] In an internal presentation discussing the ultimately abandoned Instagram Kids platform, Meta noted that, "[h]elping tweens discover their interests on IG is important because tweens define themselves by their social position, which is in large part driven by their interests."[1137] Another Meta survey on the needs of tweens highlighted that "entertainment/interests" are "a starting point for engagement" and that a product geared towards tweens should "strengthen connections to a small circle of close friends"[1138] (see Figure 25, below).

1133 META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 678.

1134 META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 703.

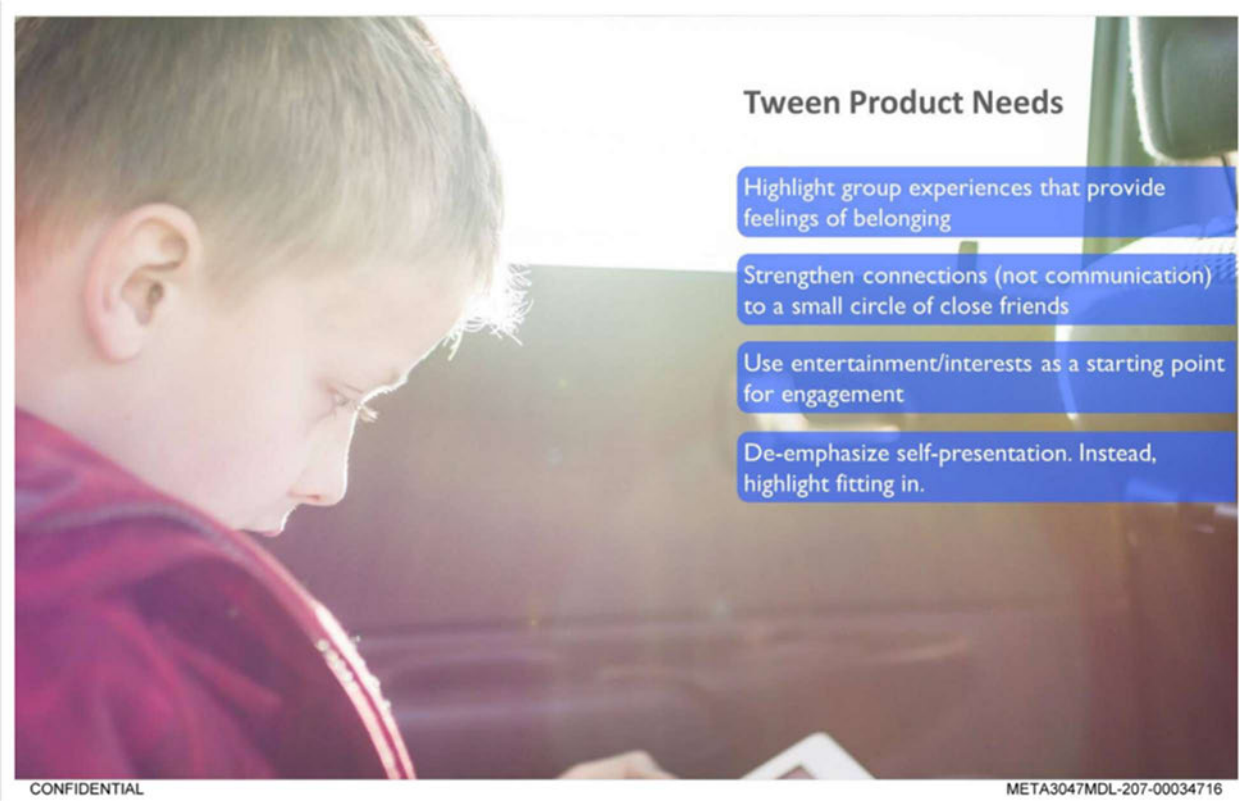
1135 META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 678.

1136 META3047MDL-020-00428695, "Tweens and Early Teens," at slide 8.

1137 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 527.

1138 META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017 at 716.

Figure 25. Meta's 2017 survey of tweens and social media concluded with a series of "tween product needs"[1139]



491. Instagram's capacity to present users with content that mirrors their interests is critical to the platform's appeal. An Instagram blog post from 2023 translated this matching algorithm for lay audiences: "To find photos and videos you might be interested in, we look at past activity such as posts you've liked, saved, shared and commented on in the past."[1140] The same post explained that, using that information, Instagram "personalize[s] the experience for you to try to strike a balance between content from accounts you follow with content from accounts you don't follow but might be interested in."[1141] In tailoring the platform to each individual's attitudes,

[1139] META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017 at 716.
[1140] https://about.instagram.com/blog/announcements/instagram-ranking-explained.
[1141] https://about.instagram.com/blog/announcements/instagram-ranking-explained.

preferences, and behaviors, Instagram presents a personalized experience that reflects the psychographic profile of each user—including, critically, the profiles of users who are aged 12 years and under.

492. In an internal study, one teen survey respondent explained the power of this tailored feed to capture attention for extended periods of time: "I spend all my time on the Explore page and I'm never on the actual Home Page. I'd give myself an hour and a half maybe on the Home page, and I'd give myself an hour on the Explore page. [Explore] is almost like TikTok, when I get onto it I can't stop."[1142] Additionally, as described in Meta's internal documents, and detailed earlier,[1143] the same content that appeals to young teens is appealing to children under 13, so a feed that targets the interests of a 13- or 14-year-old will also appeal to many 11- and 12-year-olds.

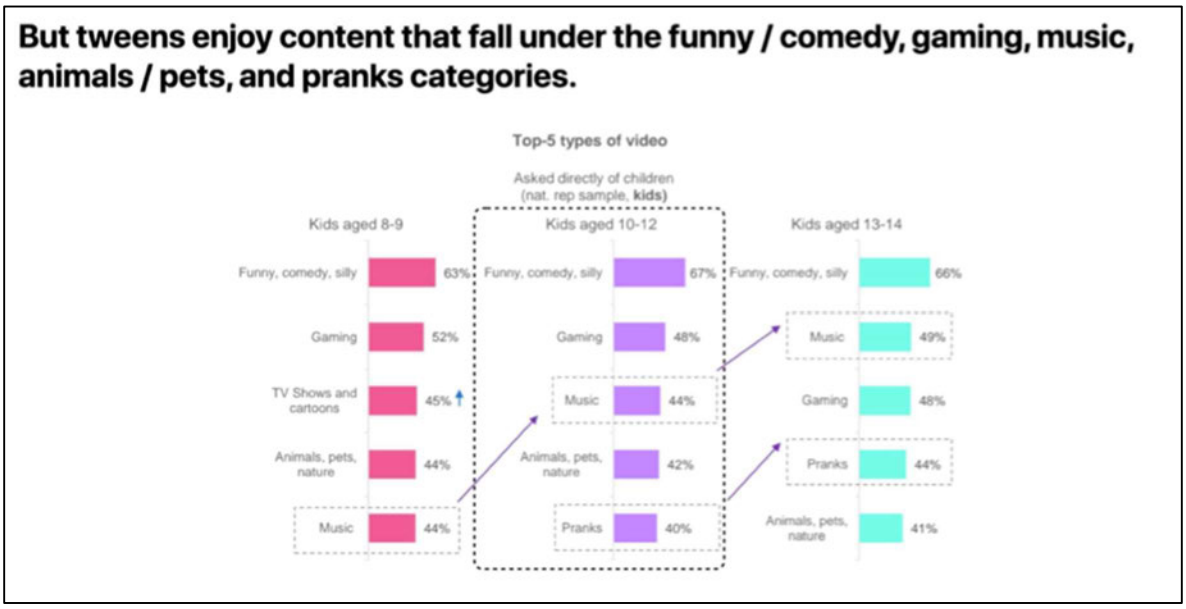
493. Meta has spent considerable resources identifying the specific interests that are likely to appeal to young teen, and by extension tween, users. The company noted that, "[y]oung teens see more content related to pop culture like tv & movies and music,"[1144] and gravitate towards content that expresses, among other characteristics, humor, and that focuses on, among other topics, gaming or music (see Figure 26 below). Though Meta distinguishes between tweens and teens in this presentation, its findings highlight the behavioral and attitudinal similarities between young teens and their slightly younger peers, implying that teen-targeted content is similarly appealing to tweens.

1142 META3047MDL-003-00020827, "Beyond the Individual User: Understanding Products through the Household Ecosystem," March 2021 at 0852.

1143 See, for example, META3047MDL-003-00015900, direct message summary, April 28, 2021.

1144 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 529.

Figure 26. Tween video topics from survey on "Short Form Video Landscape for Kids"[1145]



494. Instagram also leveraged partnerships with influencers, internally referred to as "creators," to ensure content on the platform was appealing to tweens and young teens.[1146] A 2018 internal email titled "Creator Examples for Zuck Meeting" states that "young creators are native to mobile creation and understand how to capture and grow a loyal teen audience… We are targeting this new class of creator for IG TV."[1147] Meta specifically indicated that it was seeking creators with a "high teen following (resonating with 13-15 year olds)."[1148] Meta employees argued for "filter[ing] for only real teen partners (12–18)" in discussing how to "reach the most global (or US) every day teens in the most compelling ways."[1149] In this case, Meta's definition of "real teen partners" explicitly included 12-year-olds. On several occasions Meta

1145 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 530.
1146 See, for example, Antony Deposition, 144:4-8.
1147 META3047MDL-065-00475879, "Creator Examples for Zuck Meeting," January 19, 2018 at 879, (Antony Deposition, Exhibit #4).
1148 META3047MDL-065-00475879, "Creator Examples for Zuck Meeting," January 19, 2018 at 879 (Antony Deposition, Exhibit #4).
1149 META3047MDL-074-00143512, "Re: Partners (sic) w/ high teen followings," October 2017, at 512.

specifically focused on "teen and teen-focused partners,"[1150] as when the company launched its Live and Stories features,[1151] or when, in 2019 and 2021, the company paid large groups of primarily adolescent influencers, including influencers who were 11 years old at the time, to create Reels for the platform.[1152]

495. Four years later Instagram continued to seek creators capable of attracting teens and, by extension, tweens. Mr. Antony, Meta's Director of Creative Partnerships, stated in internal messages that "ideally we even emphasize creators that are closest to teen stage and make content for teens," such as "Bella Poarch and Charli D'Amelio," and that Meta "shouldn't prioritize Established [sic] superstar[s] that have no teen following."[1153] Meta's interest in attracting and partnering with creators, influencers, and celebrities who themselves were tweens, and who appealed to tween and young teen users, further indicates that content on Instagram appealed to child users.

496. In assessing the content that appealed to its teen users, Instagram assembled a master spreadsheet of influencers across various topics, including, among others, humor, dance, style, and music.[1154] Each account was listed with its total follower count, and the portion of overall followers who were teens.[1155] Many of these categories are the same topic categories Meta previously identified as appealing to tweens, as in Figure 26, above, and in notes from Meta's

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1150 META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017," at 852.

1151 META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017," at 852.

1152 META3047MDL-241-00000012, "Instagram Reels Production and Marketing Agreement," at 19 (concerning [redacted]), for example, [redacted] was 11 years old in 2021 (https://www.famousbirthdays.com/people/[redacted] *See also* META3047MDL-241-00000024, "IG Content Order Form" (concerning partnerships with many popular teen influencers in 2019) at 035; for example, [redacted] ([redacted]) was 11 years old in 2019 (https://www.famousbirthdays.com/people/[redacted]

1153 META3047MDL-065-00483116, direct messages between Justin Antony, [redacted] and [redacted], November 30, 2022, (Antony Deposition, Exhibit 8) at 116.

1154 META3047MDL-065-00231552, untitled spreadsheet.

1155 META3047MDL-065-00231552, untitled spreadsheet.

development of an Instagram app for children, which noted that "…gaming is very important to [tweens]."[1156] The influencer tracking spreadsheet included "gaming" as a tab, and listed accounts of 239 gaming influencers.[1157] By tracking influencers in categories Meta knew were appealing to tweens, and measuring the portion of followers on those accounts who are teens, Meta's own data confirm it was heavily invested in attracting and promoting content that it expected to appeal to users under 13-years of age.

497. Leaders at Meta assumed that these young influencers were more likely to appeal to users the same age or younger. For example, Mr. Antony testified, "I think it's a fair assumption to just say that if somebody closer to their age range is making content, it probably resonates with teens more than an older person."[1158] This observation is also consistent with the academic literature on tween and teen development described above in Section XV.[1159] Mr. Antony explained in an internal chat in 2017: "Teens need to see other teens and tweens on the platform so that they feel the app is for them."[1160] While not every account on Instagram features child models or celebrities, Meta recognized that fostering accounts from tweens and young teens, including those under the age of 13, raised the company's prospects of attracting and retaining tween users.

498. Meta also partnered with celebrities with a high number of teen followers to help them create successful content by helping them understand how they might develop, retain, and appeal to their audiences.[1161] In deciding which celebrities to pursue, Mr. Antony wrote in a direct message, "I think we should be focused on teen-centric creators across cohorts so that we can

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1156 META3047MDL-003-00131162, "RECAP Research Team's H2 Roadmap share-out (presented during Lunch n Learn)," Meeting notes, July 9, year undated, at 162.
1157 META3047MDL-065-00231552, untitled spreadsheet.
1158 Antony Deposition, 144:4-8.
1159 See, e.g., Bandura, A. (1977). *Social Learning Theory.* Englewood Cliffs, NJ: Prentice-Hall.
1160 META3047-MED-047-00693844, Message Summary, January 13, 2017 (Antony Deposition, Exhibit 16.)
1161 Antony Deposition, 52:7-25

win with teens and their interests. So we should prioritize highly followed teen accounts irrespective of their cohort stage."[1162] An internal presentation from 2021 called "Tweens and Early Teens" highlighted that "Tweens are into the same celebrities, athletes, musicians as early teens."[1163] By choosing to focus on celebrities who appealed to teens, Meta was simultaneously and necessarily focusing on celebrities who appealed to tweens.

499. Among other vehicles targeting young users, Meta partnered with Brat TV. Brat TV is an online television channel whose website advertises that "Fortune 500 advertisers choose Brat TV to reach Gen Z."[1164] In 2019, Meta entered into an agreement with Brat TV to have its influencers create original IGTV content for Instagram.[1165] In paying Brat TV personalities to create exclusive content for Instagram, Meta had invested in attracting Generation Z, the youngest of whom were just 7 years old in 2019.[1166] An email discussing a subsequent agreement in 2020 to have Brat TV talent create Reels for Instagram included the follower counts and the ages of the mostly-teen creators, with the youngest listed as 12-years-old.[1167] As its partnership with Brat TV illustrates, Meta leveraged the popularity of creators with tweens and young teens to ensure Instagram contained content that appealed to tween users.

ii. Advertisements on Instagram target children and promote child-oriented content

500. In addition to the specific platform features that Meta used to attract children under 13, Instagram's appeal to child users is evident in the platform's ability to attract and retain

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1162 META3047MDL-065-00483116, direct messages between Justin Antony, Eric Levine and Pooja Kumar, November 30, 2022, (Antony Deposition, Exhibit 8), at 116.
1163 META3047MDL-020-00428695, "Tweens and Early Teens," August 2021, at slide 8.
1164 https://www.brat.tv/.
1165 BRAT000029, "IGTV Video Content Order Form," May 6, 2019.
1166 https://www.pewresearch.org/short-reads/2019/01/17/where-millennials-end-and-generation-z-begins/.
1167 BRAT000825, "Reels – emerging talent (Brat TV)" email, September 2020, at 826.

advertisers who sought to market products that targeted children. A closer look at Nickelodeon's purchase of ads on Meta's platforms provides a case study in how advertisers viewed Instagram as venue to target under-13 users.

501. Nickelodeon is the most popular children's TV network among children aged 2-11.[1168] Nickelodeon provides a compelling case study because, as one of the largest and most influential children's entertainment brands, its strategies are likely to be mimicked or matched by other companies that seek to target children and tweens. Nickelodeon used Instagram to promote shows with a target market of children under 13 on the platform. An internal Nickelodeon marketing document from 2021 examined various promotional marketing channels (or venues) that might enable the company to promote its forthcoming show *Warped* to its target market of 6- to 11-year-olds.[1169] Nickelodeon noted that its target audience included [redacted] who is [redacted] and suggested that the [redacted] should prioritize these online users.[1170] Nickelodeon's research highlighted that [redacted] target audience considers Instagram a preferred social media app and that they are a [redacted][1171] In promoting *Warped*, Nickelodeon planned to "utilize Instagram [redacted]

[redacted][1172]

502. In addition to promoting posts by its shows' stars, Nickelodeon also invested in ads on

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1168 https://variety.com/2019/tv/features/nickelodeon-40th-anniversary-rugrats-blues-clues-spongebob-kids-choices-awards-ryans-mystery-playdate-1203164889/.
1169 AG-MDL3047-105164, "Warped: Media Recommendation," November 2021 at 116.
1170 AG-MDL3047-105164, "Warped: Media Recommendation," November 2021 at 169.
1171 AG-MDL3047-105164, "Warped: Media Recommendation," November 2021 at 185.
1172 AG-MDL3047-105164, "Warped: Media Recommendation," November 2021 at 185.

Instagram. Between 2015 and the first part of 2024, Meta generated approximately $18.7 million dollars in revenue from Nickelodeon ads on Instagram.[1173] Over 27,000 of these ads were designed to target an audience that included 13-year-olds, generating 2.5 billion impressions in total. During the same time period, Nickelodeon placed approximately 370 ads that targeted *only* users below the age of 15, generating over 35 million impressions.[1174] Because Instagram's official policy is that users must be 13,[1175] advertisers are unable to select ages under 13 as the target audience, instead relying on the similarities between 13-year-olds and their tween peers, using 13 as a proxy for these younger users. Figure 27, Figure 28, and Figure 29, below, are still images from Nickelodeon ads that were designed to target only users aged 15 years and younger.

503. Figure 27, below, shows a still from a video preview for a music video from [redacted] and [redacted], stars of their own respective children's shows.[1176] The ad caption read, "new beats for you to jam to […] dropping tonight after new Young Dylan & That Girl Lay Lay at 7p/6c"[1177]

1173 Includes ads for both Nickelodeon and Nickelodeon Family. Figures are derived using data from the following sources: META3047MDL-115-00000004; META3047MDL-115-00000005; META3047MDL-115-00000006; META3047MDL-115-00000007; META3047MDL-115-00000008; META3047MDL-115-00000009; META3047MDL-115-00000010; META3047MDL-115-00000011; META3047MDL-115-00000012; META3047MDL-115-00000013.

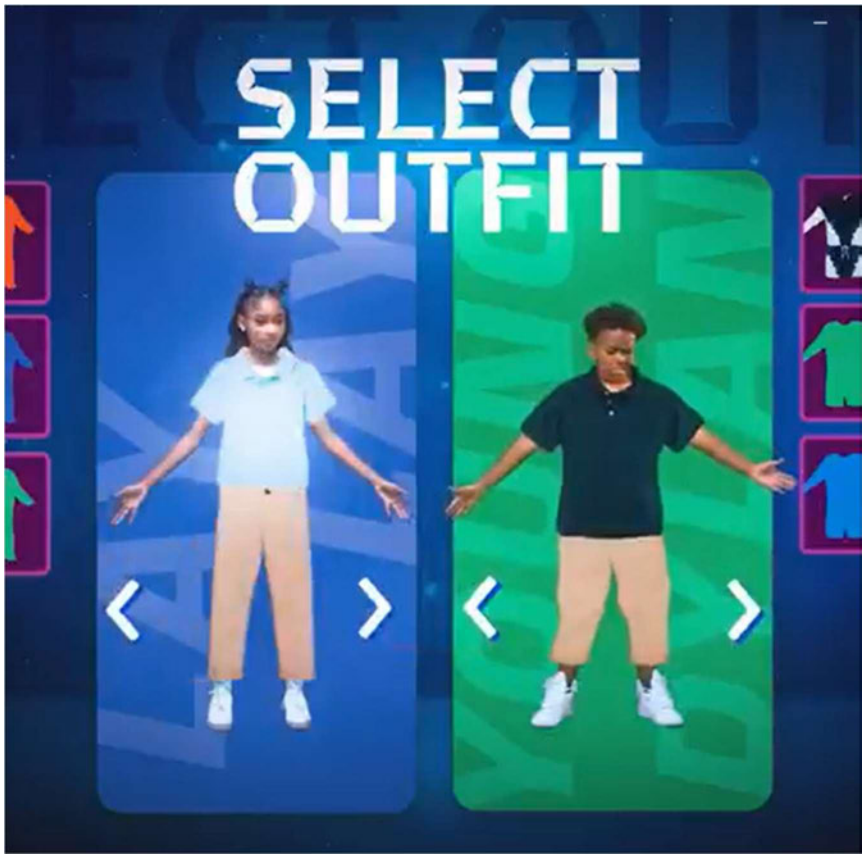
1174 Includes ads for both Nickelodeon and Nickelodeon Family. Figures are derived using data from the following sources: META3047MDL-115-00000004; META3047MDL-115-00000005; META3047MDL-115-00000006; META3047MDL-115-00000007; META3047MDL-115-00000008; META3047MDL-115-00000009; META3047MDL-115-00000010; META3047MDL-115-00000011; META3047MDL-115-00000012; META3047MDL-115-00000013.

1175 https://help.instagram.com/3237561506542117.

1176 https://www.imdb.com/title/tt11097072, https://www.imdb.com/title/tt14442054/.

1177 META3047MDL-220-00001997.

Figure 27. Still from Instagram video promoting song featuring [redacted] & That Girl [redacted][1178]



504. Figure 28, below, shows a still from a video preview for a special about JoJo Siwa's birthday celebrations. [redacted].[1179] The ad's caption read, "We're throwing JoJo an EPIC birthday party & EVERYONE is invited!!!"[1180]

1178 META3047MDL-220-00001999 and META3047MDL-220-00001997.
1179 AG-MDL3047-105950, "Nickelodeon Paid Social Approach," 2022, at slide 6.
1180 META3047MDL-220-00002027.

Figure 28. Still from Instagram video promoting JoJo's Dream Birthday special[1181]



505. Figure 29, below, shows a still from a video preview for Halloween programming on Nickelodeon called "HallowScream" including clips from various Nickelodeon children's shows including That Girl [redacted][1182] and Danger Force.[1183] The ad caption read, "Get excited for HalloSCREAM all month long on Nickelodeon!"[1184]

1181 META3047MDL-220-00002029 and META3047MDL-220-00002027.
1182 https://www.imdb.com/title/tt14442054/.
1183 https://www.imdb.com/title/tt11833388.
1184 META3047MDL-220-00002178.

Figure 29. Still from Instagram video promoting Halloween programming on Nickelodeon[1185]



506. Nickelodeon spent [redacted] advertising the Kids' Choice Awards on Meta,[1186] [redacted]. The company's Kid's Choice Awards Wrap Report in 2022 concluded that [redacted]"[1187] Instagram Stories and Reels—features Meta identified as popular with tweens—provided [redacted] for tween girls [redacted][1188] Promotional posts, Stories, and Reels for the Kids' Choice Awards placed on Instagram and Facebook received at least [redacted]

1185 META3047MDL-220-00002180 and META3047MDL-220-00002178.
1186 AG-MDL3047-105579, "Kid's Choice Awards Wrap Report 2022," 2022 at 601.
1187 AG-MDL3047-105579, "Kid's Choice Awards Wrap Report 2022," 2022 at 581.
1188 AG-MDL3047-105579, "Kid's Choice Awards Wrap Report 2022," 2022 at 594.

views, demonstrating that Nickelodeon reached a considerable audience by targeting children on Instagram.[1189]

507. The features and content on Instagram outlined in this section demonstrate that, as Meta's own research indicates, the Instagram platform appeals to child and tween users.[1190] Meta developed and implemented features that appeal to tweens, including, but not limited to, content that emphasized "entertainment and emotional connections"[1191] as well as a personalized experience that sought to match users with content relevant to their interests. The company was aware that these features would be appealing to tweens, either based on Meta's own internal research on the interests of tweens, or because the features were incorporated into other platforms known to be appealing to tweens. The visual style of features Instagram incorporates colorful and "playful"[1192] elements, including stickers and filters, that sought to appeal directly to children, tweens, and young teens. Other strategies that Meta employs include incentives or rewards aimed at children, such as secret games and other features which seek to generate an approval response from users. Meta understood this response to be particularly effective at engaging teens and tweens.[1193] The use of "real" teen celebrities and influencers was also intended to "resonate" with teens and drive engagement. Finally, advertisers placed ads and sponsored posts on Instagram for products marketed towards under-13 users. In sum, many key features and content on Instagram appear to be directed to child users.

1189 AG-MDL3047-105579, "Kid's Choice Awards Wrap Report 2022," 2022 at 618.
1190 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 554.
1191 META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017 at 678.
1192 https://about.instagram.com/blog/announcements/introducing-face-filters-and-more-on-instagram.
1193 META3047MDL-003-00132740, "Teen Fundamentals," May 2020, at 793.

D. Evidence from internal and external sources confirm children under the age of 13 use Instagram

508. Instagram has been successful at building and sustaining an audience of tween users. For many years, Meta has been aware that millions of children under the age of 13 use Facebook and Instagram.[1194]

509. According to the U.S. Census, there are roughly 21 million children in the U.S. who are 8-12 years of age.[1195] A 2021 study by Common Sense Media in the U.S. reported that 18% of children aged 8-to-12-years used some form of social media every day, implying that roughly 3.8 million such children use these platforms daily.[1196] The same study reported that Instagram was the second-most-popular social media platform among tweens, attracting 10% of that age group, or approximately 2.1 million children below the age of 13. A 2022 study by Thorn, a nonprofit organization focused on global child safety,[1197] reported that an even larger share of tweens used Instagram daily, with 29% of U.S. children aged 9 to 12—roughly 4.9 million children—using Instagram daily, and 51%—roughly 10.5 million children—having used Instagram at least once.[1198] The 2023 Thorn study showed similar numbers, with just under a quarter of 9- to 12-

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1194 In a survey conducted by Consumer Reports, published in its June 2011 issue, the consumer research non-profit concluded that 20 million U.S. "minors" (those under 18) were on Facebook; that 7.5 million U.S. children 12 and under were on Facebook, and that 5 million U.S. children under 11 were on Facebook. "Your Security: Facebook traps and online threats," *Consumer Reports*, June 2011, https://www.consumerreports.org/media-room/press-releases/2011/05/cr-survey-75-million-facebook-users-are-under-the-age-of-13-violating-the-sites-terms-/.

1195 "Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States: April 1, 2020 to July 1, 2023," U.S. Census, chart ID: nc-est2023-syasexn, https://www2.census.gov/programs-surveys/popest/tables/2020-2023/national/asrh/nc-est2023-syasexn.xlsx.

1196 Rideout, V., Peebles, A., Mann, S., & Robb, M. B. (2022). *Common Sense census: Media use by tweens and teens*, 2021, Common Sense, https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf , p. 5.

1197 https://www.ijm.org/news/three-tips-teaching-online-safety-kids.

1198 "Youth Perspectives on Online Safety: 2022," Thorn, https://info.thorn.org/hubfs/Research/22_YouthMonitoring_Report.pdf , p.6-7.

year-olds using Instagram daily and half of them having used Instagram ever.[1199]

510. A 2025 "Life in Media" survey from the University of South Florida found that 48% of 11- to 13-year olds used Instagram with their own account, while 13% used it with someone else's account and 5% used it without being signed in.[1200] A 2025 study by Common Sense Media found that 48% of children aged 0 to 8 have watched short form videos on platforms such as TikTok, YouTube Shorts, and Instagram Reels.[1201] Though these numbers vary, they demonstrate that a meaningful number of children below the age of 13 use Instagram regularly.

511. Instagram's own data indicate that an even greater number of tweens are likely to use Instagram than public studies suggest. Instagram has long been aware that its population of users includes many children under the age of 13, and it has tracked and attempted to measure that number as early as 2017, and as recently as 2021, as shown in Table 14, below. Meta consistently found between a quarter and half of tweens in the United States were on Instagram.

1199 Thorn report, "Youth Perspectives on Online Safety, 2023," pp. 9-10 https://info.thorn.org/hubfs/Research/Thorn_23_YouthMonitoring_Report.pdf.

1200 "Life In Media Survey: 2025," University of South Florida, pg. 26, https://www.usf.edu/arts-sciences/departments/journalism/documents/lims2025/lims2025.pdf.

1201 "The Common Sense Census: Media Use by Kids Zero to Eight: 2025," Common Sense Media, 2025, https://www.commonsensemedia.org/sites/default/files/research/report/2025-common-sense-census-web-2.pdf.

Table 15. Meta studied the number of children on Instagram, consistently finding a significant number of children and tweens on the platform

Year of Meta Study	Meta Estimate of Child Users
2017	"[A]s age increases (5- to 12-year-olds), so does the self-reported proportion of U13 year olds with FB and IG accounts (**5-30%**)"[1202]
2017	Meta survey of parents showed that "[b]y age 12, ~**25% of pre-teens** [were] (presumably) using Instagram" and that "by age 12, roughly 50% of 12 year olds either use an account or have asked for one."[1203]
2018	"Looking at people we predict to be 13 and 14 today, we can estimate that there were **4M people under 13 in 2015 on IG** … around 30% of all 10-12 years old in the US."[1204]
2020	**22% of 6- to 9-year-olds** and **35% of 10- to 12-year-olds** reported having used Instagram in the past month.[1205]
2020	14% of 6-9-year-olds and 21% of 10-12-year-olds reported that **most of their friends were on Instagram**.[1206]
2021	"A **majority of 12 year olds** and about **half of 11 year olds** screened are on IG already in some capacity."[1207]

512. Documents and studies from across the last decade demonstrate that Meta has devoted considerable resources to studying and cataloguing the attitudes, beliefs, values, behaviors, and needs of tweens, and has used the output of that research to introduce tween-focused features and content to Instagram. These child-oriented elements have enabled Meta to attract millions of daily users aged 12-years and below, and Instagram is aware that this illicit, underage audience represents a significant population among its base of users.

1202 META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017," at 851.
1203 META3047MDL-047-00608197, "Project Neo Understand: IG-Relevant Data," 2017, at 197-198.
1204 META3047MDL-014-00133662, "H2/H1 2018 Youth Team Review," 2018, at 666.
1205 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020 at 4191.
1206 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020 at 4207.
1207 META3047MDL-172-00000001, "[redacted]'s post in Youth Team needs approval," Direct Messages, August 31, 2021, at 001. See, also, META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 1411, another 2020 Meta study of "children" and "tweens" aged 6-13 which reported similar usage rates among peers.

XVIII. EVALUATION OF THE CHILD-DIRECTEDNESS OF PORTIONS OF INSTAGRAM

513. As established above, Instagram has child users, and many of the platform's core features appeal to children. In this section, I review several accounts that illustrate how the platform appeals to audiences under the age of 13. It is my opinion that these accounts appeal to children because they feature child models and celebrities; discuss topics of interest to children and tweens; and incorporate the visual features Instagram provides that appeal to children, including camera filters or animated stickers. Further, these accounts include evidence that under-13 users are among those following and interacting with the profile. These examples illustrate many of the features and types of content that Meta employed in its pursuit of tween users (and as discussed in the previous section).

514. As discussed in Section XV, above, teens tend to pay close attention to other teens who are the same age as or older than they are, and to devote relatively little attention to tweens. Meta's own documents note: "Tweens are teen-aspirational."[1208] Consequently, the primary audience captured by an 11-year-old is likely to consist of children who are themselves 11-years-old or younger in age.

A. [redacted]

515. [redacted] is a [redacted] influencer born in [redacted]2007.[1209] She has 5.7 million followers on Instagram as of March 4, 2024.[1210] Many of [redacted]'s [redacted] tween years focus on subject matter that other tweens and children are likely interested in, such as toys, bows, and fashion. She also frequently posts alongside other children, including with other child

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1208 META3047MDL-020-00428695, "Tweens & Early Teens," August 2021, at slide 3.
1209 https://www.imdb.com/name/nm9268291/.
1210 https://www.instagram.com/[redacted]

influencers, and uses playful camera filters, such as those adding animal ears. Additionally, [redacted] had several sponsored posts by brands targeting child users. [redacted] account is very popular; she reached one million followers on Instagram in February 2019 when she was 11 years old.[1211] On posts celebrating her 11th and 12th birthdays, many followers indicated that they too were under 13 years old.

516. Figure 30 through Figure 34 show examples of her content that is child-oriented, which together indicate her account in the years before she turned 13 was directed to children. Figure 30 also contains a comment appearing to disclose that the poster is 9 years old, as she will turn 10 on August 12.

[1211] https://www.instagram.com/p/Bto1glHlstT/?img_index=1. Fewer than 1% of accounts on Instagram have over a million followers as of 2023. See, https://mention.com/en/reports/instagram/followers/.

Figure 30. Post celebrating [redacted] squishies (stuffed animal) collection, including comment from 9-year-old user[1212]



[1212] https://www.instagram.com/p/BSiN8XuDDmB.

Figure 31. Post from 2017 with camera filter effects[1213]



1213 https://www.instagram.com/[redacted]p/BXB9_mJDRBc/?hl=en.

Figure 32. 2018 post of [redacted] with [redacted] another popular young social media influencer who had two million followers by May 2019[1214]



[1214] https://www.instagram.com/p/Bd6m20aD8u7/; https://web.archive.org/web/20190526134116/https://www.instagram.com/[redacted].

Figure 33. 2018 sponsored post for Party Popteenies toys[1215]



1215 https://www.instagram.com/p/Bn6pUzXjiY5/.

Figure 34. [redacted] 11th birthday post[1216]



517. [redacted] post caption read, "COMMENT your birthday down below," and a number of commentors did so with birthdays that indicate they were not yet 13 on August 21, 2018:

"November 10 2007"[1217]

"March 24th 2006"[1218]

"August 21 2007"[1219]

"June 30 2008"[1220]

"August 22nd 2007"[1221]

1216 https://www.instagram.com/p/BmvmDCABoui/?img_index=1.
1217 https://www.instagram.com/p/BmvmDCABoui/c/17867085623381513/?img_index=1.
1218 https://www.instagram.com/p/BmvmDCABoui/c/17904362347746309/?img_index=1.
1219 https://www.instagram.com/p/BmvmDCABoui/c/17908063417645277/?img_index=1.
1220 https://www.instagram.com/p/BmvmDCABoui/c/18113179066089921/?img_index=1.
1221 https://www.instagram.com/p/BmvmDCABoui/c/17930906233402656/?img_index=1.

"november 11 2008"[1222]

"August 20th 2007"[1223]

"My birthday is July 16th 2007"[1224]

"28 August 2007 💕 💕 😘 💖 😘 😘 😋 "[1225]

"My brithday is January2 2011"[1226]

"2010 July 5th"[1227]

"March 25,2006"[1228]

"July 1th 2010"[1229]

"September 6th 2006"[1230]

"My birthday is July 20th 2010"[1231]

"24 august 2008"[1232]

"August 20 2008"[1233]

"August 18 2007"[1234]

"January 18 2009"[1235]

"My b-day is November 21st so you are 3 mouths older than me I am 11 right now I have a big feeling that you will not respond"[1236]

"OCTOBER 30th 2007"[1237]

1222 https://www.instagram.com/p/BmvmDCABoui/c/17901717793465693/?img_index=1.
1223 https://www.instagram.com/p/BmvmDCABoui/c/17865328129777630/?img_index=1.
1224 https://www.instagram.com/p/BmvmDCABoui/c/17855565523713325/?img_index=1.
1225 https://www.instagram.com/p/BmvmDCABoui/c/17869991200550620/?img_index=1.
1226 https://www.instagram.com/p/BmvmDCABoui/c/18076009714181362/?img_index=1.
1227 https://www.instagram.com/p/BmvmDCABoui/c/18112891237032961/?img_index=1.
1228 https://www.instagram.com/p/BmvmDCABoui/c/17982756916283436/?img_index=1.
1229 https://www.instagram.com/p/BmvmDCABoui/c/18022434922240769/?img_index=1.
1230 https://www.instagram.com/p/BmvmDCABoui/c/18056357998172661/?img_index=1.
1231 https://www.instagram.com/p/BmvmDCABoui/c/18035183314204040/?img_index=1.
1232 https://www.instagram.com/p/BmvmDCABoui/c/17866694989484830/?img_index=1.
1233 https://www.instagram.com/p/BmvmDCABoui/c/18067861393137667/?img_index=1.
1234 https://www.instagram.com/p/BmvmDCABoui/c/17873064226450246/?img_index=1.
1235 https://www.instagram.com/p/BmvmDCABoui/c/17860368238495580/?img_index=1.
1236 https://www.instagram.com/p/BmvmDCABoui/c/17871692482441497/?img_index=1.
1237 https://www.instagram.com/p/BmvmDCABoui/c/18010902463231339/?img_index=1.

"July 14 I just turned 11"[1238]

"HBD (same day as urs) August 21 2007"[1239]

"August 10th 2007"[1240]

"April 20 2010"[1241]

"Same year"[1242]

"8.5.2007 💙"[1243]

"July 13 2011"[1244]

"20.7. 2007"[1245]

"March 25th 2006"[1246]

B. [redacted]

518. [redacted] is a social media influencer born in [redacted] 2014.[1247] He has 473,000 followers as of March 11, 2024. Posts on [redacted] profile focus on subject matter likely to appeal to children such as candy, Roblox, and toys. He also posts original music with child-oriented names such as "Let's Play." Other posts on his page include animated overlays, and users have commented they are the same age as [redacted] under 13.

519. Figure 35 through Figure 38 below show examples of his content that is child-oriented, which together indicate that his account is directed to children.

1238 https://www.instagram.com/p/BmvmDCABoui/c/18020658292213913/?img_index=1.
1239 https://www.instagram.com/p/BmvmDCABoui/c/18047337679151738/?img_index=1
1240 https://www.instagram.com/p/BmvmDCABoui/c/18082969600008999/?img_index=1.
1241 https://www.instagram.com/p/BmvmDCABoui/c/17999880679242912/?img_index=1.
1242 https://www.instagram.com/p/BmvmDCABoui/c/18059166937116506/?img_index=1.
1243 https://www.instagram.com/p/BmvmDCABoui/c/17844811594501344/?img_index=1.
1244 https://www.instagram.com/p/BmvmDCABoui/c/17907838414316786/?img_index=1.
1245 https://www.instagram.com/p/BmvmDCABoui/c/18044324350147057/?img_index=1.
1246 https://www.instagram.com/p/BmvmDCABoui/c/18030798604194684/?img_index=1.
1247 https://www.instagram.com/[redacted]

Figure 35. Screenshot of music video promo with animations overlaid throughout[1248]



1248 https://www.instagram.com/p/CmSJ4DsJA6e/.

Figure 36. Photo of [redacted] falling into a bath filled with colorful candy[1249]



1249 https://www.instagram.com/p/B0XTBezH_LW/.

Figure 37. A screenshot of a video of [redacted] with other notable child celebrities from the Nickelodeon Universe at a 2024 New Year's Eve celebration[1250]



1250 https://www.instagram.com/p/C1iRPMhJL5t/.

Figure 38. Comment from a follower who is also 10 years old[1251]



C. Kids [redacted] Show

520. [redacted] a 10 year-old born in [redacted]2014, is a YouTuber with 658,000 followers on Instagram.[1252] She is primarily known for her show Kids [redacted] Show, having been nominated for a Kids' Choice Award as "fav female creator."[1253] Posts on [redacted] page feature subject matter that appeals to children such as plans for summer break from school, gymnastics play gyms, and arcade games. She posts with other famous child influencers, such as

1251 https://www.instagram.com/p/C7XXZpxy321/c/18009245324583607/?img_index=1.
1252 https://www.instagram.com/[redacted]hl=en.
1253 https://www.instagram.com/p/C76nBRooiXM.

her brother, [redacted], also a popular YouTuber.[1254] Her posts also feature visuals that appeal to children such as balloons and animated overlays and youthful pop songs.

521. Figure 39 through Figure 42 show examples of her content that is child-oriented, which together indicate that her account is directed to children.

Figure 39. Kid's Choice Nomination[1255]



1254 https://www.youtube.com/[redacted].
1255 https://www.instagram.com/p/C76nBRooiXM/.

Figure 40. Various animated visual elements included throughout video[1256]



1256 https://www.instagram.com/p/DA_IHumoSDN/.

Figure 41. 10 year-old [redacted] pictured with friends of similar age[1257]



1257 https://www.instagram.com/p/DAJBGeboCTP/?img_index=1.

Figure 42. Comment by user on birthday post indicating that user is under 13[1258]



D. [redacted]

522. [redacted] is an 11-year-old social media personality born in [redacted] 2013 best known for being the youngest member of the Rock Squad,[1259] a "modern YouTube Family Channel."[1260] The Rock Squad is also prevalent on Instagram where they have 218,000 followers as of April 9, 2025.[1261] [redacted] has 446,000 followers as of April 9, 2025.[1262] Her content primarily consists of Reels in which [redacted] dances with friends. [redacted] can be seen in engaging in activities that are relevant to her age demographic through dozens of her posts. She also posts original

1258 https://www.instagram.com/p/C5NbrNFtkL6/c/18026969512846982/?img_index=1.
1259 https://www.famousbirthdays.com/people/[redacted]html.
1260 https://www.youtube.com/@THEROCKSQUAD.
1261 https://www.instagram.com/therocksquad/?hl=en.
1262 https://www.instagram.com/[redacted]hl=en.

music videos with dances targeted to children. Other posts on her page include posts with other child celebrities and users have commented that they are also under 13-years-old.

523. Figure 43 through Figure 46 below show examples of her content that is child-oriented, which together indicate that her account is directed to children.

Figure 43. [redacted] and her friend dressed in silly costumes, namely Winnie the Pooh and a chicken (not Halloween related)[1263]



[1263] https://www.instagram.com/p/C_vOQgEpoGO/?hl=en.

Figure 44. Reel promoting release of music video by the Rock Squad[1264]



1264 https://www.instagram.com/p/DC4xfX7h1u1/?hl=en.

Figure 45. Reel featuring [redacted] and other members of the Rock Squad[1265]



[1265] https://www.instagram.com/p/C_x_A79J93H/?hl=en.

Figure 46. [redacted] 11th birthday post with a comment by a 12-year-old Instagram member[1266]



E. [redacted]

524. [redacted] is a 14-year-old skin care social media influencer born in [redacted], 2011.[1267] She has 138,000 followers as of April 9, 2025.[1268] Posts on [redacted] profile focus on [redacted] doing her skin care and makeup, an increasingly popular topic amongst tween girls, as discussed above.[1269] "Get Ready With Me" videos have become increasingly popular with children as young as 8 years old. The videos of younger creators have been labelled "Toddler

1266 https://www.instagram.com/p/C6oOlaluK6A/c/18258633820216612/?hl=en&img_index=1.
1267 https://www.famousbirthdays.com/people/[redacted]html.
1268 https://www.instagram.com/[redacted]
1269 https://www.npr.org/sections/shots-health-news/2024/07/12/nx-s1-4990677/teens-skin-care-social-media-tweens-tiktok-influencers.

Get Ready With Me content."[1270] "Get Ready With Me" videos and Gen Alpha's interest in skincare have been the subject of much discussion online, with Gen Alpha tweens being dubbed Sephora Kids.[1271] [redacted] account name, [redacted] contains an acronym for Get Ready With Me. While she gets ready, she discusses subject matter likely to appeal to children such as school, skin care products and shopping, and she features other children in her posts.

525. Figure 47 through Figure 50 below show examples of her content that is child-oriented, which together indicate that her account is directed to children.

1270 https://www.redbrick.me/the-influx-of-sephora-kids-and-toddler-get-ready-with-me-videos/.

1271 https://abcnews.go.com/US/gen-alpha-takes-skin-care-social-media-scene/story?id=107225927, https://phillipian.net/2024/02/08/are-makeup-and-social-media-the-reasons-why-tweens-are-going-extinct/, https://www.goodto.com/family/family-news/back-to-school-grwm-videos-viral-online-parenting-expert-warns-massive-safeguarding-issue-parents-ignore, https://www.cbc.ca/news/canada/sephora-kids-trend-controversy-1.7088691.

Figure 47. [redacted] account features a series of Get Ready With Me videos

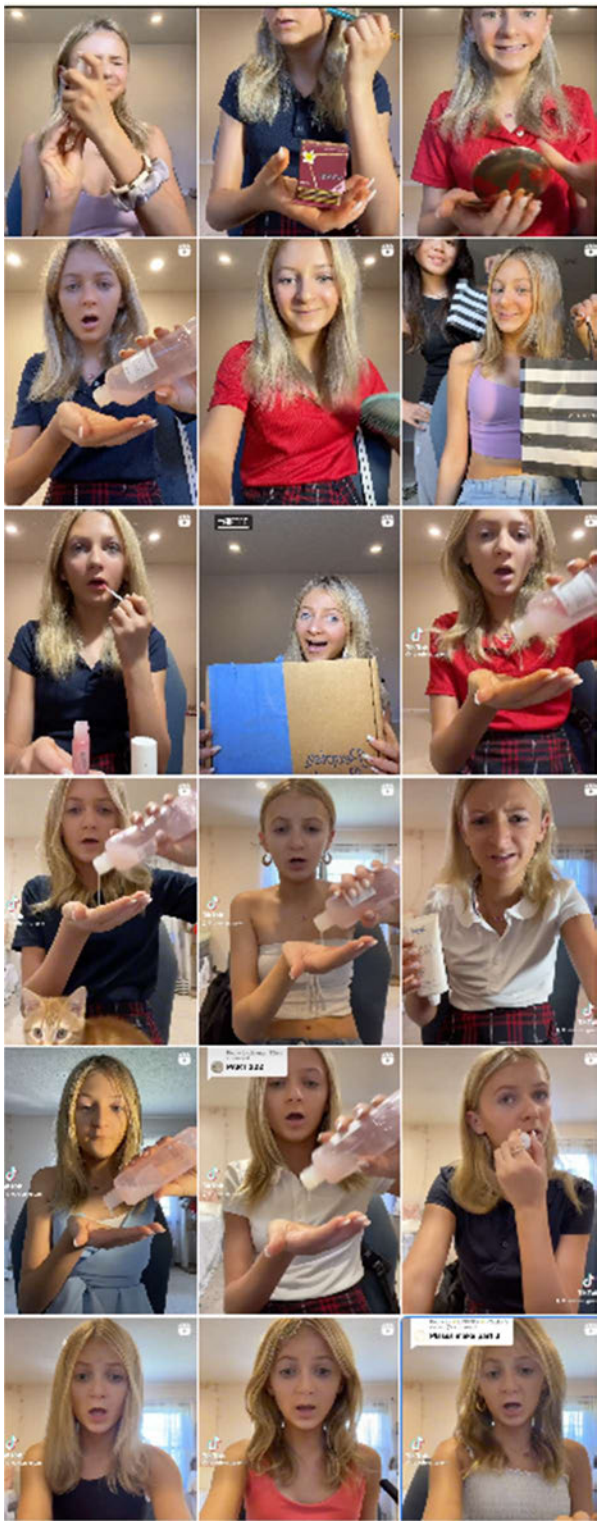


Figure 48. 12-year-old [redacted] discussing people at school who annoy her[1272]



Figure 49. 12-year-old [redacted] discussing "makeup things that make me mad"[1273]



1272 https://www.instagram.com/p/CxG2NwTgyFC/?hl=en.
1273 https://www.instagram.com/p/CxF15oMAjYk/?hl=en.

Figure 50. 12-year-old [redacted] posting a Sephora haul with a friend who also appears to be a child[1274]



526. The above examples illustrate that portions of the Instagram platform are directed to children.

XIX. EVALUATION OF FACEBOOK'S CHILD-DIRECTEDNESS

527. In this section, I examine whether Facebook, as a platform, is directed to children. There are two broad categories of information that demonstrate whether a platform is child-directed: First, evidence that either the platform in its entirety or portions of the platform are intended to or include features and content that appeal to children; and second, empirical or quantitative evidence that the platform in its entirety, or portions of the platform, actually attract child users. A platform that attracts and retains users who are children is empirically more likely to be child-

[1274] https://www.instagram.com/p/Cxafwx7ArBa/?hl=en.

directed because it in fact attracts and retains such users.

528. Together, I rely on these evidentiary components—the extent to which Meta viewed having child users on Facebook as desirable (Subsection A); the extent to which Facebook incorporates child-focused features and content (Subsection B); the extent to which empirical evidence demonstrates that Facebook attracts and retains child users (Subsection C)—to assess whether and to what extent Facebook is child-directed.

A. Facebook has always targeted younger users

529. According to documents produced in this case, Meta spent much of Facebook's existence devising and testing strategies designed to attract children and tweens, and many of the studies and research projects administered during this period were conducted in the service of such strategies.[1275] To examine the problem empirically and strategically, Meta often conducted research studies that elided the boundary between tweens and teens, conceiving of and examining those audiences through the same analytic lens.[1276]

i. Meta began targeting younger users shortly after it was launched

530. When TheFacebook was launched in 2004, users were required to have an email address issued by a college or university to register.[1277] Following college students, high school students were among the first targeted segments of the population.[1278] The company's pursuit of young users continued as Meta allowed users without an educational email address to access the

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[1275] See, for example, META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016; META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016; and META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017.

[1276] See, for example, META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021.

[1277] https://www.nytimes.com/2006/09/12/technology/12online.html.

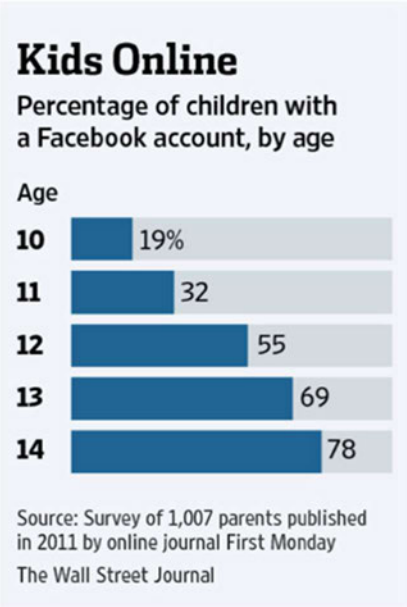
[1278] https://www.cnn.com/interactive/2019/02/business/facebook-history-timeline/index.html.

platform from 2006,[1279] and lowered the official registration age to 13 years.[1280]

531. Despite officially limiting the platform to users aged 13 years and above, a number of reports highlighted that a meaningful number of children were using Facebook as early as 2011. According to Consumer Reports, for example, "7.5 million children under the age of 13 were using the site, including more than five million under the age of 10."[1281] A 2011 Microsoft Research study found that "36% of parents were aware that their children joined Facebook before age 13 and that a substantial percentage of those parents helped their kids in the effort."[1282] Another study published that same year from First Monday showed that 55% of 12-year-olds had a Facebook account, as shown in Figure 51, below.

[1279] https://www.nytimes.com/2006/09/12/technology/12online.html.
[1280] https://www.cnn.com/interactive/2019/02/business/facebook-history-timeline/index.html.
[1281] Anton Troianovski and Shayndi Raice, "Facebook Explores Giving Kids Access," *Wall Street Journal*, June 4, 2012, http://online.wsj.com/article/SB10001424052702303506404577444711741019238.html.
[1282] Anton Troianovski and Shayndi Raice, "Facebook Explores Giving Kids Access," *Wall Street Journal*, June 4, 2012, http://online.wsj.com/article/SB10001424052702303506404577444711741019238.html.

Figure 51. First Monday survey of parents showing percentage of children with a Facebook account from 2011[1283]



532. Meta personnel, including those at the company's highest levels, believed child and tween users were an asset to the platform. Mr. Zuckerberg and other senior personnel sought to retain young users on Facebook.[1284] Meta's initial strategy in managing child users was to incorporate them into the primary Facebook platform, and senior executives directed Facebook's engineers to develop technology to enable children younger than 13 to use Facebook.[1285] As reported by the *Wall Street Journal* in 2012, "Facebook isn't working on a separate kids-only site, but rather, is developing buffers and parental controls that would let kids use the current site legitimately."[1286] Mr. Zuckerberg, in an interview, explained Meta's interest in such users by

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[1283] Anton Troianovski and Shayndi Raice, "Facebook Explores Giving Kids Access," *Wall Street Journal*, June 4, 2012, http://online.wsj.com/article/SB10001424052702303506404577444711741019238.html.

[1284] Anton Troianovski and Shayndi Raice, "Facebook Explores Giving Kids Access," *Wall Street Journal*, June 4, 2012, http://online.wsj.com/article/SB10001424052702303506404577444711741019238.html.

[1285] Anton Troianovski and Shayndi Raice, "Facebook Explores Giving Kids Access," *Wall Street Journal*, June 4, 2012, http://online.wsj.com/article/SB10001424052702303506404577444711741019238.html.

[1286] Anton Troianovski and Shayndi Raice, "Facebook Explores Giving Kids Access," *Wall Street Journal*, June 4, 2012, http://online.wsj.com/article/SB10001424052702303506404577444711741019238.html?reflink=desktopwebshare_permalink.

noting that their presence would "strengthen the experience for everybody."[1287]

ii. Introduction of Messenger Kids as a gateway for young users

533. Over time, Meta's strategy shifted and the company created a separate children's app that it called Messenger Kids. As explained in more detail in Section XVI, above, Meta viewed Messenger Kids as a critical tool for establishing a pipeline of young users who would naturally come to use Meta's other apps, including Facebook, as they aged.[1288] Part of Messenger Kids' appeal was that it allowed child users to cultivate a base of online contacts that could be transported to Facebook. Meta discovered that many tweens felt Messenger Kids was too childish,[1289] which left them without a natural digital home within Meta's family of apps, as they were still too young to licitly join Facebook. Meta's two-pronged challenge was to avoid losing existing Messenger Kids users as they became tweens,[1290] while preventing competitors like Snapchat from attracting those tweens before they signed up for a Facebook account.[1291]

iii. Attracting tweens in order to grow the teen user base

534. As with Instagram, Meta recognized the value of attracting tweens to Facebook as a vehicle for growing its teen user base. According to one member of Facebook's "Youth team:"[1292] "We are aligned on the importance of young teens/tweens for winning teens longer term."[1293] Put differently, Facebook would acquire, retain, and grow its teen user base more effectively if it could attract "young teens/tweens" to the platform. Accordingly, Facebook

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1287 https://www.nytimes.com/2006/09/12/technology/12online.html.

1288 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 663; META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020, at 239 and 251; META3047MDL-003-00134443, "US Teens & Growth," October 6, 2016, at 461.

1289 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 491.

1290 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 491.

1291 META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 707.

1292 META3047MDL-003-00084997, "Rob's Youth Update," September 2018, at 023.

1293 META3047MDL-003-00084997, "Rob's Youth Update," September 2018, at 021.

studied young teens and tweens to identify their interests, needs, and preferred social media platform features.[1294] Meta "creat[ed] a centralized team in Engagement that [was] responsible for Teen growth…and engagement…primarily focusing on FB…"[1295] This team was directed to study teens, specifically, because "topline findings" from studies of older Facebook users were unlikely to apply to younger users.[1296] Many of these studies conceived of tweens and young teens as a single age bracket, ranging from 11- or 12-year-olds to 15-year-olds.[1297] This monolithic category matched the approach Meta used when it aggregated tween and young teen users on Instagram, similarly indicating Meta's view that, in this context, there were no material differences between 12-year-olds and 13-year-olds.[1298] Implicit in Meta's approach here, a platform that is designed to appeal to 13- to 15-year-olds will necessarily also appeal to tweens.

iv. Difficulty in engagement of tweens

535. Although Meta managed to attract tween users to Facebook, the platform struggled to engage such users. In one 2017 study of tween social media use, researchers reported that tweens believe "Facebook is for old people" (see Figure 52, below). These 10- and 11-year-old tweens reported having a Facebook account that they used rarely if ever, and that Facebook had failed to capture other "people my age," and was viewed as targeting "parents, aunts and uncles, and cousins 20+" rather than tween and young teen peers, as highlighted in the red box in Figure 52, below.[1299]

1294 *See*, for example, META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017 and META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016.
1295 META3047MDL-003-00171899, "Teens," at 920.
1296 META3047MDL-003-00171899, "Teens," at 920.
1297 *See*, for example, META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 659.
1298 META3047MDL-014-00381713, "Teens All Hands" email thread, May 2017, at. 713.
1299 META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 706.

Figure 52. Slide showing tweens thoughts about Facebook in 2017[1300]



536. Meta repeatedly found that tweens (and teens) did not view Facebook as an app for their age group, despite the continued presence of under-13 users on the site. For example, two years later, an internal Instagram presentation described how teens viewed various social media platforms, and reported that teens perceived Facebook very negatively, labeling it variously as "unapproachable" and "greedy."[1301] Meta attributed a similar view to tweens given the company's conception of tweens and young teens as a single, largely monolithic audience.[1302]

1300 META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 706.

1301 META3047MDL-003-00020907, "The Power of Identities: Why Teens and Young Adults Choose Instagram," at 915.

1302 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020, at 184; and META3047MDL-020-00428695, "Tweens and Early Teens," August 2021, at slide 3.

v. Meta's effort to overcome tween lack of engagement

537. Meta sought to improve Facebook's appeal to young users, with a member of the youth team, Robert Chen, posing the question, "What is our value proposition to teens"?[1303] Mr. Chen concluded that Facebook "need[ed] a stronger sense of [its] value prop," and "a stronger understanding of the teens [it was] addressing."[1304] One component of Meta's efforts to answer these questions included studying teens and 11- and 12-year-old tweens.[1305] By examining 11- and 12-year-old tweens as part of its process of building features that would appeal to "teen users," Meta was intentionally designing Facebook to also meet the needs and wants of children, thereby shaping Facebook to become increasingly child-directed as the platform evolved.

538. In a 2018 internal presentation titled "Long Term Retention and its Implications," Meta wrote, "we have definitively established tweens as the highest retention age group in the United States," highlighting that "people who joined Facebook at 11 years old have almost 4x the [long-term retention] of those who joined as 20 year-olds."[1306] Long-term retention was used as one of the figures to calculate lifetime value, so people who joined earlier and had higher long-term retention had a higher lifetime value.[1307] To capture young users and maximize profit, Meta focused on updating Facebook to appeal to young teens[1308] and, by the company's collapsing 11- to 15-year-old users into a single category, tweens.[1309] Facebook was interested in the content

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1303 META3047MDL-003-00084997, "Rob's Youth Update," September 2018 at 024.
1304 META3047MDL-003-00084997, "Rob's Youth Update," September 2018 at 024.
1305 See, for example, META3047MDL-003-00084997, "Rob's Youth Update," September 2018 at 014.
1306 META3047MDL-047-00544632, "M&A and Market Landscape Review: Long Term Retention and its Implications," December 2018, at slide 4 and 5 (Chen Deposition Exhibit #13).
1307 META3047MDL-005-00000318/METAMAAG-007-00000102, "MK & Youth Platform Product Reviews," August 2018 (Chen Deposition Exhibit #5).
1308 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 667.
1309 See, for example, META3047MDL-003-00084997, "Rob's Youth Update," September 2018, at 022, 024; META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 659; META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 742.

these young users would generate, the social currency they might bring to the platform, and, ultimately, the financial rewards that might follow from attracting such users to the platform.

539. Facebook's goal, stated in a 2021 internal presentation, was to drive Facebook's appeal to "…young people and position ourselves to serve the next generation of youth."[1310] Meta further believed that hooking users as early as possible was a lucrative business investment, with one email about youth presence on Facebook noting that, "people who join FB as 13 year-olds have [a lifetime value] of approximately $350, higher than all other teen ages (13-18) due to their very high long term retention. We should acquire teens as young as possible."[1311]

540. In sum, Meta has sought to attract and retain children for almost two decades.[1312] Internal documents show that Meta found that tweens consider themselves to be more like teens than children,[1313] and were interested in apps explicitly targeting teenagers.[1314] Meta aimed to "rebuild core Facebook to work better for teens,"[1315] proposing "entire product needs to evolve into a coherent sharing space that meets key teen needs of social + entertainment." [1316] The company intended and expected that these revisions to Facebook would appeal to both tweens and young teens, as they introduced features and other updates that were tested in studies of tweens and teens aged between 11- or 12- and 15-years-old.[1317]

1310 META3047MDL-014-00009592, "Youth Research Unite," June 2021, at 597.
1311 META3047MDL-003-00085182, "Market Strategy Update – 1-/10/5/18" email, October 2018, at 182.
1312 META3047MDL-003-00084997, "Rob's Youth Update," September 2018, at 001.
1313 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020, at 141-148.
1314 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020, at 189-194, 213.
1315 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 667.
1316 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 667.
1317 See, for example, META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 725.

B. Facebook incorporated features and content that appeal to teens and tweens

541. As described above, Meta has sought to attract young users, including tweens under the age of 13, to Facebook. In this section, I review the Facebook platform's features to assess whether those features, and the platform broadly, appeal to children.

542. Meta introduced a range of features to Facebook that appealed to teen and tween users. Meta understood that these features would appeal to both teens and tweens because it recognized that tweens view teens as aspirational targets,[1318] and that the two audiences overlapped sufficiently to be grouped together in age-centric research.[1319] For example, Meta highlighted "social biases toward messaging and small-group sharing, and Entertainment benefit from the broad sharing and viral aspects of Feed" as features that appealed to teens that were similar to the "visual and text messaging" and "feed of video and entertainment content" it identified for "U13" users.[1320] Internal documents from 2017 show Meta intended for the Facebook feed to become "an entertainment-focused surface to better match the interests and needs of teens."[1321] Below, I discuss such entertainment-focused features, among others, and examine how Meta strategically incorporated them into Facebook to attract tween and teen users.

i. Facebook added tools that appealed to tweens, including video functionality and creative tools

a. Introducing features inspired by competitor platforms

543. As described earlier in this report, Meta recognized that YouTube, Snapchat, and TikTok were competing for the attention of the same 11- to 15-year-olds Meta intended to attract to its

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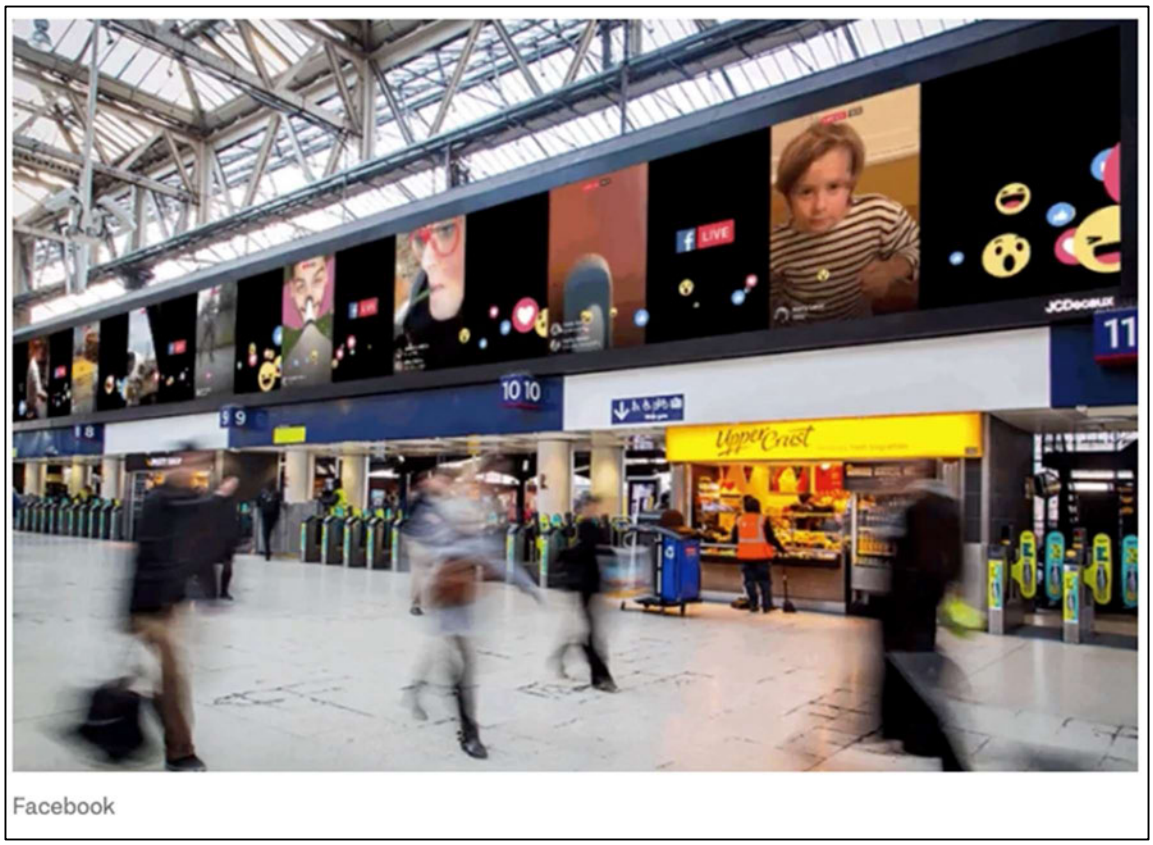
[1318] META3047MDL-014-00138351, "Social Aspirations of 8-15 Year Olds," at 353-357.
[1319] META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 661.
[1320] META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 663, 667.
[1321] META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 667.

platforms.[1322] As it had done for Instagram, Meta introduced and promoted features on Facebook that mimicked or were adapted from those platforms, including expanded video functionality, disappearing content, and short-form videos.

544. In the mid-2010s, Facebook "executives identified video as a business priority, and used the algorithm to boost 'native' videos shared directly to Facebook."[1323] Meta noted that "watching (public) videos is a huge and proven use case for Teens;" that YouTube "is their TV;"[1324] and identified the "need to… streamline sharing and discovery of content."[1325] Meta noted in a presentation on "Teens" from around late 2015 that teens wanted to "discover, watch and share media" as they do on YouTube, and suggested Facebook Videos as a solution to this problem.[1326] In addition to produced videos, Facebook also introduced Live, its video streaming function, in 2015.[1327] Meta viewed Live as a way to compete with Snapchat for teen users, allowing them to "share raw personal visual moments from [their] day," and identified this feature as "a huge and validated use case for Teens (Snapchat.)"[1328] Meta proposed that "early directional data [shows] that Live […] could be highly engaging and retentive for Teens,"[1329] Meta's promotion campaign for Live, such as that shown in Figure 53 below, prominently featured children in the example streams.

1322 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021, at 741.
1323 https://www.washingtonpost.com/technology/interactive/2021/how-facebook-algorithm-works/.
1324 META3047MDL-003-00171899, "Teens," at 914.
1325 META3047MDL-003-00171899, "Teens," at 914.
1326 META3047MDL-003-00171899, "Teens," at 913.
1327 https://www.businessinsider.com/facebook-launches-ad-campaign-for-live-video-2016-10.
1328 META3047MDL-003-00171899, "Teens," at 917.
1329 META3047MDL-003-00171899, "Teens," at 917.

Figure 53. Promotional display for Facebook's Live features a child[1330]



545. By December 2015, data showed that Live was successful among young users. Meta reported that Live had "[s]ignificantly higher usage in younger cohorts," with young teens using Live at rates twice as high as older teens.[1331] Another report on Facebook's performance with teens noted that while "US Teen time spent stagnated in 2014" it ultimately "grew in 2015 thanks to video."[1332]

546. As Meta employees explained in an internal conversation in 2016, "Facebook is successful in entertainment because we have the social graph and social signals that curates

[1330] https://www.businessinsider.com/facebook-launches-ad-campaign-for-live-video-2016-10.
[1331] META3047MDL-003-00171899, "Teens," at 918.
[1332] META3047MDL-003-00171899, "Teens," at 907.

content that is relevant to users, […] the social side is paramount for Facebook."[1333] This discussion included an assessment of teen usage:

> Social doesn't exist without entertainment…. "Social" on Facebook for US teens is not a thing without entertainment. **There is [sic] almost no 'social-only' teens in the US**. They are 1. Consuming media only (40%), 2. Consuming media **and** socializing (36%), or 3. Unengaged (22%). Combining this with the recent YouTube related work by the marketing team… I'd recommend we double down on the effort of **social entertainment** for teens in the US.[1334]

Meta continued to shape Facebook's video functions to make the platform more appealing to teens, including amidst a 2017 plan to "pivot FB toward entertainment."[1335] Meta recognized that, in order to connect younger users, it needed to enhance Facebook's capacity to provide so-called "social entertainment." Facebook sought to leverage the social components of its platform—feedback, Likes, Comments, and other forms of engagement—while adding video content that would appeal to its tween and teen audiences.

547. Meta continued to expand Facebook's video features, launching Facebook Watch, a video-on-demand function within the Facebook platform, in 2017 in the US and 2018 globally, as the "go-to place to discover videos across Facebook for whatever you're into."[1336] Meta's public promotion of Facebook Watch, later renamed Facebook Video,[1337] explained that the feature's goal was "to instantly entertain people…"[1338] Internal research studies had demonstrated to Meta that "video [was] vital" as tweens were looking for fresh sources of entertainment when they left Messenger Kids behind around age 11,[1339] so the company

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1333 META3047MDL-003-00021146, "Youth Data & Research," November 18, 2016, at 147.
1334 META3047MDL-003-00021146, "Youth Data & Research," November 18, 2016, at 146.
1335 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 669.
1336 https://about.fb.com/news/2020/09/the-evolution-of-facebook-watch/.
1337 https://en.wikipedia.org/wiki/Facebook_Watch.
1338 https://about.fb.com/news/2020/09/the-evolution-of-facebook-watch/.
1339 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 441.

recognized that Facebook could attract those tweens with well-targeted video content. Facebook Watch contained a range of programming, including news programs, reality TV, and game shows, and critically it also hosted several "teen dramas" that were particularly appealing to tweens and young teens.[1340]

548. Meta similarly adapted its Stories feature from similar features it had observed on competing platforms. In the internal Meta presentation titled "2017 Teens Strategic Focus," Meta stated that the company should "use stories" to connect users with the people they follow as the company sought to "rebuild core Facebook to work better for teens."[1341] Stories—ephemeral posts lasting 24 hours—were introduced to Facebook in 2017 following the feature's successful rollout at Instagram.[1342] Meta recognized that Snapchat was particularly appealing to teens and tweens because it allowed them to post ephemeral, disappearing content,[1343] which lowered the barriers to self-disclosure that sometimes dissuaded users under the age of 13 from engaging with social media platforms.[1344] The top of Facebook's Feed was redesigned with a horizontal scrollable series of stories featuring accounts the user followed.[1345] Meta also created cross-posting functionality so users could share their Instagram Stories directly to Facebook from the Instagram app, which provided a largely frictionless vehicle for increasing the volume of content on Facebook.[1346] Early reports demonstrated that Stories successfully increased engagement with Facebook's platform,[1347] and internal Meta research found that Stories continued to be popular

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1340 https://en.wikipedia.org/wiki/List_of_Facebook_Watch_original_programming.
1341 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 667.
1342 META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017," at 851-852.
1343 https://www.theverge.com/2017/3/28/15081398/facebook-stories-snapchat-camera-direct.
1344 See, for example, META3047MDL-207-00034678 "Digital Me: Exploring Tweens Social Media Habits," October 2017 at 708.
1345 https://www.theverge.com/2017/3/28/15081398/facebook-stories-snapchat-camera-direct.
1346 https://techcrunch.com/2017/10/04/instaface/.
1347 https://techcrunch.com/2017/10/04/instaface/.

among young users.[1348]

549. In 2021, Facebook launched Reels,[1349] a short-form video format similar to the content offered by competitor TikTok,[1350] which had successfully captured the 11- to 15-year-old audience that Facebook sought to attract.[1351] Like Stories, Reels were launched on Instagram and then incorporated into Facebook, allowing users to cross-post Reels between the two platforms.[1352] The ephemeral content and video features Facebook adopted made the platform globally more appealing tweens and young teens, just as its internal research suggested it would.

b. Facebook's Groups feature

550. Another Facebook function that Meta leveraged to appeal to tweens and young teens was its Groups function—a space for people to connect over shared connections and interests. Groups can be public (open to all users of the platforms) or private (only available to users who are explicitly granted access to the group).[1353] Shortly after Groups was first introduced, in 2010, Mr. Zuckerberg explained in popular press interviews that the function was introduced to Facebook "to create and maintain a space for sharing with the small communities of people in your life, like…classmates…"[1354] Meta's research on tweens in 2016 concluded that "[t]weens are herd animals [who] want to find communities where they can fit in."[1355] To meet this need, Mr. Chen—discussed in Section XIX.A.v for his work on the youth team—identified that Groups could be promoted among schools to help to bring young teens to the platform.

1348 META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017," at 851-852
1349 https://about.fb.com/news/2021/09/launching-reels-on-facebook-us/?locale=en_US.
1350 https://www.vox.com/recode/23002679/reels-facebook-tiktok-video-
1351 https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/.
1352 https://help.instagram.com/459497729122868?helpref=faq_content.
1353 https://associationheadquarters.com/blog/facebook-groups-associations-benefits-challenges-best-practices.
1354 https://www.theguardian.com/technology/2010/oct/07/facebook-groups.
1355 META3047MDL-207-00034678 "Digital Me: Exploring Tweens Social Media Habits," October 2017 at 678.

551. Meta hoped to use its Groups feature to encourage more young users to use Facebook by leveraging information sharing within their school networks on Facebook. One Meta presentation noted: "research indicates that we have 'FB' and 'non-FB' high schools; tipping schools may be high impact."[1356] Though that presentation focused on high-school-aged teens, Mr. Chen later discussed the importance of expanding school usage to capture even younger users, asking: "What can we build for 9th graders? 8th graders? 7th graders? 6th graders?" He went on: "How can we build products that make it so that when you start Middle School, Facebook is the best product to use and the way you connect with your peers?"[1357] In the US, many 6th graders will be 11 or 12 years old. Meta recognized the importance of capitalizing on existing school communities to attract young users to its platform, and explored using this strategy to attract middle school children to Facebook, several years before they had reached age 13.

c. Creative tools and animated features

552. Meta introduced whimsical, animated features and creative tools to Facebook following the company's internal research insights demonstrating the appeal of such features to tweens.[1358] As on Instagram, in 2017 Meta rolled out a series of animated stickers that could be used in Facebook direct messages (see Figure 54, below).[1359] In 2023, Facebook also rolled out an AI tool allowing users to create their own personalized stickers,[1360] thereby offering additional tools that were designed to appeal to tweens and young teens.

1356 META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 2016, at 666.
1357 META3047MDL-003-00084997, "Rob's Youth Update," September 2018, at 014-015.
1358 See, for example, META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 750.
1359 https://www.facebook.com/messenger/photos/heres-how-to-access-and-send-facebook-stickers-tap-on-the-smiley-face-icon-which/1454339998019009/.
1360 https://about.fb.com/news/2023/09/introducing-ai-powered-assistants-characters-and-creative-tools/.

Figure 54. Facebook added Stickers in 2017[1361]



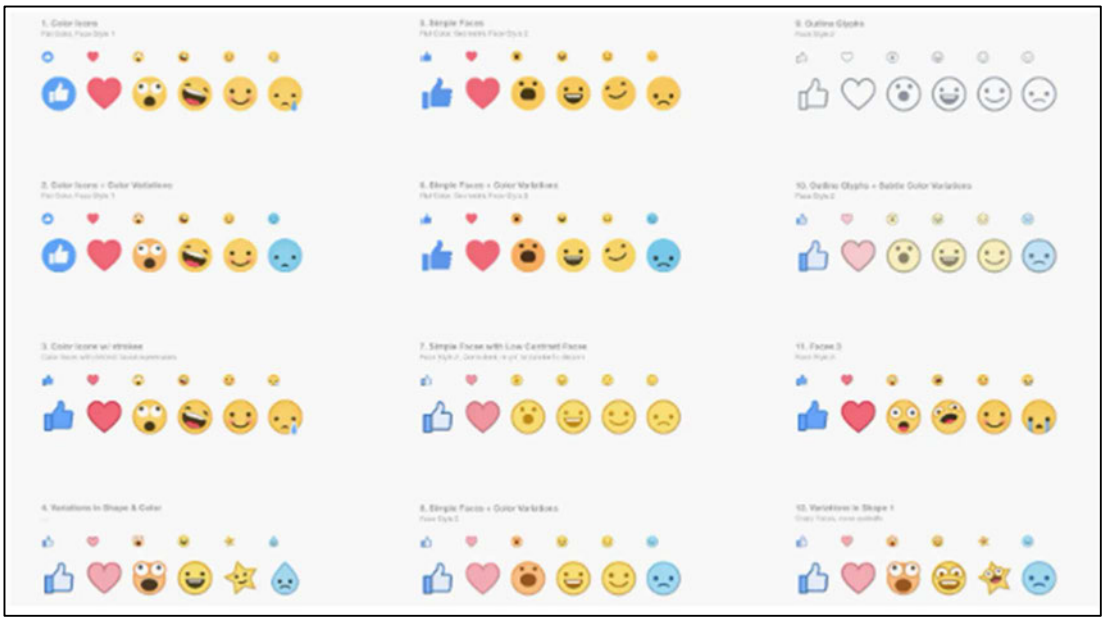
553. Facebook similarly introduced features that appeal to children by expanding the Like button to include a suite of reaction emojis. These playful, animated features allow for increased non-verbal expression, which Meta knew was important to tween users.[1362] Facebook began testing these new reactions in 2015, and implemented the so-called *Love*, *Haha*, *Yay*, *Wow*, *Sad* and *Angry* reaction emojis across the platform in 2016 (see Figure 55 below).[1363]

1361 https://www.facebook.com/messenger/photos/heres-how-to-access-and-send-facebook-stickers-tap-on-the-smiley-face-icon-which/1454339998019009/.

1362 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 750.

1363 https://variety.com/2016/digital/news/facebook-reactions-emotion-buttons-1201713676/.

Figure 55. Facebook tested various emoji options to expand on the Like feature[1364]



554. Emojis, which experienced a surge in popularity around this time, were widely regarded to appeal primarily to teens and tweens.[1365] In 2015, Kim Kardashian launched a line of emojis,[1366] and the Oxford Dictionary declared the Face with Tears of Joy emoji the "Word of the Year."[1367] Pixar's popular 2014 animated movie *Inside Out* "featured multi-hued characters personifying joy, anger, fear, disgust and sadness."[1368]

555. Facebook's expansion of the Like button to include emojis provided all users with a broad expressive palette, but it was particularly appealing to 11- to 15-year-olds. Teen Vogue, a publication targeting pre-teens and teens,[1369] reported on the new feature, declaring "we're

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1364 https://www.wired.com/2016/02/facebook-reactions-totally-redesigned-like-button/.

1365 https://www.nytimes.com/2015/04/03/fashion/mens-style/should-grown-men-use-emoji.html; https://www.theguardian.com/commentisfree/2014/jun/18/adults-emoji-grow-up-emoticons-teenagers; https://www.businessinsider.com/how-teens-use-emojis-to-talk-2013-10.

1366 https://www.eonline.com/news/725692/there-s-a-kimoji-for-every-moment-in-your-life-here-are-the-14-best-ways-to-use-them.

1367 https://time.com/4114886/oxford-word-of-the-year-2015-emoji/.

1368 https://variety.com/2016/digital/news/facebook-reactions-emotion-buttons-1201713676/.

1369 https://www.teenvogue.com/info/about-us.

loving it."[1370] Middle and high school students were asked about the new feature in a survey that asked them to respond using the Like and Love emoji reactions. The winning emoji was "wow," and the students generally responded to the change with positive feedback. One student noted: "it will help tell others how you are feeling without talking,"[1371] demonstrating the appeal of an undemanding expressive format that did not ask teens and tweens to compose fresh verbal responses when they intended to engage with online content.

556. In sum, Facebook includes a suite of features that appeal to tweens and young teens. Meta introduced some of these features as a direct response to the popularity of platforms like TikTok, Snapchat, and YouTube, often imitating those platforms in an attempt to appeal to the same audience of tween users. Facebook similarly introduced its Groups feature, and incorporated creative visual tools like animated stickers, to attract and retain young users.

ii. Facebook sought to introduce and promote content and games that appeal to tweens

557. Like Instagram, Facebook appeals to tweens by meeting both social and entertainment needs. The platform's personalized algorithm allows Meta to connect users to content that appeals to their particular interests, whether driven by age or other demographic or psychographic characteristics.

a. Facebook's personalized algorithm

558. While the original Facebook feed was chronological, presenting the most recently posted information first, a strategic ranking algorithm was introduced in 2009 to present users with

[1370] https://www.teenvogue.com/story/facebook-emoji-reactions.
[1371] https://studentreportinglabs.org/news/youth-react-to-facebooks-wow-feature/.

content that was intended to be idiosyncratically appealing.[1372] The algorithm has become increasingly sophisticated over time. [redacted], Meta's head of integrity policy, stated that the algorithm takes in "more than 10,000 different signals to make its predictions about a user's likelihood of engaging with a single post."[1373] According to Meta's customer-facing description, the algorithm is designed to connect users with appealing users, pages, and content: "To help you discover new things on Facebook, we suggest certain content in your feed. Content suggested for you is personalized based on what may be relevant to you and is influenced by things such as your previous Facebook activity. Content that is suggested for you can be videos, photos or articles from Pages and groups that you don't already follow."[1374] Critically, the algorithm automatically folds age-driven preferences into its recommendations, so a tween who expresses tween-typical preferences will tend to be introduced to content that appeals to tweens at large.

559. The algorithm begins to learn about users as soon as they join Facebook. When they first sign up for an account, the platform directs them to send "friend requests to people [they] know in real life, such as…Friends. Family. Colleagues. Classmates."[1375] The algorithm then uses these data to recommend content it believes will engage those new users, including posts by classmates, and content that appealed to these newly-acquired friends.[1376] Meta also sought to attract youth to Facebook by attracting celebrities who specifically appeal to tweens and young teens. In 2018, Facebook's youth team identified as a priority its desire to "…explore authority figures and influencers as a vehicle for rapidly attracting teens to Facebook. These people

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1372 https://www.washingtonpost.com/technology/interactive/2021/how-facebook-algorithm-works/.
1373 https://www.washingtonpost.com/technology/interactive/2021/how-facebook-algorithm-works/.
1374 https://www.facebook.com/help/485502912850153.
1375 https://www.facebook.com/help/240436879374301.
1376 https://www.washingtonpost.com/technology/interactive/2021/how-facebook-algorithm-works/.

included club leaders, student body leaders, teachers, and celebrities (e.g., Kim Kardashian.)"[1377] Ms. Kardashian, with over 30 million followers on Facebook, [1378] is one of social media's most popular celebrities, and, particularly at that time, was immensely appealing to young girls.[1379] Meta's systematic targeting of celebrities to appeal to young teens and by extension tweens further indicates that Facebook appealed to child users.

560. In sum, Facebook's feed is tailored to represent the interests of each user. According to Meta: "What you see in your Feed is uniquely personalized to your interests through machine learning."[1380] A tween who uses Facebook will encounter a feed designed to appeal to tweens. Additionally, since much of the content that appeals to young teens tends to appeal broadly to tweens, a feed that targets the interests of a user aged 13- or 14-years-old will necessarily also target a user aged 11- or 12-years-old.

b. Gaming on Facebook

561. Meta began to introduce games to Facebook as early as 2007,[1381] and many of the games featured on the platform are inherently attractive to children. Facebook's games became popular among the platform's adult users with the rise of Farmville in 2009,[1382] but the games feature has become particularly attractive to young users, including tweens, with the introduction of youth-centric features. For example, Facebook's games were incorporated into Messenger in 2016,[1383] combining the appeal of games with Meta's knowledge that tweens are particularly interested in

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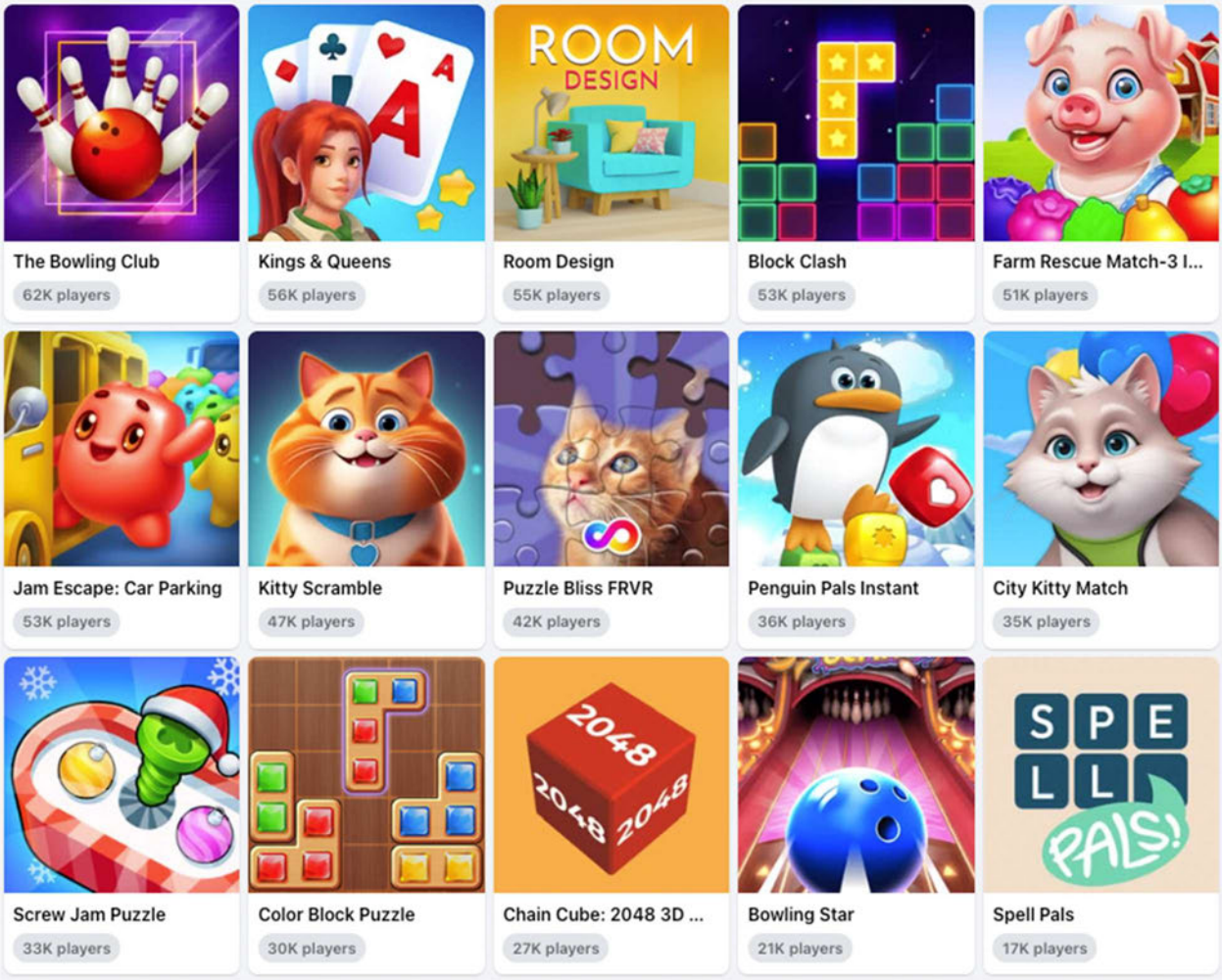
1377 META3047MDL-003-00084997, "Rob's Youth Update," September 2018, at 022.
1378 https://web.archive.org/web/20180207144011/https://www.facebook.com/KimKardashian/.
1379 https://www.theguardian.com/lifeandstyle/2016/feb/25/kim-kardashian-teens-book-celebrity-social-media-american-girls.
1380 https://about.fb.com/news/2022/10/new-ways-to-customize-your-facebook-feed.
1381 https://www.brandwatch.com/blog/history-of-facebook; https://www.zynga.com/about/our-story.
1382 https://www.nytimes.com/2020/12/31/technology/farmville-zynga-facebook.html.
1383 https://about.fb.com/news/2016/11/game-on-you-can-now-play-games-on-messenger/.

messaging friends and family members.[1384] Meta's research on 11- to 15-year-olds noted, "[p]lay sustains but become[s] more integrated with other social components such as rewards, perception, and competition."[1385] In 2017 Facebook introduced the ability to livestream game play, tying the platform's youth-centric promotion of Facebook Live[1386] with the inherent appeal of games among young audiences.

562. Facebook later created a devoted games section on its platform titled Facebook Games, providing a form of "entertainment" that earlier research had indicated was particularly appealing to tweens and young teens.[1387] Games likely to appeal to children include, among others, makeup styling games;[1388] animated animal sorting games;[1389] and pet care roleplaying games.[1390] Many games, including Fruit Ninja with Friends,[1391] are collaborative, so they enable young teens to play with their friends. Meta's internal research highlighted that such collaborative or multiplayer games were particularly appealing to 11- to 15-year-old users.[1392] A range of the most played "quick play" games can be seen in Figure 56, below.

1384 META3047MDL-004-00003522, "IG Youth: Tween Needs," at 554.
1385 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 739.
1386 META3047MDL-003-00171899, "Teens," at 918.
1387 See, for example, META3047MDL-003-00134648, "2017 Teens Strategic Focus," October 27, 2016, at 669.
1388 https://www.facebook.com/gaming/play/1418532198930152.
1389 https://www.facebook.com/gaming/play/294903896714779.
1390 https://www.facebook.com/gaming/play/2486610861476113.
1391 https://www.facebook.com/gaming/play/1331614800685579.
1392 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 739.

Figure 56. Games on Facebook[1393]



c. Advertisements

563. In addition to the specific platform features that Meta used to attract children under 13, Facebook's appeal to child users is evident in the platform's ability to attract advertisers who sought to market products that targeted children. As I did when I discussed Instagram, above, I examine the ads that Nickelodeon, the most popular children's TV network among children aged

[1393] https://www.facebook.com/games/instantgames/category?category=482234206383476.

2-11,[1394] placed on Facebook to target child users.

564. As discussed in more detail in Section XVII.C.ii, Nickelodeon's internal documents [redacted] [1395] However, Nickelodeon's recap of its campaign to market the Kids' Choice Awards in 2022 notes that [redacted] on Facebook, [redacted] [1396] The presentation [redacted], illustrating Nickelodeon's impression that [redacted] [1397]

565. Between 2012 and the first part of 2024, Meta generated $17.8 million dollars in revenue from Nickelodeon ads on Facebook.[1398] Nearly 17,000 of these ads were designed to target an audience that included 13-year-olds, generating 1.2 billion impressions in total. During the same period, Nickelodeon placed approximately 745 ads that targeted *only* users below the age of 15, generating over 11 million impressions.[1399] Because Facebook's official policy is that users must

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1394 https://variety.com/2019/tv/features/nickelodeon-40th-anniversary-rugrats-blues-clues-spongebob-kids-choices-awards-ryans-mystery-playdate-1203164889/.

1395 AG-MDL3047-105579, "Kid's Choice Awards Wrap Report 2022," 2022 at 585, 600.

1396 AG-MDL3047-105579, "Kid's Choice Awards Wrap Report 2022," 2022 at 600.

1397 AG-MDL3047-105579, "Kid's Choice Awards Wrap Report 2022," 2022 at 618.

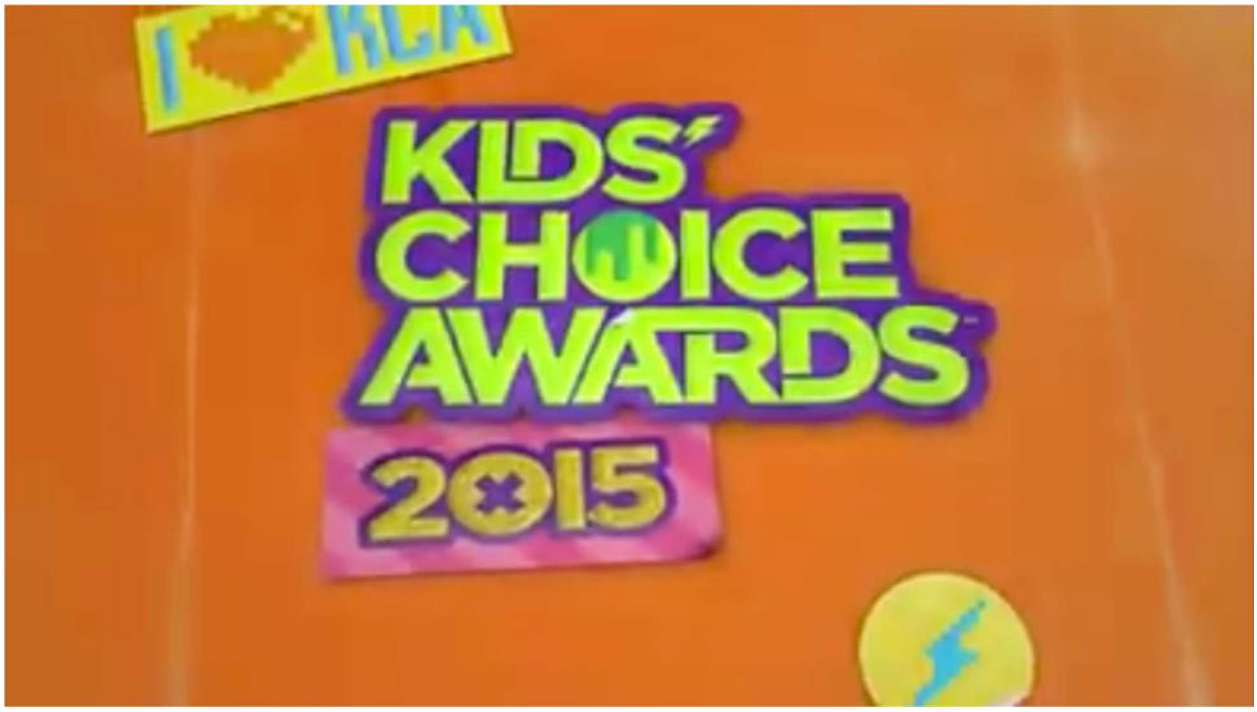
1398 Includes ads for both Nickelodeon and Nickelodeon Family. Figures are derived using data from the following sources: META3047MDL-115-00000004; META3047MDL-115-00000005; META3047MDL-115-00000006; META3047MDL-115-00000007; META3047MDL-115-00000008; META3047MDL-115-00000009; META3047MDL-115-00000010; META3047MDL-115-00000011; META3047MDL-115-00000012; META3047MDL-115-00000013.

1399 Includes ads for both Nickelodeon and Nickelodeon Family. Figures are derived using data from the following sources: META3047MDL-115-00000001; META3047MDL-115-00000002; META3047MDL-115-00000003; META3047MDL-115-00000004; META3047MDL-115-00000005; META3047MDL-115-00000006; META3047MDL-115-00000007; META3047MDL-115-00000008; META3047MDL-115-00000009; META3047MDL-115-00000010; META3047MDL-115-00000011; META3047MDL-115-00000012; META3047MDL-115-00000013.

be 13,[1400] advertisers are unable to explicitly target audiences under the age of 13. However, as Meta's research established, the interests of 11- and 12-year-old children are similar to those of their 13- and 14-year-old near-peers, meaning the same types of ads are likely to appeal to tweens.

566. In the Nickelodeon Facebook ad in Figure 57, below, targeted to reach only users under the age of 15, the voiceover addresses children directly, saying the "Kids' Choice Awards are right around the corner, which means it's time to vote for your favorite[s]."[1401] The Kids' Choice Awards draws over 3 million viewers, and in 2023 was the top cable telecast among children aged 2-11 and tweens aged 9-14.[1402]

Figure 57. Still from video promotion of 2015 Kids' Choice Awards[1403]



1400 https://help.instagram.com/3237561506542117.
1401 META3047MDL-220-00001318.
1402 https://deadline.com/2023/03/2023-nickelodeons-kids-choice-awards-ratings-1235282177/.
1403 META3047MDL-220-00001316 and META3047MDL-220-00001318.

567. Another Nickelodeon ad, shown in Figure 58, below, features child actors playing "This or That" to "pick what will make this the ultimate school year."[1404] The ad directs children to "Nick YouTube" while promoting Abercrombie's children clothing line.

Figure 58. Nickelodeon and Abercrombie Kids advertisement features child actors[1405]



568. Other advertisers also placed ads targeting children and tween users. For example, Nike placed an ad on Facebook (shown in Figure 59, below) promoting its "Back to School collection," telling children "[on] the field and in the hallways, we've got you covered."[1406]

1404 META3047MDL-220-00000585.
1405 META3047MDL-220-00000583 and META3047MDL-220-00000585.
1406 META3047MDL-220-00002329.

Figure 59. Video still of Nike ad featuring children playing[1407]



569. In sum, internal Meta documents demonstrate that Facebook incorporates child-focused features and content. Meta added a number of features to Facebook that adapted or built on similar features on other platforms that were popular among tweens, as well as features that were proven to appeal to tweens on Instagram, such as Stories and Reels.[1408] Meta viewed Facebook's capacity to provide "social entertainment" as a particular strength that enabled the platform to meet the needs of tweens who sought to engage with their friends over videos and gaming content.[1409] Meta also leveraged Facebook's unique algorithmic model to connect young users to the content and games that tend to appeal to them, and to engage these users with creative tools,

1407 META3047MDL-220-00002329 and META3047MDL-220-00002331.
1408 See, for example, META3047MDL-003-00135848, "Re: Instagram Teens HPM 0 23 Jan 2017."
1409 See, for example, META3047MDL-003-00021146, "Youth Data & Research," November 18, 2016, at 146, and META3047MDL-004-00003522, "IG Youth: Tween Needs," at 554.

expressive reactions, and celebrities popular among tweens and young teens.[1410] Additionally, advertisers such as the largest children's TV brand, Nickelodeon, place ads for child-oriented shows and activities on Facebook, increasing the content targeted to children on the site and indicating a belief that children are reached through Facebook.

C. Evidence from internal and external sources confirm children under the age of 13 use Facebook

570. As discussed above, Meta intended and designed Facebook to appeal to tweens. Both internal and external sources confirm that under-13s use Facebook despite the platform's explicit policy prohibiting children and tweens from establishing an account on the platform.

571. Studies and public data demonstrate that, for more than a decade, millions of under-13s have used Facebook every day. For example, a study conducted in 2011 and led by Danah Boyd of Microsoft Research found that 55% of 12-year-old children in the United States had a Facebook account (equivalent to approximately 2.3 million children).[1411] Consumer Reports published a report in June 2011 documenting that 7.5 million U.S. children under-13 (a wider sample than the audience of 12-year-olds examined in Boyd's study) had a Facebook account.

572. A decade later, a Thorn[1412] study titled "Youth Perspectives on Online Safety, 2022," found similar numbers, despite the rise of newer social media platforms competing for the same audience of tweens. Thorn focused on a group of tweens aged between 9- and 12-years-old.

[1410] See, for example, META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021 at 750.

[1411] Boyd, Danah, Hargittai, E., Schultz, J., & Palfrey, J. (2011), "Why parents help their children lie to Facebook about age: Unintended consequences of the Children's Online Privacy Protection Act," *First Monday*, 16(11); https://www2.census.gov/programs-surveys/popest/technical-documentation/file-layouts/2010-2019/nc-est2019-agesex-res.csv.

[1412] Thorn is a nonprofit focused on child safety. See, https://www.ijm.org/news/three-tips-teaching-online-safety-kids.

Among that group of children and tweens surveyed in 2022, 53% reported having "ever used" Facebook, and 29% reported using Facebook "at least once per day." Based on 2022 demographic data, this percentage implied that 4.7 million children aged 9- to 12-years-old were using Facebook daily.[1413] The following year, a similar study conducted by Thorn found that the number of 9- to 12-year-olds who had "ever" used Facebook had increased from 53% to 59%, and those who reported using Facebook daily had increased from 29% to 35% of respondents.[1414]

573. Meta's internal data similarly demonstrate that the company was aware that children were using Facebook. In the internal "Messenger Kids: Next Steps App Profile" presentation from 2020, Meta found 31% of 6- to 9-year-olds and 44% of 10- to 12-year-olds reported using Facebook in the past month.[1415] In that same presentation, 22% of 6- to 9-year-olds and 30% of 10- to 12-year-olds reported that "most" of their friends were on Facebook.[1416] The 2020 internal presentation "Messenger Kids: What's in a Name?" reported that 9% of 6- to 9-year-olds and 10% of 10- to 13-year-olds believed that most children their age used Facebook.[1417] Meta's internal "Youth Landscape and Opportunities" study similarly confirmed that many children use Facebook.[1418] The deck breaks down estimated Facebook use by children of different age groups, reporting that a third of 8- to 10-year-olds had used Facebook in the past month, along with one-in-five children aged between 5 and 7 years of age (see Figure 11, below).[1419]

1413 Thorn report, "Youth Perspectives on Online Safety, 2022," pp. 6-7, https://info.thorn.org/hubfs/Research/22_YouthMonitoring_Report.pdf; "Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States: April 1, 2020 to July 1, 2023," U.S. Census, chart ID: nc-est2023-syasexn, https://www2.census.gov/programs-surveys/popest/tables/2020-2023/national/asrh/nc-est2023-syasexn.xlsx.

1414 Thorn report, "Youth Perspectives on Online Safety, 2023," pp. 9-10 https://info.thorn.org/hubfs/Research/Thorn_23_YouthMonitoring_Report.pdf.

1415 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020, at 191.

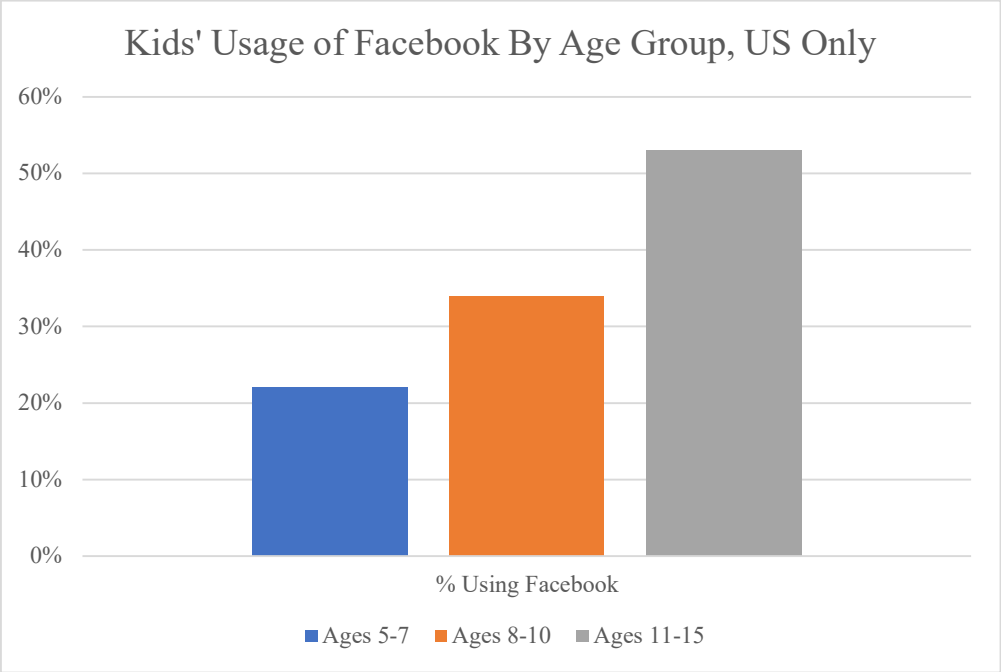
1416 META3047MDL-003-00124140, "Messenger Kids: Next Steps App Profile," October 2020, at 207.

1417 META3047MDL-003-00031387, "Messenger Kids: What's in a Name?" September 2020, at 1411.

1418 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021, at 741.

1419 META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021, at 741.

Figure 60. Meta was aware that children were using Facebook[1420]



574. In sum, Meta viewed its ability to attract children and tween users to Facebook as critical to the platform's ongoing success. Meta blurred the line between tweens and young teens, often treating them as members of a single group, studying the groups together, incorporating platform features and content that appeals to both tweens and teens, and effectively attracting users under 13 when targeting early teens. Meta focused on identifying and developing features that would keep children engaged with its family of apps, recognizing that tweens were interested in short-form video as entertainment and temporary content that allows for creativity.[1421] Moreover, internal and external data show that Meta successfully attracted such tweens to Facebook, and that Meta was aware that Facebook's user base included a material number of children below the

[1420] Graph recreated from META3047MDL-003-00016725, "Youth Landscape and Opportunities for IG," July 2021, at 741.

[1421] META3047MDL-207-00034678, "Digital Me: Exploring Tweens Social Media Habits," October 2017, at 705, 708.

age of 13.

XX. EVALUATION OF THE CHILD-DIRECTEDNESS OF PORTIONS OF FACEBOOK

575. As demonstrated earlier, Facebook's user base includes millions of children and tweens, and many of the platform's features appeal to child and tween audiences. I would expect accounts that appeal to children to feature, among other characteristics: child models and celebrities; topics of interest to children and tweens; and visual features that appeal to children, including as A.I. camera filters and animated stickers. I would also expect to find evidence that users under the age of 13 years interact with such accounts. In this section, I review several specific profiles that contain content that appeals to children.

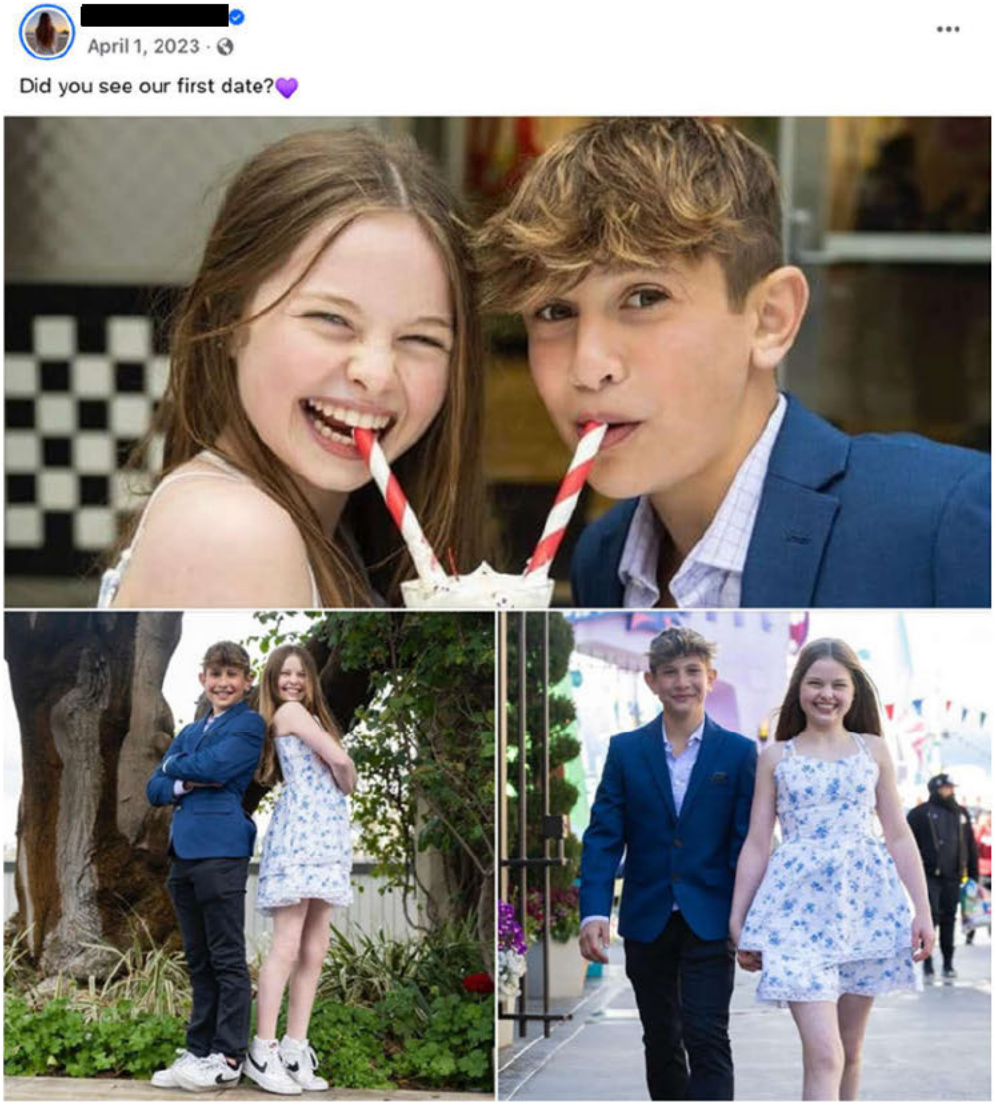
A. [redacted]

576. [redacted] is a 15-year-old social media influencer born in [redacted] 2009 who began gaining followers on social media in 2020 when she was 11-years-old.[1422] She has 325,000 followers on Facebook as of March 21, 2025.[1423] [redacted] and her father, also a YouTuber, won a Nickelodeon Kid's Choice Award for Favorite Creator Family in 2024.[1424] Posts on [redacted]'s profile focus on subject matter likely to appeal to children such as first dates, dancing and playing with family. [redacted]'s posts feature other child influencers and children and users have commented that they are under 13-years-old.

577. Figure 61 through Figure 65 below show examples of her content that is child-oriented, which together indicate her account is directed to children.

1422 https://www.famousbirthdays.com/people/[redacted]html.
1423 https://www.facebook.com/profile.php?id=100070967029810.
1424 https://www.nick.com/kids-choice-awards/articles/rebzs2/every-kids-choice-2024-winner.

Figure 61. Post documenting [redacted]'s first date with influencer [redacted][1425]



[1425] https://www.facebook.com/share/p/16BoNyVr5H/.

Figure 62. Reel featuring 13-year-old [redacted] and 14-year-old influencer [redacted] dancing on an escalator[1426]



[1426] https://www.facebook.com/share/r/15z7bWR6za/.

Figure 63. Post featuring [redacted] burying her dad in sand at the beach[1427]



[1427] https://www.facebook.com/share/p/18vE5CimQp/.

Figure 64. [redacted] and [redacted] at the Nickelodeon Kids' Choice Awards[1428]



[1428] https://www.facebook.com/share/p/15WhFCZp7B/.

Figure 65. 8-year-old commenting on post[1429]



B. [redacted]

578. [redacted] is a 9-year-old social media influencer born in [redacted] 2015.[1430] Her YouTube channel, "A for [redacted] – Learning for Fun", has 7.8 million subscribers.[1431] Her

1429 https://www.facebook.com/permalink.php?story_fbid=pfbid0f7Q5KFtidgGdPFXxEMmKzwq7cJK4McHePbVGhndnUs3Wu3VGkvgzwEidKz8wwugal&id=100070967029810&comment_id=137882809274545.

1430 https://www.famousbirthdays.com/people/[redacted]html.

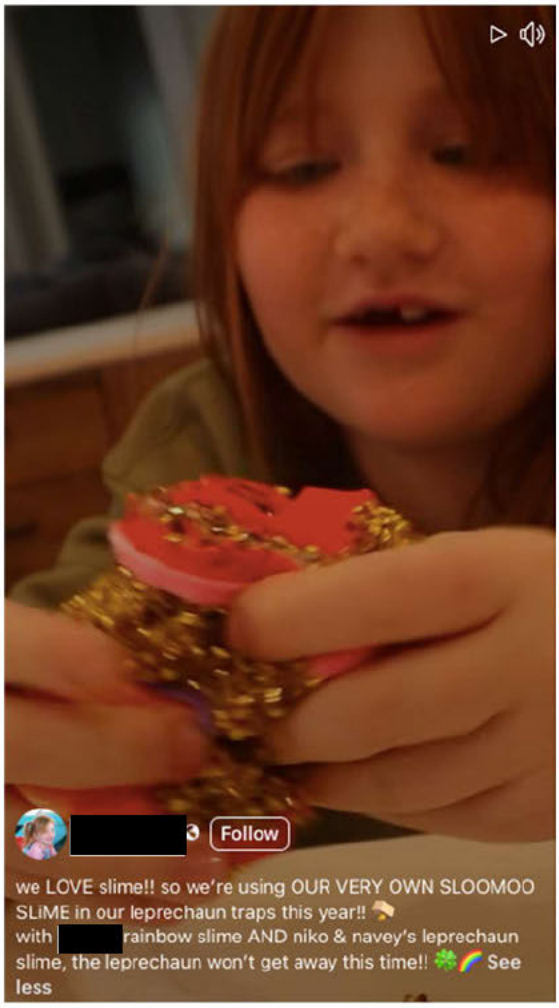
1431 https://www.youtube.com/channel/UCBJuxfqZuiibvcwSc8ViGsQ.

associated Facebook page is titled "A for [redacted] which has 25,000 followers as of April 9, 2025.[1432] She posts content which would appeal to children such as unboxing toys, a crossover with popular children's gaming platform Roblox, and holiday craft activities. Other posts on her page include original kid-friendly music and posts featuring other children.

579. Figure 66 through Figure 70, below, show examples of her content that is child-oriented, which together indicate her account is directed to children.

[1432] https://www.facebook.com/[redacted]

Figure 66. Reel showing [redacted] and family unboxing and playing with packages of slime[1433]



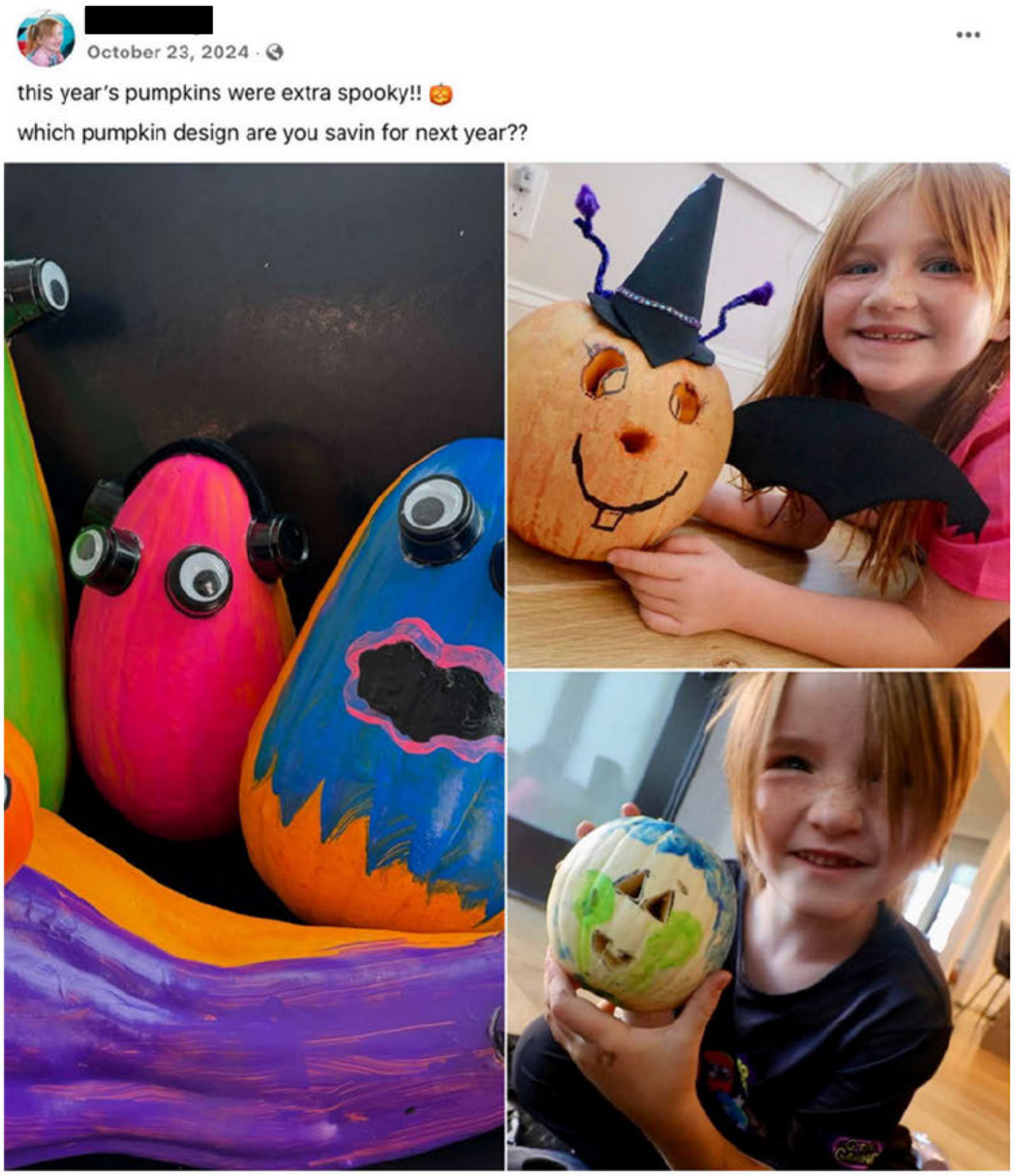
[1433] https://www.facebook.com/reel/2057162784695788.

Figure 67. Reel promoting [redacted] original Roblox story[1434]



[1434] https://www.facebook.com/reel/1227213338627283.

Figure 68. [redacted] posing with painted pumpkins[1435]



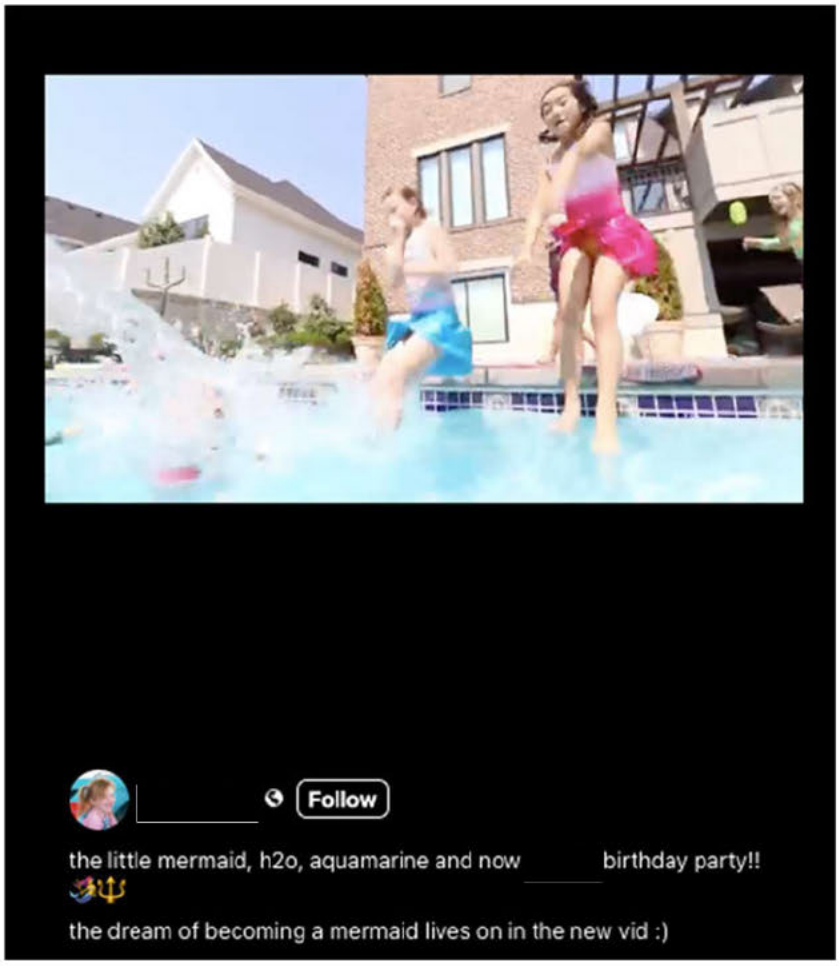
1435 https://www.facebook.com/share/p/1BXmbjcyj2/.

Figure 69. Post containing several animated photos promoting [redacted] new music video[1436]



1436 https://www.facebook.com/share/p/16KepV1AcH/.

Figure 70. Reel showing [redacted] celebrating her 9th birthday with children who look similar in age[1437]



C. Ninja Kidz Fan Club

580. Ninja Kidz TV is a collective of four siblings with 29,000 followers on Facebook.[1438] The siblings are 16-year-old twins [redacted] and [redacted], born in [redacted], 2008,[1439] 18-year-

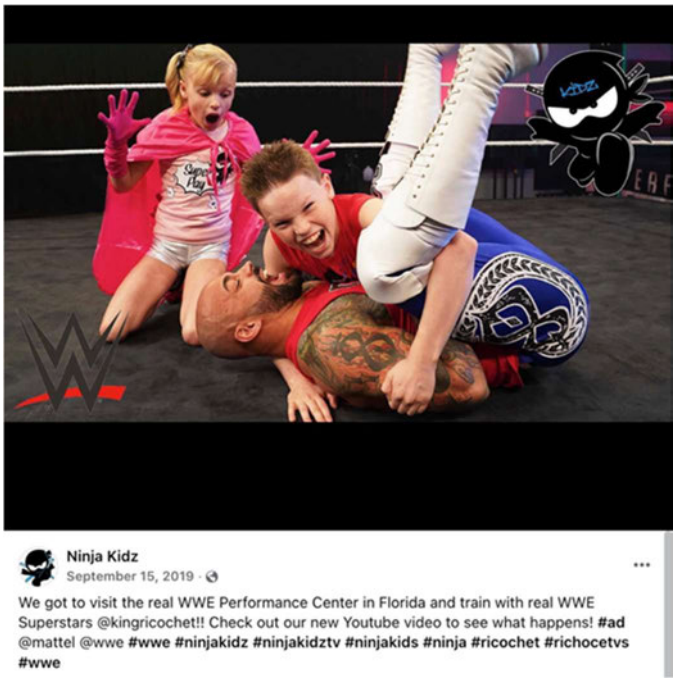
[1437] https://www.facebook.com/reel/1006483657463891.
[1438] https://www.facebook.com/@NinjaKidzTV/. As of April 9, 2025.
[1439] https://www.famousbirthdays.com/people/[redacted]
https://www.famousbirthdays.com/people/[redacted]

old [redacted] born in [redacted], 2006,[1440] and 21-year-old-[redacted], born in [redacted] 2004.[1441] The Ninja Kidz been creating content for children since 2017 when they were 9, 11, and 13-years-old on YouTube where they now have 23 million followers.[1442] The Ninja Kidz won the Nickelodeon Kids' Choice Award for Favorite Social Media Family in 2023.[1443] Ninja Kidz TV posts content likely to appeal to children such as training with the WWE, visiting arcades and collecting snakes with friends. They also post content which would visually appeal to children with cartoon dinosaurs and pirates. Other posts on their page include advertisements directed to children.

581. Figure 71 through Figure 74 below show examples of their content that is child-oriented, which together indicate their account is directed to children.

[1440] https://www.famousbirthdays.com/people/[redacted]
[1441] https://www.famousbirthdays.com/people/[redacted]
[1442] https://www.youtube.com/@NinjaKidz.
[1443] https://www.nick.com/kids-choice-awards/articles/rwskx2/every-kids-choice-awards-2023-winner.

Figure 71. Post featuring the wrestling with WWE Superstars[1444]



[1444] https://www.facebook.com/photo/?fbid=724313034661157&set=a.275394276219704.

Figure 72. Post of the Ninja Kidz siblings at an arcade with a Ninja Turtles video game[1445]



Ninja Kidz
November 4, 2019 ·

Havin fun over the weekend! We met the Shredder 😂 what did you do this weekend? Lol **#ninjakidztv #ninjakids #ninjaturtles #weekendfun**

[1445] https://www.facebook.com/photo/?fbid=761311850961275&set=a.275394276219704.

Figure 73. Post featuring [redacted] and his friend with snakes they found[1446]



Ninja Kidz
October 5, 2019 ·

[redacted] with his buddy [redacted] official doing what they love. Looking for snakes. Does anyone else know what herping is? These two really enjoy it and have a wonderful love for all animals. They are always careful and respectful of every animal they encounter. Do you love animals too? What's your favorite animal? Comment below. #ninjakidztv #ninjakidstv #ninjakids #ninjakidz [redacted] [redacted] #utahfriends #utahboys #utahyoutubers #herpers #herping #utahherps #snakeloversofinstagram #lovesnakes See less

1446 https://www.facebook.com/photo/?fbid=737970879962039&set=a.275394276219704.

Figure 74. Post featuring the Ninja Kidz as cartoon characters surrounded by pirate ships, dinosaurs, dragons and other characters that appeal to children[1447]



1447 https://www.facebook.com/NinjaKidzTV/posts/pfbid023Q284uviokWd5YRZeqohAmphRLkZzBh6cFvPpX9wsabySNAjtLYaCjuXsTqrfPt8l.

Figure 75. Sponsored post featuring Mattel toys[1448]



D. Roblox

582. Roblox is an online gaming platform that allows users to play and develop games with a large base of child users.[1449] The Roblox Facebook page has 1.8 million followers[1450] and is focused on promoting the Roblox game. Many of the games within Roblox, featured in posts on Facebook, have subject matter that appeals to children such as school, cute animals, dinosaurs and skateboarding hot dogs. Some of Roblox posts promote in-game children's activities related to holidays such as a Halloween. Comments on Roblox posts indicate that some of their followers are under 13-years-old.

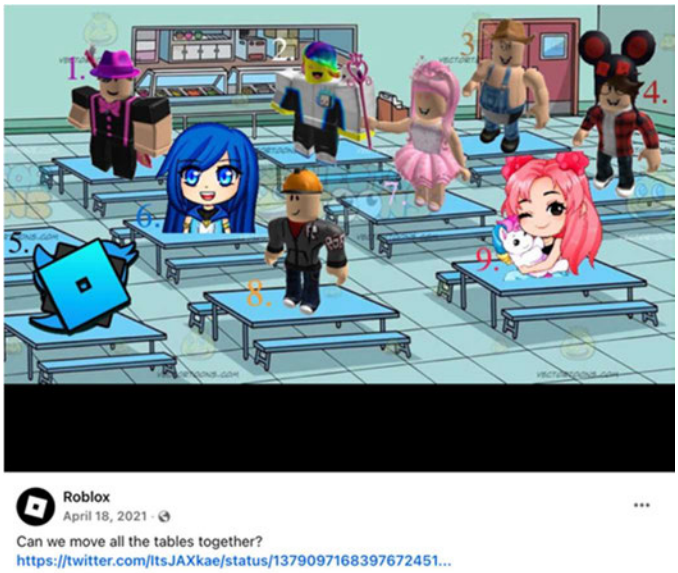
[1448] https://www.facebook.com/NinjaKidzTV/posts/pfbid0QTKN1LPSMUjZWj6dfdMFPa2uDBpncCC6XhZAWcvGPWcmaNPgMmUSJrDvFzZ3cHdml.

[1449] https://www.theguardian.com/games/2024/nov/18/what-is-roblox-everything-you-need-to-know-about-online-game-platform.

[1450] https://www.facebook.com/Roblox.

583. Figure 76 through Figure 82 below show examples of Roblox content that is child-oriented, which together indicate the Roblox account is directed to children.

Figure 76. Post featuring Roblox characters in a cafeteria[1451]

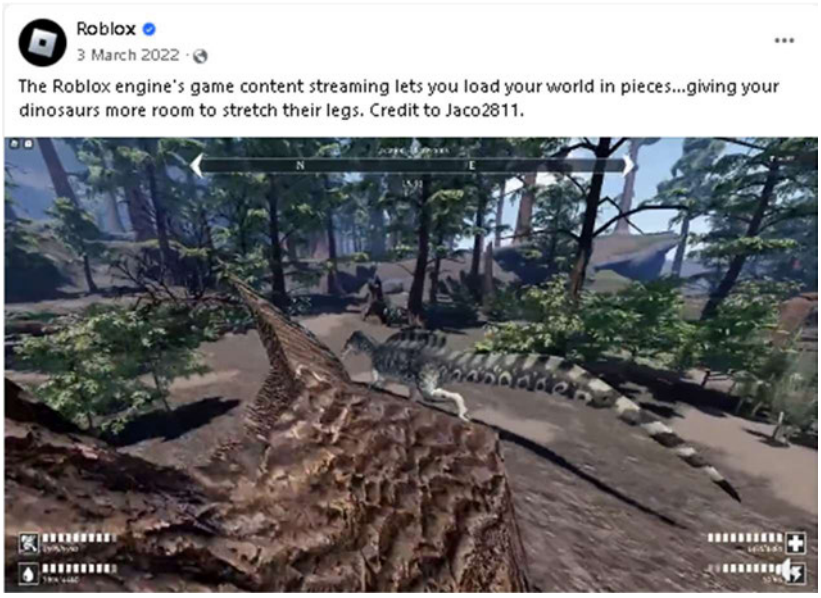


[1451] https://www.facebook.com/photo/?fbid=10158854516423580&set=a.378366298579.

Figure 77. Reel promoting capybara themed game[1452]

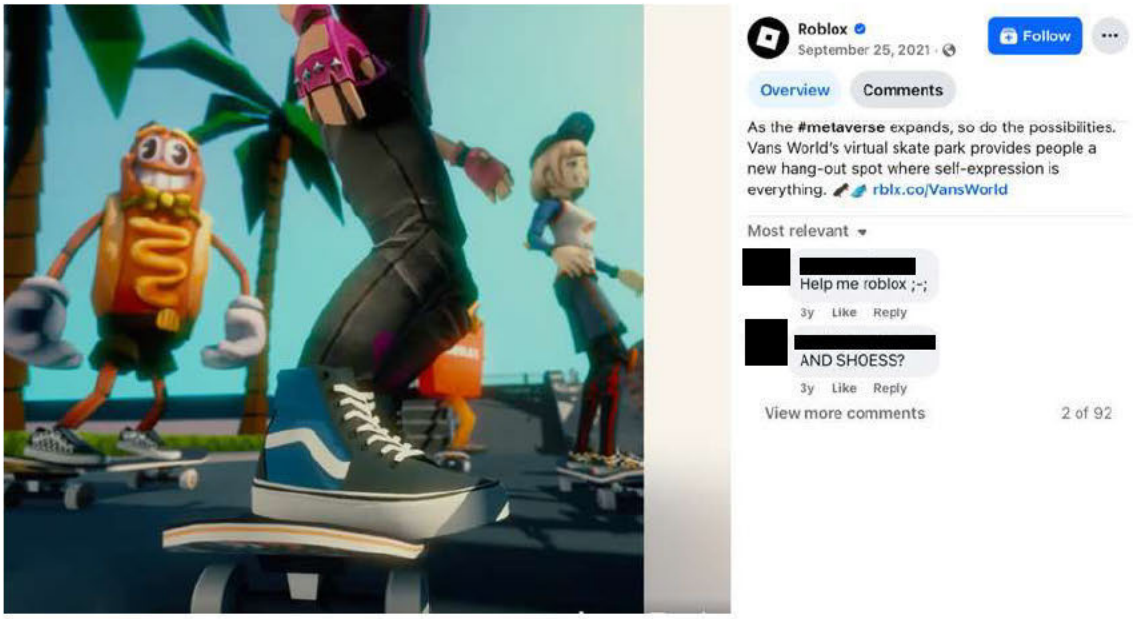


Figure 78. Video post featuring a dinosaur themed video game[1453]



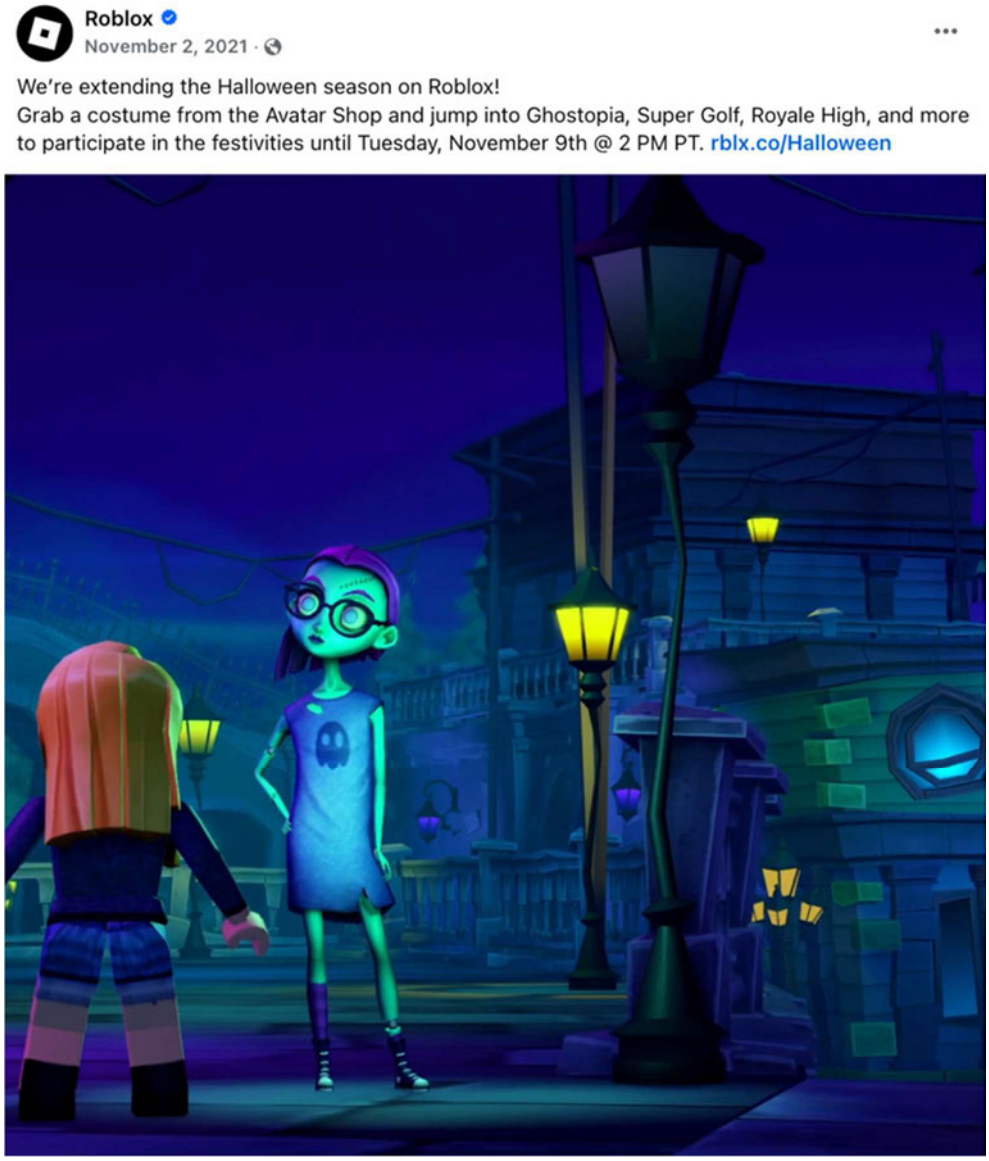
[1452] https://www.facebook.com/reel/643329618449237.
[1453] https://www.facebook.com/Roblox/videos/3135411450010422/.

Figure 79. Video post featuring a game with a skateboarding hot dog[1454]



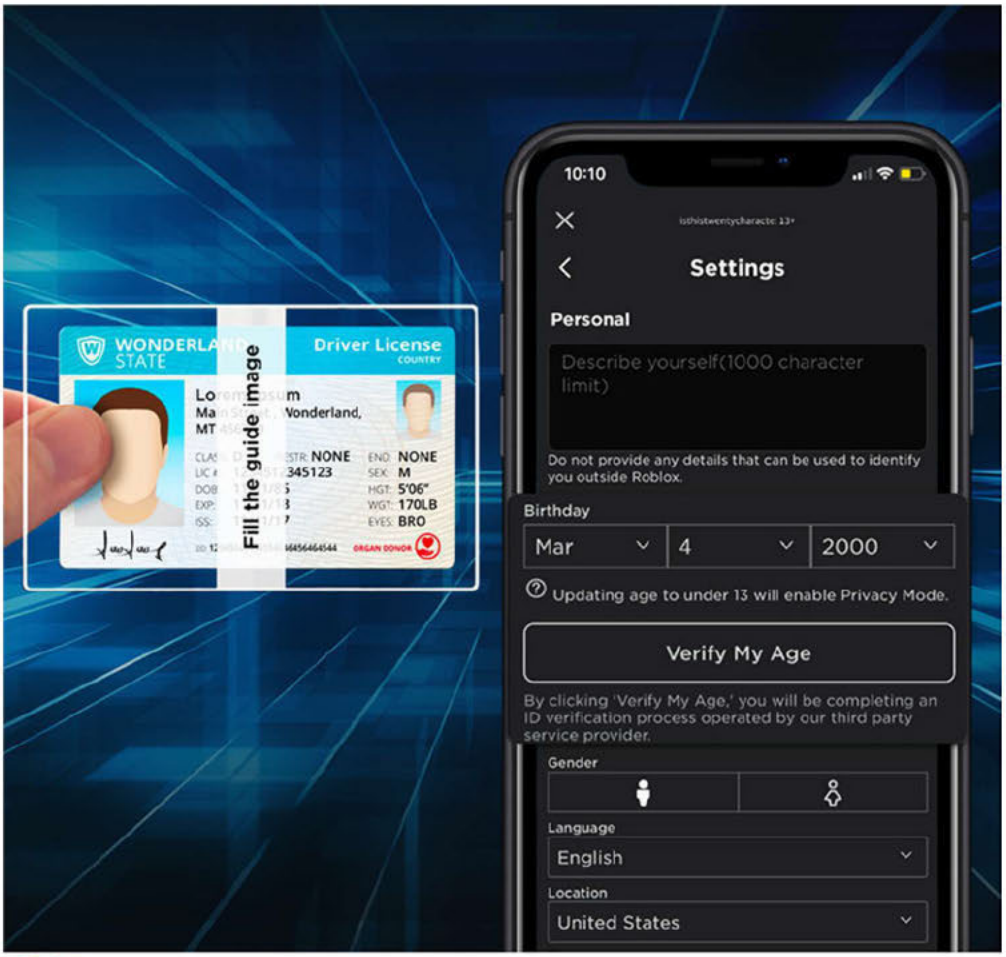
1454 https://www.facebook.com/watch/?v=462473651545032.

Figure 80. Post showing Halloween activities available on Roblox[1455]



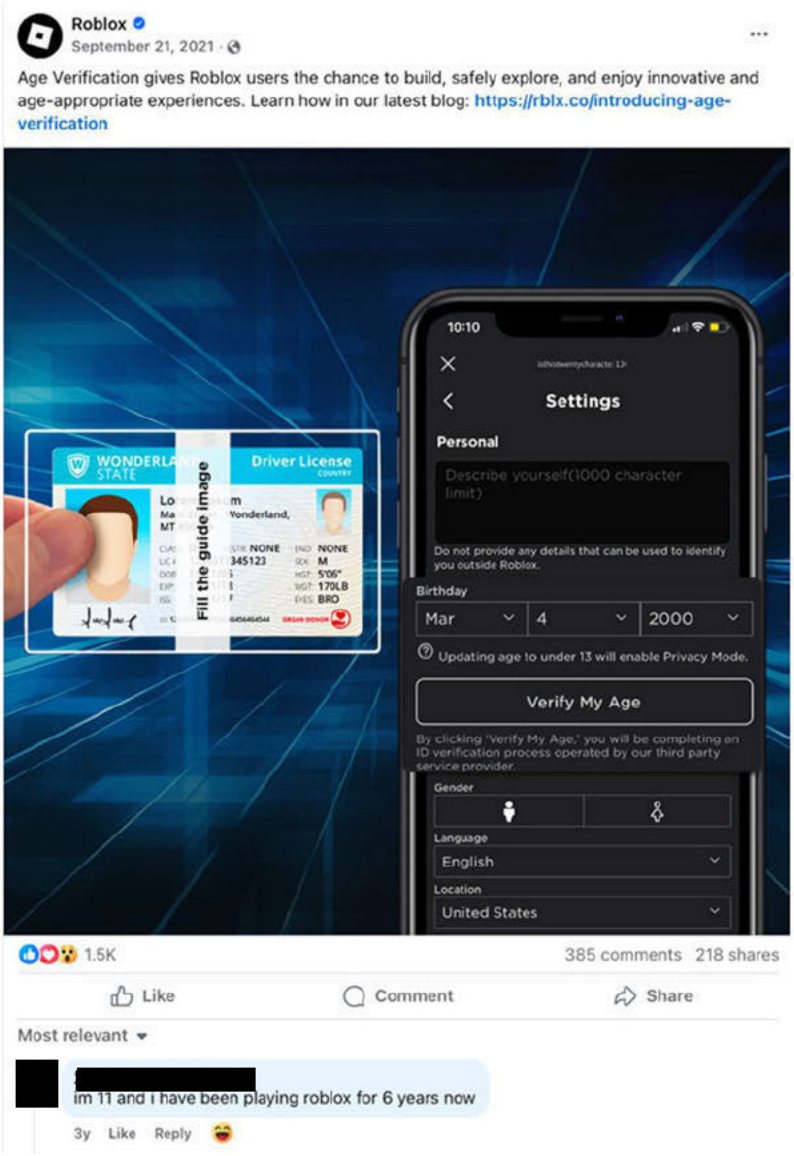
[1455] https://www.facebook.com/Roblox/posts/pfbid02aFeTXGQdqc5QTo2xeKthxVWYpHj2K8scrKjSso9R5VtkSjgtWBXrDh2zQ4TGVjpTl.

Figure 81. Comment from 12-year-old user stating that they are almost 13[1456]



[1456] https://www.facebook.com/Roblox/posts/pfbid06XCd3ba6F6DzeRj6hoDyRk2WpkfvDmzsL3PmQHVcxKVJaYGYYX4SR66cKL9o6frnl?comment_id=10159181096618580.

Figure 82. Comment from user stating that they are 11 years old[1457]



E. LankyBox

584. LankyBox is a YouTube sketch duo that features two adult creators, Justin Kroma and Adam McArthur, who post videos on YouTube Kids.[1458] On Facebook, the LankyBox page has

1457 https://www.facebook.com/Roblox/posts/pfbid06XCd3ba6F6DzeRj6hoDyRk2WpkfvDmzsL3PmQHVcxKVJaYGYYX4SR66cKL9o6frnl?comment_id=10159179066583580.

1458 https://www.famousbirthdays.com/webgroups/lankybox.html.

640,000 followers.[1459] Many of the account's posts focus on Roblox, the online video game platform popular with children.[1460] LankyBox also posts original humorous songs about topics that appeal to children, and promotes branded merchandise that appeals to children, such as stuffed animals and costumes.[1461] Comments from users indicate that the account has followers under the age of 13 on its Facebook page.

585. Figure 83 through Figure 86 below show examples of LankyBox content that is child-oriented, which together indicate that the LankyBox account is directed to children.

Figure 83. Post showing LankyBox hosts during a game-playing session in popular children's game Roblox[1462]



1459 https://www.facebook.com/LankyBox/.
1460 https://www.theguardian.com/games/2024/nov/18/what-is-roblox-everything-you-need-to-know-about-online-game-platform.
1461 https://lankyboxshop.com/.
1462 https://www.facebook.com/LankyBox/videos/301708728295431.

Figure 84. Post showing Justin Kroma dressed in a onesie playing with a collection of plush toy characters available for purchase[1463]



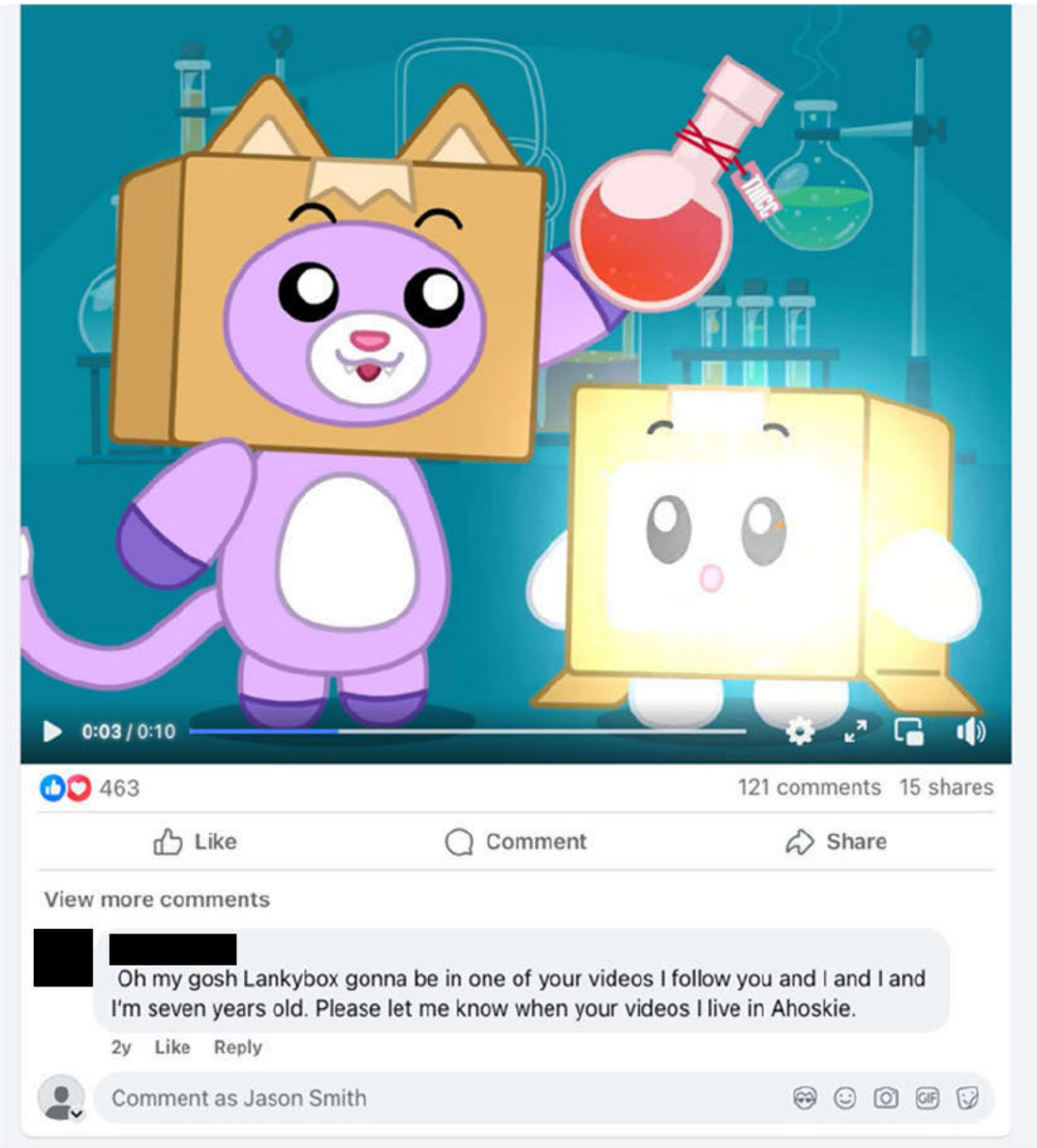
1463 https://www.facebook.com/photo.php?fbid=337055341112657&id=100044245816729.

Figure 85. Post with a compilation of original songs about "bromance," fidget spinners, chicken nuggets, complaints about the internet being down after school, and a love song to tacos [1464]



[1464] https://www.facebook.com/watch/?v=1940316442787978.

Figure 86. Comment from a user stating that he is 7-years-old[1465]



586. The above examples illustrate that portions of the Facebook platform are directed to children.

[1465] https://www.facebook.com/LankyBox/videos/153242360639289?comment_id=240666368399992.

XXI. OVERALL EVALUATION OF THE CHILD-DIRECTEDNESS OF INSTAGRAM AND FACEBOOK

587. Meta has long recognized the value of hosting young users on its platforms, and the company has accordingly sought to attract and retain children and adolescent users in its pursuit of enduring long-term growth. Though the company officially only allows users aged 13-years and older to create Facebook and Instagram accounts, Meta has consistently pursued strategies that encourage tweens and children to use its platforms, while enforcing its age limits so ineffectively that the company's internal research shows that there are millions of child users on Facebook and Instagram. Meta conducted numerous, intensive research projects designed to study the interests, needs, and behaviors of children and tweens, ultimately incorporating much of what it learned to enhance the capacity for Facebook and Instagram to attract and retain children. Meta's work to build platforms that would appeal to 13-year-olds also necessarily entailed building a platform for tweens and children—audiences that Meta recognized in its own research hold interests and preferences that overlapped substantially with the young teen audience the company was expressly targeting.

588. In sum, and as reflected in Table 16, below, evidence indicates that Facebook and Instagram are directed to children. Meta intended to attract young users to Facebook and Instagram, and both internal and external research demonstrates that the company succeeded in attracting millions of children and tweens to those platforms.

Table 16. Instagram and Facebook are child-directed, and host child users

	Instagram	Facebook
Intended Audience	Studied "tweens" frequently and sought to compete with TikTok and Snapchat for these users.	Sought to increase the number of young users, tracking interests and behavior of users aged 11-to-15-years as a singular group.
Features	Adopted features popularized by competitors, including Snapchat and TikTok, that appealed to under-13 users, including filters, Stories, and Reels. Incorporated findings about features from research into under-13 users for its childrens' app effort, including in the design and implementation of playful and creative tools.	Adopted features popularized by competitors, including YouTube, Snapchat, and TikTok, that appealed to under-13 users, including features associated with Live, Stories and Reels. Introduced creative tools and animated elements such as emoji reactions and stickers in direct meesages.
Content	Focused on increasing tween- and teen-oriented video and entertainment, including through partnerships with influencers (including under-13 influencers) who appeal to tweens, to generate content that would appeal to children.	Focused on becoming a video entertainment hub for young teens, and leveraging middle and high school communities to bring in users. Sought to use accounts of celebrities popular with teens to increase the appeal of the platform for tweens and young teens.
Audience Composition	Reported, in 2021, that a majority of 11- and 12-year-olds in the United States were on Instagram.	Reported, in 2021, that half of 11- to 15-year-olds, and a third of 8- to 10-year olds in the United States were on Facebook.

589. In addition to the platform-level design, features, and functionality that appeal to users under the age of 13 on Instagram and Facebook, portions of each platform contain content that appeals to children. For example, tween influencers like 11-year-old [redacted] and now-15-year-old [redacted] are of interest primarily to users their own age or younger, as are online shows featuring children, including Kids [redacted] Show and Ninja Kidz.

590. Tweens are eager to join platforms like Facebook and Instagram because these social networks promise, among other claimed benefits, entertainment, and a vehicle for connecting with peers and family members who are already active users. Indeed, Meta's internal research

indicates that older siblings also play a key role in introducing tweens to Facebook and Instagram. Further, many 12-year-olds share similar interests and behaviors with, and demonstrate similar levels of digital savviness to, their 13-year-old peers. Like their young teen counterparts, these tweens attend the same schools, inhabit the same grades at school, occupy the same social and sports groups, and—as Meta's own research demonstrates—are interested in very similar or identical online content, influencers, memes, and video challenge trends. As a result, tweens under the age of 13 are attracted to these platforms despite official policies that restrict under-13s from opening accounts.

591. Facebook and Instagram also appeal to tweens and children because they embody the same or similar features that have made competing social media platforms so attractive to youth: disappearing stories; a stream of humorous short-form videos; and the general promise of cognitively undemanding entertainment. Additionally, Facebook and Instagram allow tweens to follow influencers popular *among tweens*—including influencers who are themselves under the age of 13—who have been encouraged to post content on those platforms by Meta at least in part because the company recognized that youth influencers are particularly appealing to young social media users. In concert, Meta's tween- and child-focused research, and deliberate implementation and promotion of tween- and child-focused platform-level features and content, have succeeded in attracting a significant portion of all tweens in the United States to Facebook and Instagram—as clear a sign as any that those platforms are directed to children.

The undersigned hereby certifies their understanding that they owe a primary and overriding duty of candor and professional integrity to help the Court on matters within their expertise and in all submissions to, or testimony before, the Court. The undersigned further certifies that their report and opinions are not being presented for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation.



August 1, 2025

Adam L. Alter, Ph.D. Date

APPENDIX A – CURRICULUM VITAE

Adam Alter

Marketing Department, Stern School of Business, New York University 40 West 4th Street, Room 811, New York, NY 10012

+ 1-212-998-0142; aalter@stern.nyu.edu

Academic Employment

2020-present	**Professor of Marketing,** Stern School of Business, New York University Robert Stansky Teaching Excellence Faculty Fellow Affiliated appointment in the Psychology Department
2014-2020	**Associate Professor of Marketing,** Stern School of Business, New York University Affiliated appointment in the Psychology Department
2009-2014	**Assistant Professor of Marketing,** Stern School of Business, New York University Affiliated appointment in the Psychology Department

Education

2009	**Ph.D.** in Social Psychology Princeton University
2006	**M.A.** in Social Psychology Princeton University
2004	**B.Sc.** in Psychology; Law minor (Honors Class I, University Medal -- 1st place) University of New South Wales

Selected Honors, Fellowships, and Awards

2021	Elected Fellow, Association for Psychological Science
2020	NYU Stern Distinguished Teaching Award, 2019-2020 (Stern's highest teaching award voted on by a committee of senior faculty)

2020	NYU Stern Professor of the Year, 2019-2020 (voted on by all MBA students)
2018	Awarded grant to study the effects of screens on adolescents and children by Viacom and South Park Studios, $150,000
2017-present	Member, World Economic Forum Advisory Committee on AI, VR, AR, and Blockchain
2017	Designated the *Robert Stansky Teaching Excellence Faculty Fellow* at New York University's Stern School of Business
2017	*Irresistible* designated Amazon.com non-fiction title of the month for March 2017.
2014	*Drunk Tank Pink* designated a *CHOICE* Outstanding Academic Title for 2013
2010	Runner-Up, Hillel Einhorn New Investigator Award, Society of Judgment and Decision Making
2009	Society for Personality and Social Psychology Travel Grant
2008-2009	Charlotte Elizabeth Procter Honorific Dissertation Fellowship
2008	Princeton University Dean's Fund for Scholarly Travel
2007-2009	Woodrow Wilson Scholars Society Dissertation Fellowship
2004	Young Investigator Grant, American Society of Trial Consultants

Publications

Books

Alter, A. L., (May 16, 2023). *Anatomy of a Breakthrough: How to Get Unstuck When It Matters Most.* Simon and Schuster: New York.

Alter, A. L. (March 7, 2017). *Irresistible: The rise of addictive technology and the business of keeping us hooked.* Penguin Press: New York.

- Judged one of the 100 best books of 2017 by Amazon.

- Selected as a best book of 2017 by Inc., Forbes, Abe Books, and Library Weekly, among other outlets.
- TED talk based on *Irresistible* selected as one of the top ten most popular TED talks of 2017.

Alter, A. L. (March 21, 2013). *Drunk Tank Pink: And other unexpected forces that shape how we think, feel, and behave.* Penguin Press: New York.

- *New York Times* bestseller.
- Barnes and Noble book of the month and editor's choice.
- Smithsonian notable book.
- Kirkus recommended book.
- CHOICE outstanding academic title.

Selected Journal Publications

Kappes, H., **Alter, A. L.,** Edwards, G., & Berri, D. (2022). Difficult training improves team performance: An empirical case study of US college basketball. *Behavioural Public Policy, 6*, 554-577.

Sussman, A. B., Paley, A., & **Alter, A. L.** (2021). How and why our eating decisions neglect infrequently consumed foods. *Journal of Consumer Research, 48,* 251–269,

Munz, K., Jung, M., & **Alter, A. L.** (2020). Name similarity encourages generosity: A field experiment in email personalization, *Marketing Science, 39,* 1071-1091.

Hershfield, H. E., & **Alter, A. L.** (2019). On the naturalistic relationship between mood and entertainment choice. *Journal of Experimental Psychology: Applied, 25,* 458-476.

Lick, D. J., **Alter, A. L.,** & Freeman, J. B. (2018). Superior pattern detectors efficiently learn, activate, apply, and update social stereotypes. *Journal of Experimental Psychology: General, 147,* 209- 227.

Hershfield, H. E. & **Alter, A. L.** (2017). Context matters: How macroeconomic forces may alter the reception of negative emotions in art. *Behavioral and Brain Sciences, 40,* e365.

Alter, A. L., Stern. C., Granot, Y., & Balcetis, E. (2016). The "bad is black" effect: Why people believe evildoers have darker skin than do-gooders. *Personality and Social Psychology Bulletin, 42,* 1653-1665.

Alter, A. L., & Hershfield, H. E. (2015). Still good evidence that people search for meaning when they approach a new decade in chronological age. *Proceedings of the National Academy of Sciences, 112,* E1171.

Sussman, A. B., Sharma, E., & **Alter, A. L.** (2015). Framing charitable donations as exceptional expenses increases giving. *Journal of Experimental Psychology: Applied, 21,* 130-139.

Shah, A. K., & **Alter, A. L.** (2014). Consuming experiential categories. *Journal of Consumer Research, 41,* 965-977.

Alter, A. L., & Hershfield, H. E. (2014). People search for meaning when they approach a new decade in chronological age. *Proceedings of the National Academy of Sciences, 111,* 17066-17070.

Oppenheimer, D. M., & **Alter, A. L.** (2014). The search for moderators in disfluency research. *Applied Cognitive Psychology, 28,* 502-504.

Sharma, E., Mazar, N., **Alter, A. L.,** & Ariely, D. (2014). Financial Deprivation Selectively Shifts Moral Standards and Compromises Moral Decisions. *Organizational Behavior and Human Decision Processes, 123,* 90-100.

Alter, A. L. (2013). The benefits of cognitive disfluency. *Current Directions in Psychological Science, 22,* 437-442.

Alter, A. L., Oppenheimer, D. M., & Epley, N. (2013). Disfluency prompts analytic thinking--but not always greater accuracy: response to Thompson et al. (2013). *Cognition, 128,* 252-255.

Sussman, A. B., & **Alter, A. L.** (2012). The exception is the rule: Underestimating and overspending on exceptional expenses. *Journal of Consumer Research, 39,* 800-814.

Sharma, E., & **Alter, A. L.** (2012). Financial deprivation prompts consumers to seek scarce goods.

Journal of Consumer Research, 39, 545-560.

Laham, S., Koval, P., & **Alter, A. L.** (2012). The name pronunciation effect: Why people like Mr. Smith more than Mr. Colquhoun. *Journal of Experimental Social Psychology, 48,* 16-21.

Alter, A. L., & Balcetis, E. (2011). Fondness makes the distance grow shorter: Desired locations seem closer because they are more vivid. *Journal of Experimental Social Psychology, 47,* 16-21.

Alter, A. L., Oppenheimer, D. M., & Zemla, J. C. (2010). Missing the trees for the forest: A construal theory account of the Illusion of Explanatory Depth. *Journal of Personality and Social Psychology, 99,* 436-451.

- Runner-Up, 2010 Hillel Einhorn New Investigator Award, Society of Judgment and Decision Making.

Alter, A. L., Aronson, J., Darley, J. M., Rodriguez, C., & Ruble, D. N. (2010). Rising to the threat: Reducing stereotype threat by reframing the threat as a challenge. *Journal of Experimental Social Psychology, 46,* 166-161.

Alter, A. L., & Darley, J. M. (2009). When the association between appearance and outcome contaminates social judgment: A bidirectional model linking group homogeneity and collective treatment. *Journal of Personality and Social Psychology, 97,* 776-795.

Alter, A. L., & Oppenheimer, D. M. (2009). Suppressing secrecy through metacognitive ease: Cognitive fluency encourages self-disclosure. *Psychological Science, 20,* 1414-1420.

Alter, A. L., & Oppenheimer, D. M. (2009). Uniting the tribes of fluency to form a metacognitive nation.

Personality and Social Psychology Review, 13, 219-235.

Laham, S., **Alter, A. L.,** & Goodwin, G. P. (2009). Easy on the mind, easy on the wrongdoer: Unexpectedly fluent violations are deemed less morally wrong. *Cognition, 112,* 462-466.

Alter, A. L., & Kwan, V. S. Y. (2009). Cultural sharing in a global village: Extracultural cognition in European Americans. *Journal of Personality and Social Psychology, 96,* 742-760.

Alter, A. L., & Oppenheimer, D. M. (2008). Easy on the mind, easy on the wallet: Effects of fluency on valuation judgments. *Psychonomic Bulletin and Review, 15,* 985-990.

- Subject of a feature article on *Irrational Economics* in *The Economist,* April 3, 2008.

Alter, A. L. & Oppenheimer, D. M. (2008). Effects of fluency on psychological distance and mental construal (or why New York is a large city, but *New York* is a civilized jungle). *Psychological Science, 19,* 161-167.

Alter, A. L., Oppenheimer, D. M., Epley, N, & Eyre, R. N. (2007). Overcoming intuition: Metacognitive difficulty activates analytic reasoning. *Journal of Experimental Psychology: General, 136,* 569- 576.

Alter, A. L. & Forgas, J. P. (2007). On feeling happy but fearing failure: The effects of mood on self- handicapping strategies. *Journal of Experimental Social Psychology, 43,* 947-954.

Alter, A. L., Kernochan, J., & Darley, J. M. (2007). Morality influences how people apply the ignorance of the law defense. *Law and Society Review, 41,* 819-864.

Alter, A. L., Kernochan, J., & Darley, J. M. (2007). Transgression wrongfulness outweighs its harmfulness as a determinant of sentence severity. *Law and Human Behavior, 31,* 319-335.

Alter, A. L. & Oppenheimer, D. M. (2006). From a fixation on sports to an exploration of mechanism: The past, present and future of hot hand research. *Thinking and Reasoning, 12,* 431-444.

Alter, A. L., & Oppenheimer, D. M. (2006). Predicting short-term stock fluctuations by using processing fluency. *Proceedings of the National Academy of Sciences, 103,* 9369-9372.

- Selected as a *PNAS: In This Week* feature article.
- Paper featured in *Nature* news, May 30th 2006.
- Interviewed on U.S. and Australian television and British radio, and research featured in international newspapers and popular journals, including *The New York Times*, *Wall Street Journal*, *Los Angeles Times*, *The Guardian* (United Kingdom).

Book Chapters

Oppenheimer, D. M., & **Alter, A. L.** (in press) The Fluency sleeper effect: Disfluency endured today promotes fluency tomorrow. In: R. Greifeneder & C. Unkelbach, *Advances in Fluency and Metacognition.* Psychology Press.

Darley, J. M. & **Alter, A. L.** (2013). Behavioral issues of punishment and deterrence. In E. Shafir (Ed.), *Behavioral foundations of policy.* Princeton University Press: Princeton, NJ.

Non-Academic Writing

Regular contributor to the *New Yorker* website's Currency blog: http://www.newyorker.com/magazine/bios/adam_alter/search?contributorName=Adam+Alter

Written ad-hoc columns for, among other publications: *The Atlantic, Slate, New York Times, New Yorker, Popular Science, Huffington Post, New York Post, 99u, WIRED, Psychology Today.*

Selected Invited Talks

MIT, Sloan School of Management;

Yale University, School of Management (twice);

Cornell University, Johnson School of Business;

University of California, San Diego, Rady School of Management;

New York University, Stern School of Business;

Stanford University, Graduate School of Business;

Harvard University, Negotiation, Organizations and Markets Unit;

Carnegie Mellon University, Department of Social and Decision Sciences;

New York University, Social Psychology;

Chicago, Booth School of Business (Marketing; Behavioral Science; and Gleacher Center Public Talk);

Stellenbosch University, Cape Town, South Africa;

University of New South Wales, Sydney, Australia;

Erasmus University, Rotterdam, Netherlands;

Mannheim University, Mannheim, Germany;

HEC, Paris, France;

Microsoft, Seattle;

Google, NYC;

University of Houston;

University of Florida;

Cornell University;

TEDxSydney;

Princeton University, Social Psychology;

Wharton School, University of Pennsylvania, Decision Processes Colloquium;

University of Maryland;

Georgetown University;

Ohio State University;

Columbia University;

TED Mainstage, Vancouver, Canada

Selected Service Activities

Member, Stern Faculty Council, 2018-present

NYU Stern IRB faculty representative, 2016-present Marketing Core Curriculum Committee, 2017-present

Member, World Economic Forum Committee on AI, VR, AR, and blockchain technologies, 2017- present

Technology in MBA Committee (headed by J.P. Eggers), 2018-present

Delivered invited talks at NYU to:

- MBA 9s Orientation Event (three times)
- NYU Senate Spouses' Event
- NYU Stern Freshman Orientation
- Several MBA-organized events and club meetings
- Summer school students in the psychology department (twice)

Advanced assistant professor recruitment committee, 2018-present

Pro-bono work advising Google, Apple, YouTube, and various other tech companies on the ethical design of their products.

Arranged a speaker series for the MBA Core including six industry speakers from Google, Mediacom, Redscout (branding agency), Droga5 (advertising agency), and Kraft Mondelez, 2017-present.

Selected Editorial and Reviewing Experience

Associate Editor

Journal of Consumer Psychology

Editorial Board

Journal of Consumer Research

International Journal of Research in Marketing Journal of Experimental Social Psychology Cognition

Marketing Letters

Ad-Hoc Journal Reviewing

Applied Cognitive Psychology

Cognition

Cognitive Psychology

Cognitive Science

Consciousness and Cognition

Emotion

European Journal of Social Psychology

Group Processes and Intergroup Relations

Individual Differences

International Journal of Research in Marketing

Journal of Applied Research in Memory and Cognition

Journal of Business Ethics

Journal of Experimental Psychology: General

Journal of Experimental Psychology: Applied

Journal of Experimental Psychology: Learning, Memory, and Cognition

Journal of Experimental Social Psychology

Journal of Cognitive Psychology

Journal of Consumer Psychology

Journal of Consumer Research

Journal of Marketing Research

Journal of Personality and Social Psychology

Law and Human Behavior

Learning and Individual Differences

Management Science

Marketing Letters

Memory

Memory and Cognition

Motivation and Emotion

Organizational Behavior and Human Decision Processes

Personality and Social Psychology Bulletin

Personality and Social Psychology Review

Perspectives in Psychological Science

PLoS ONE

Psychological Bulletin

Psychological Science

Psychology, Public Policy and the Law

Quarterly Journal of Experimental Psychology

Social Behavior and Personality

Social and Personality Psychology Compass

Social Psychology

Social Psychology and Personality Science

Social Cognition

Thinking and Reasoning

Ad-Hoc Grant Reviewing

Netherlands Organization for Social Research

Research Foundation of City University New York

Israeli Science Foundation

Memberships & Committees

Fellow, Association for Psychological Science

Member, Association for Consumer Research

Member, Society for Consumer Psychology

Member, American Psychological Association

Member, Society of Personality and Social Psychology

Member, American Society of Trial Consultants

Member, New York Academy of Sciences

Member, Society of Judgment and Decision Making

Member, American Association for the Advancement of Science Graduate

Associate, Princeton Program in Law and Public Affairs

Graduate Fellow, Mathey College, 2006-2007.

Graduate Social Psychology Departmental Representative, Princeton Psychology Dept, 2005-2006.

APPENDIX B – PREVIOUS EXPERT TESTIMONY

- Red Hydrogen, LLC v. Cloudminds (Hong Kong) Ltd. JAMS REF. NO. 1220062943 (for the Plaintiff; both deposition and testimony).
- In Re: Smitty's/CAM2 303 Tractor Hydraulic Fluid Marketing, Sales Practices, and Products Liability Litigation; MDL No. 2936; Master Case No. 4:20-MD-02936-SRB United States District Court for the Western District of Missouri, Western Division (for the Plaintiff; deposition).
- In Re: U.S. Dominion, Inc., Dominion Voting Systems, Inc., and Dominion Voting Systems Corporation v. Fox News Network, LLC. Case No. N21C-03-257 EMD. Superior Court for the State of Delaware (for the Plaintiff; deposition).
- In Re: U.S. Dominion, Inc., Dominion Voting Systems, Inc., and Dominion Voting Systems Corporation v. Newsmax Media, Inc. Case No. N21C-08-063 EMD. Superior Court for the State of Delaware (for the Plaintiff; ongoing).
- Justin O'Connor, Stanislaw, Zielinski, Daniel Fair, Bryan Smith, Jason Steen, William Fiedler, Michael Barcelona, Robert Marino, Brian Dougherty, Susan Heller, Victor M. Orndorff, and Michael McDonald on behalf of themselves and all others similarly situated v. Ford Motor Company. Case No. 1:19-cv-05045. United States District Court Northern District of Illinois (for the Plaintiff; deposition).
- Kaitlyn Kuchar and Thomas Siegenthaler v. Western Reserve Academy. Case No. CVB-2021-10-3464. Court of Common Pleas, Summit County, Ohio (for the Defendant; deposition)
- Daniel Michalow v. D.E. Shaw & Cc., L.P., Maximilian Dana Stone, and Edward Laurence Fishman. FINRA Case No. 23-01854, Financial Industry Regulatory Authority, (for the Plaintiff).
- In Re: US Dominion, Inc., Dominion Voting Systems, Inc., and Dominion Voting Systems Corporation v. Herring Networks, Inc. d/b/a One America News Network, Charles Herring, Robert Herring, Sr., Chanel Rion, and Christina Bobb, Case No. 1:21-cv-02130. The District Court of the District of Columbia (for the Plaintiff; ongoing).
- Computer and Communications Industry Association and NetChoice v. Ashley Brooke Moody, in her official capacity as Attorney General of the State of Florida. Case No. 4:24-cv-004380-MW-MAF, United States District Court for the Northern District of Florida Tallahassee Division (for the Defendant; deposition)

APPENDIX C – MATERIALS CONSIDERED

Production Documents

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Legal Filings, Depositions, and Correspondences

- *In re Soc. Media Adolescent Addiction/Pers. Inj. Prods. Liab. Litig.*, 753 F. Supp. 3d 849 (N.D. Cal. 2024)
- Complaint, *People of the State of California, et al. v. Meta Platforms, Inc., et al.*, 4:23-cv-05448 (N.D.Cal.) (Dkt. No. 73-2)
- Complaint and Jury Demand, *Commonwealth of Massachusetts v. Meta Platforms, Inc. et al*, Civil Action No. 2384CV2397BLS1 (Suffolks Sup. Ct. redacted version filed October 24, 2023) (Docket No. 1)
- Meta's May 30, 2023 Response to Illinois Civil Investigative Demand, dated April 10, 2023, Interrogatory No. 8 at 11
- The State Attorneys General's First Set of Requests for Production to Meta, dated March 22, 2024
- The State Attorneys General's Second Set of Requests for Production to Meta, dated June 7, 2024
- The State Attorneys General's Third Set of Requests for Production to Meta, dated July 22, 2024
- Meta's Responses and Objections to the Illinois Civil Investigative Demand, dated April 10, 2023
- Meta's Second Supplemental Responses and Objections to the Commonwealth of Massachusetts' First Set of Interrogatories, dated May 28, 2024
- Deposition of Justin Antony, March 3, 2025, Transcripts and Exhibits
- Deposition of Kyle Andrews, November 19-20, 2024, Transcripts and Exhibits
- Deposition of Monika Bickert, May 1-2, 2025, Transcripts and Exhibits
- Deposition of Arturo Béjar, April 7-10, 2025, Transcripts and Exhibits
- Deposition of Moira Burke, January 28-29, 2025, Transcripts and Exhibits
- Deposition of Deposition of Robert Chen, March 5, 2025, Transcripts and Exhibits
- Deposition of Justin Cheng, March 13 and April 1, 2025, Transcripts and Exhibits
- Deposition of Nick Clegg, March 20-21, 2025, Transcripts and Exhibits
- Deposition of Liza Crenshaw, March 5, 2024, Transcripts and Exhibits
- Deposition of Liza Crenshaw, July 16, 2025, Transcripts and Exhibits
- Deposition of Tom Cunningham, March 7, 2025, Transcripts and Exhibits
- Deposition of Antigone Davis, March 4-5, 2025, Transcripts and Exhibits
- Deposition of Elena Davis, March 5-6, 2025, Transcripts and Exhibits
- Deposition of Pavni Diwanji, March 3, 2025, Transcripts and Exhibits
- Deposition of Paul Alexander Dow, November 7-8, 2025, Transcripts and Exhibits
- Deposition of Margaret Gould Stewart, October 21, 2025, Transcripts and Exhibits
- Deposition of Wendy Gross, January 28, 2025, Transcripts and Exhibits
- Deposition of Jennifer Guadagno, November 14, 2024, Transcripts and Exhibits
- Deposition of Kristin Hendrix, January 22-23, 2025, Transcripts and Exhibits
- Deposition of Vaishnavi Jayakumar, January 30-31, 2025, Transcripts and Exhibits
- Deposition of Shayli Jimenez, February 11-12, 2025, Transcripts and Exhibits
- Deposition of Kang-Xing Jin, October 24-25, 2025, Transcripts and Exhibits

- Deposition of Darius Kilstein, December 17-18, 2024, Transcripts and Exhibits
- Deposition of Allison Lee, February 6, 2025, Transcripts and Exhibits
- Deposition of Susan Li, March 10, 2025, Transcripts and Exhibits
- Deposition of Shilpa Mody, March 14, 2025, Transcripts and Exhibits
- Deposition of Adam Mosseri, March 17-18, 2025, Transcripts and Exhibits
- Deposition of Karina Newton, February 27-28, 2025, Transcripts and Exhibits
- Deposition of Sayed Otaru, June 9, 2025, Transcripts and Exhibits
- Deposition of Pratiti Raychoudhury, December 12-13, 2024, Transcripts and Exhibits
- Deposition of Guy Rosen, February 19-20, 2025, Transcripts and Exhibits
- Deposition of Miki Rothschild, January 21-22, 2025, Transcripts and Exhibits
- Deposition of Alexander Schultz, February 27-28, 2025, Transcripts and Exhibits
- Deposition of Robert Sherman, April 30, 2025, Transcripts and Exhibits
- Deposition of Charles Sismondo, October 16, 2024, Transcripts and Exhibits
- Deposition of George Volichenko, December 16, 2024, Transcripts and Exhibits
- Deposition of Mark Zuckerberg, March 27-28, 2025, Transcripts and Exhibits
- Letter from Meta Defendants dated December 20, 2024, regarding META3047MDL_VOL115
- Letter from Meta Defendants dated January 30, 2025, regarding SEM Campaigns and META3047MDL_VOL150
- Letter from Meta Defendants dated January 30, 2025, regarding Youth Posts and META3047MDL_VOL150
- Letter from Meta Defendants dated January 30, 2025, regarding New User Accounts and META3047MDL_VOL150
- Letter from Meta Defendants dated January 30, 2025, regarding Top 500 Accounts and META3047MDL_VOL150
- Letter from Meta Defendants dated February 12, 2025, regarding META3047MDL_RVOL115
- Letter from Meta Defendants dated February 28, 2025, regarding MDL State Attorneys General Request for Production No. 163 and META3047MDL_VOL_173
- Letter from Meta Defendants dated March 5, 2025, regarding MDL State Attorneys General Request for Production No. 162 Production and META3047MDL_VOL176
- Letter from Meta Defendants dated April 4, 2025, regarding META3047MDL_VOL215
- Letter from Meta Defendants dated April 17, 2025, regarding META3047MDL_VOL225
- Letter from Meta Defendants dated July 17, 2025, regarding META3047MDL-VOL250
- Letter from Meta Defendants dated November 5, 2025, regarding META3047MDL_VOL077

Academic Articles and Books

- 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

- Ajzen, I. (1991). "The theory of planned behavior." *Organizational Behavior and Human Decision Processes*, 50(2): 179-211
- Ajzen, I. (2012). "The theory of planned behavior." *Handbook of Theories of Social Psychology*. SAGE.
- Alter, A. L. (2013). "The benefits of cognitive disfluency," *Current Directions in Psychological Science*, 22: 437-442
- Alter, A. L. (2013). *Drunk Tank Pink: And Other Unexpected Forces that Shape How We Think, Feel, and Behave*. Penguin Publishing Group
- Alter, A. L. (2017). *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked*. Penguin Press: New York
- Alter, A. L. (2023). *Anatomy of a Breakthrough: How to Get Unstuck When it Matters Most*. Simon & Schuster: New York
- Alter, A. L., & Kwan, V. S. (2009). "Cultural sharing in a global village: Evidence for extracultural cognition in European Americans." *Journal of Personality and Social Psychology*, 96(4): 742-760
- Alter, A. L. & Oppenheimer, D. M. (2008). "Effects of fluency on psychological distance and mental construal (or why New York is a large city, but New York is a civilized jungle)," *Psychological Science*, 19:161-167
- Alter, A. L., & Oppenheimer, D. M. (2008), "Easy on the mind, easy on the wallet: The roles of familiarity and processing fluency in valuation judgments," *Psychonomic Bulletin and Review*, 15(5):985-990
- Alter, A. L., & Oppenheimer, D. M. (2009). "Uniting the tribes of fluency to form a metacognitive nation," *Personality and Social Psychology Review*, 13: 219-235
- Alter, A. L., Aronson, J., Darley, J. M., Rodriguez, C., & Ruble, D. N. (2010). "Rising to the threat: Reducing stereotype threat by reframing the threat as a challenge." *Journal of Experimental Social Psychology*, 46: 166-161
- Alter, A. L., Kernochan, J., & Darley, J. M. (2007). "Morality influences how people apply the ignorance of the law defense." *Law and Society Review*, 41: 819-864
- Alter, A. L., Kernochan, J., & Darley, J. M. (2007). "Transgression wrongfulness outweighs its harmfulness as a determinant of sentence severity." *Law and Human Behavior*, 31: 319-335
- Alter, A. L., Oppenheimer, D. M., Epley, N., & Eyre, R. N. (2007). "Overcoming intuition: Metacognitive difficulty activates analytic reasoning," *Journal of Experimental Psychology: General*, 136: 569-576.

- Alter, A.L. & Oppenheimer, D. M. (2009). "Suppressing secrecy through metacognitive ease: Cognitive fluency encourages self-disclosure," *Psychological Science*, 20: 1414-1420

- Altikulac, Bos, Foulkes, Crone, van Hoom J. (2019) "Age and Gender Effects in Sensitivity to Social Rewards in Adolescents and Young Adults" Frontiers in Behavioral *Neuroscience*, 13:171

- Audrezet, A., Kerviler, G., & Moulard, J. (2018). "Authenticity under threat: When social media influencers need to go beyond self-presentation." *Journal of Business Research,* 117

- Balafoutas, L., & Kerschbamer, R. (2020). "Credence goods in the literature: What the past fifteen years have taught us about fraud, incentives, and the role of institutions." *Journal of Behavioral and Experimental Finance*, 26

- Bandura, A. (1977). *Social Learning Theory*. Prentice-Hall: Englewood Cliffs, NJ.

- Belch, M. A., & Willis, L. A. (2002). "Family decision at the turn of the century: Has the changing structure of households impacted the family decision-making process?" *Journal of Consumer Behavior*, 2(2): 111-124

- Belleflamme, P., & Peitz, M. (2018), "Platforms and network effects." In *Handbook of game theory and industrial organization*, volume II, pp. 286-317, Edward Elgar Publishing

- Benoit, W. L. (2015). *Accounts, Excuses, and Apologies, Third Edition: Image Repair Theory Extended*. State University of New York Press

- Bero, L. A. (2005). "Tobacco industry manipulation of research." *Public Health Reports*, 120(2): 200-2008.

- Biermann, J., Horton, J. J., & Walter, J. (2022). "Algorithmic advice as a credence good." *ZEW-Centre for European Economic Research Discussion Paper*, (22-071)

- Boyd, Danah, Hargittai, E., Schultz, J., & Palfrey, J. (2011). "Why parents help their children lie to Facebook about age: Unintended consequences of the Children's Online Privacy Protection Act." *First Monday*, 16(11)

- Boyd, D.M. and Ellison, N.B. (2007). "Social Network Sites: Definition, History, and Scholarship." *Journal of Computer-Mediated Communication*, 13: 210-230. https://doi.org/10.1111/j.1083-6101.2007.00393

- Bransford, J. D., & Franks, J. J. (1971). "The abstraction of linguistic ideas." *Cognitive Psychology*, 2(4): 331–350

- Brechwald, W.A, Prinstein, M. J. (2011). "Beyond homophily: A decade of advances in understanding peer influence processes." *Journal of Research on Adolescence*, 21:166-179

- Brender, J. (2006). "Framework for Meta-Assessment of Assessment Studies," in *Handbook of Evaluation Methods for Health Informatics*

- Brooks, G., Drenten, J., & Piskorski, M. J. (2021). "Influencer Celebrification: How Social Media Influencers Acquire Celebrity Capital." *Journal of Advertising*, 50(5): 528–547

- Brown, B. B., & Larson, J. (2009). "Peer relationships in adolescence". In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology: Contextual Influences on Adolescent Development* (3rd ed., pp. 74–103). John Wiley & Sons, Inc: Hoboken, NJ

- Bullock, O. M., Colón Amill, D., Shulman, H. C., & Dixon, G. N. (2019). "Jargon as a barrier to effective science communication: Evidence from metacognition." *Public Understanding of Science*, 28(7): 845-853

- Burrow, A. L., & Rainone, N. (2017). "How many likes did I get? Purpose moderates links between positive social media feedback and self-esteem." *Journal of Experimental Social Psychology*, 69:232–236

- Campbell, D. T., & Fiske, D. W. (1959), "Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix." *Psychological Bulletin* 56(2): 81-105.

- Campbell, D. T., & Stanley, J. C. (1963). *Experimental and Quasi-Experimental Designs for Research*. Boston: Houghton Mifflin

- Chaiken, S. (1980). "Heuristic versus systematic information processing and the use of source versus message cues in persuasion." *Journal of Personality and Social Psychology*, 39(5): 752–766

- Cheng, C., Lau, Y. C., Chan, L., & Luk, J. W. (2021). "Prevalence of social media addiction across 32 nations: Meta-analysis with subgroup analysis of classification schemes and cultural values." *Addictive Behaviors*, 117: 1-8

- Chen-Sankey, J., Unger, J. B., Bansal-Travers, M., Niederdeppe, J., Bernat, D., Choi, K., & Villanti, A. C. (2019). "E-cigarette marketing exposure and subsequent experimentation among youth and young adults." *Pediatrics*, 144:e20191119

- Cialdini, R. B., & Goldstein, N. J. (2004). "Social Influence: Compliance and Conformity." *Annual Review of Psychology*, 55: 591-621

- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). "A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places." *Journal of Personality and Social Psychology*, 58(6): 1015–1026

- Cialdini, R.B. (1993), *Influence: Science and practice* (3rd ed.), HarperCollins
- Clarkson, M.B.E. (1995). "A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance." *The Academy of Management Review*, 20(1): 92–117
- Clemons, E. K. (2009). "The complex problem of monetizing virtual electronic social networks." *Decision Support Systems*, 48:46-56
- Colston et al., "Anti-Smoking Media Campaigns and Disparities in Smoking Cessation in the United States, 2001-2015," *American Journal of Health Promotion*, 35: 658–68
- Cooley, C. H. (1902). *Human Nature and the Social Order*. Charles Scribner's Sons: New York, NY
- Cox, E., Fellmeth, R. & Schultz, J. (1969). *The Consumer and the Federal Trade Commission*, reprinted in 115 Cong. REC. E370-99 (daily ed. Jan. 22, 1969)
- Crone, E.A., & Konijn, E.A. (2018). "Media use and brain development during adolescence." *Nature Communications*, 9:588
- Darby, M. R., & Karni, E. (1973). "Free Competition and the Optimal Amount of Fraud." *The Journal of Law & Economics*, 16(1), 67–88
- da Silva Pinho, A., Céspedes Izquierdo, V., Lindström, B., & van den Bos, W. (2024). "Youths' sensitivity to social media feedback: A computational account." *Science Advances*, 10:eadp8775
- Davis, H. L. (1976). "Decision Making within the Household." *Journal of Consumer Research*, 2(4), 241–260
- Denham, S. A. (1998). *Emotional Development in Young Children*. Guilford Press: New York, NY
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods*. New York: McGraw-Hill
- Dulleck, U., & Kerschbamer, R. (2006). "On doctors, mechanics, and computer specialists: The economics of credence goods." *Journal of Economic Literature*: 44(1) 5-42
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.
- East, P. (2009). "Adolescents' relationships with siblings." In R. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology* (3rd ed., Vol. 2, pp. 43–73). Wiley, New York, NY

- Faisal-Cury, A. et al. (2022) "Depression underdiagnosis: Prevalence and associated factors. A population-based study." *Journal of Psychiatric Research*, 151: 157-165
- Fazio, L. K., Brashier, N. M., Payne, B. K., & Marsh, E. J. (2015). "Knowledge does not protect against illusory truth," Journal of Experimental Psychology: General, 144: 993-1002
- Ferster, C. B., & Skinner, B. F. (1957). *Schedules of reinforcement*. Appleton-Century-Crofts: New York, NY
- Finders, M. J. (1997). *Just Girls: Hidden Literacies and Life in Junior High*. Teachers College Press: New York, NY
- Fiske, A. P. (1992). "The four elementary forms of sociality: Framework for a unified theory of social relations." *Psychological Review*, 99(4): 689–723
- Fiske, A.P. (1991). *Structures of Social Life: The Four Elementary Forms of Human Relations*, Free Press
- Froehlich, R., & Rüdiger, B. (2005). "Framing Political Public Relations: Measuring Success of Political Communication Strategies in Germany," *Public Relations Review*, 32: 18–25
- Fujita, K., Henderson, M.D., Eng, J., Trope, Y., & Liberman, N. (2006). "Spatial distance and mental construal of social events." *Psychological Science*, 17: 278–282
- Garfinkel, A. (1983). "A pragmatic approach to truth." In R. J. Harris, (Ed.) *Information processing research in advertising* (pp. 175-193). Hillsdale, NJ: Lawrence Erlbaum
- Goldstein, N. J., Cialdini, R. B., & Griskevicius, V. (2008). "A room with a viewpoint: Using social norms to motivate environmental conservation in hotels." *Journal of Consumer Research*, 35(3): 472–482
- Granata, G., & Scozzese, G. (2019). "The Actions of e-Branding and Content Marketing to Improve Consumer Relationships." *European Scientific Journal*
- Grant, J. E., Potenza, M. N., Weinstein, A., & Gorelick, D. A. (2010). "Introduction to behavioral addictions." *The American Journal of Drug and Alcohol Abuse*, 36(5): 233-241
- Greenwald, A. G., Brock, T. C., & Ostrom, T. M. (1968), *Psychological foundations of attitudes* (Eds.), Academic Press
- Grice, H. P. (1989). *Studies in the way of words*. Cambridge, MA: Harvard University Press

- Gupta, R., et al. (2024). "The opioid industry's use of scientific evidence to advance claims about prescription opioid safety and effectiveness." *Health Affairs Scholar*, 2(10): 1-9

- Harness, J., Fitzgerald, K., Sullivan, H., & Selkie, E. (2022). "Youth Insight About Social Media Effects on Well/Ill-Being and Self-Modulating Efforts." *Journal of Adolescent Health*, 71(3): 324-333

- Harter, S. (2012). *The Construction of the Self: Developmental and Sociocultural Foundations*. Guilford Press: New York, NY

- Hassan, A., & Barber, S. J. (2021). "The effects of repetition frequency on the illusory truth effect," *Cognitive Research: Principles and Implications*, 6: 1-12

- Hawes, T., Zimmer-Gembeck, M.J., and Campbell, S.M. (2019) "Unique associations of social media use and online appearance preoccupation with depression, anxiety, and appearance rejection sensitivity." *Body Image*, 33: 66-76

- Henderson, M.D., Fujita, K., Trope, Y., & Liberman, N. (2006). "Transcending the 'here': The effect of spatial distance on social judgment." *Journal of Personality and Social Psychology*, 91: 845–856.

- Hermalin, B. (2014). "Chapter 6. Uncertainty and Imperfect Information in Markets." *Handbook of the Economics of Risk and Uncertainty*.

- Hovland, C. I. et al, (1953). *Communication and persuasion: psychological studies of opinion change*. New Haven: Yale University Press.

- Huang, J., Duan, Z, Kwok, J., Binns, S., Vera, L. E., Kim, Y., Szczypka, G., & Emery, S. L. (2019). "Vaping versus Juuling: how the extraordinary growth and marketing of JUUL transformed the US retail e-cigarette market." *Tobacco Control*, 28:146-151

- Johnson, E. J., & Goldstein, D. (2003). "Do Defaults Save Lives?" *Science*, 302: 1338–1339

- Johnston, W. J., & Bonoma, T. V. (1981). "The Buying Center: Structure and Interaction Patterns." *Journal of Marketing*, 45(3): 143–156

- Jorm, A.F. (2000) "Mental health literacy: Public knowledge and beliefs about mental disorders." *British Journal of Psychiatry*: 177(5): 396-401

- Kahneman, D. (2011), *Thinking, Fast and Slow*, Farrar, Straus and Giroux, Part II

- Kapferer, J. N. (2008). *The New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term.* Kogan Page Publishers

- Kaplan, A. M., & Haenlein, M. (2010). "Users of the world, unite! The challenges and opportunities of social media." *Business Horizons*, 53:59-68
- Kappes, H., Alter, A. L., Edwards, G., & Berri, D. (2022). "Difficult training improves team performance: An empirical case study of US college basketball." *Behavioural Public Policy*, 6: 554-577
- Kay, S., Mulcahy, R., & Parkinson, J. (2020). "When less is more: the impact of macro and micro social media influencers' disclosure." *Journal of Marketing Management*. 36:1-31
- Keller, K.L. (1993). "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity." *Journal of Marketing*, 57(1): 1-22
- Keller, K.L., (2013). *Strategic Brand Management: Building, Measuring, and Managing Brand Equity, 4th ed.* (Global Edition), Pearson
- Kelley, H. H. (1950). "The warm–cold variable in first impressions of persons." *Journal of Personality*, 18(4): 431–439
- Killen, M., & Coplan, R. J. (Eds.). (2011). *Social Development in Childhood and Adolescence: A Contemporary Reader*. Wiley-Blackwell: Hoboken, NJ
- Kintsch, W. (1988). "The role of knowledge in discourse comprehension: A construction–integration model." *Psychological Review*, 95(2): 163–182
- Knoll, L. J., Leung, J. T., Foulkes, L., & Blakemore, S. J. (2017). "Age-related differences in social influence on risk perception depend on the direction of influence." *Journal of Adolescence*, 60:53-63
- Knoll, L. J., Magis-Weinberg, L., Speekenbrink, M., & Blakemore, S.-J. (2015). "Social Influence on Risk Perception During Adolescence." *Psychological Science*, 26(5):583-592
- Kotler, P. H. (1991). *Marketing Management: Analysis, Planning, and Control, 8th ed.* Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Kowal, A. & Blinn-Pike, L. (2004). "Sibling influences on adolescents' attitudes toward safe sex practices." *Family Relations*, 53:377–384
- Kramer R. M., & Neale, B. A. (1998). "Under the influence." In R. M. Kramer & M. A. Neale (Eds.), *Power and influence in organizations*: 145-180
- Kramer, R. M., (2007). "Self-Defeating Leader Behavior," *The science of social influence: Advances and future progress*: Psychology Press 297-319

- Kretchmar, J. (2024). *Social Learning Theory: EBSCO*. EBSCO Information Services, Inc.

- Kruger, J., Wirtz, D., Van Boven, L., & Altermatt, T. W. (2004). "The effort heuristic." *Journal of Experimental Social Psychology*, 40(1): 91-98

- Lacassagne, D., Béna, J., & Corneille, O. (2022). "Is Earth a perfect square? Repetition increases the perceived truth of highly implausible statements," *Cognition*, 223

- Laham, S., Alter, A. L., & Goodwin, G. P. (2009). "Easy on the mind, easy on the wrongdoer: Unexpectedly fluent violations are deemed less morally wrong." *Cognition*, 112: 462-466

- Laham, S., Koval, P., & Alter, A. L. (2012). "The name pronunciation effect: Why people like Mr. Smith more than Mr. Colquhoun," *Journal of Experimental Social Psychology*, 4: 16-21

- Lassoued, R., & Hobbs, J. E. (2015). "Consumer confidence in credence attributes: The role of brand trust." *Food Policy*, 52: 99-107

- Laursen, B., & Veenstra, R. (2021). "Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research." *Journal of Research on Adolescence*, 31:889–907

- Leonel, R., Lee, J. H., & Perrault, E. (2025). "Of Shepherds and Sheep: Who Sets the Agenda for Firms' Attention to Social Issues?" *Corporate Social Responsibility and Environmental Management* 32: 647–60

- Lerner, R. M. (Ed.). (2015). *Handbook of Child Psychology and Developmental Science (7th ed.)*. John Wiley & Sons Inc: Hoboken, NJ

- Lerner, R. M., & Steinberg, L. (Eds.). (2009). *Handbook of Adolescent Psychology (3rd ed.)*. John Wiley & Sons Inc: Hoboken, NJ

- Levine, R. (2003). *The Power of persuasion: How we're bought and sold*. New York: Free Press

- Levine, T. R. (2014), "Truth-Default Theory: A theory of human deception and deception detection," *Journal of Language and Social Psychology*, 33(4), 378–392

- Liberman, N., Trope, Y., & Stephan, E. (2007). "Psychological distance." In E.T. Higgins & A.W. Kruglanski (Eds.), *Social psychology: A handbook of basic principles* (2nd ed., Vol. 2, pp. 353–383). New York: Guilford Press

- Lick, D. J., Alter, A. L., & Freeman, J. B. (2018). "Superior pattern detectors efficiently learn, activate, apply, and update social stereotypes." *Journal of Experimental Psychology: General*, 147: 209- 227

- Liu, M. et al. (2022). "Time Spent on Social Media and Risk of Depression in Adolescents: A Dose-Response Meta-Analysis." *International Journal of Environmental Research and Public Health*, 19(9): 51-64

- Livingstone, S. (2002). Young people and new media: Childhood and the changing media environment. SAGE Publications: London, UK

- Loken, B. and John, D.R. (2010) "When Do Bad Things Happen to Good Brands? Understanding Internal and External Sources of Brand Dilution." *Brands and Brand Management: Contemporary Research Perspectives*: 233–270

- Low, S., Snyder, J., & Shortt, J. W. (2012). "The drift toward problem behavior during the transition to adolescence: The contributions of youth disclosure, parenting, and older siblings." *Journal of Research on Adolescence*, 22:65–79

- McArthur, B.A., Madigan, S., & Korczak, D. J. (2021), "Tweens are not teens: the problem of amalgamating broad age groups when making pandemic recommendations," *Canadian Journal of Public Health*, 112:984-987

- McHale, S. M., Updegraff, K. A., & Whiteman, S. D. (2012). "Sibling relationships and influences in childhood and adolescence." *Journal of Marriage and Family*, 74: 913-930

- McKenzie, C. R. M., Liersch, M. J., & Finkelstein, S. R. (2006). "Recommendations implicit in policy defaults," *Psychological Science*, 17: 414–42

- Nabavi, R.T. (2012) "Bandura's Social Learning Theory & Social Cognitive Learning Theory." *Journal of Personality and Social Psychology*, 1:589

- Nelson, P. (1970). "Information and Consumer Behavior." *Journal of Political Economy*, 78(2), 311–329

- Nie, W., Medina-Lara, A., Williams, H., & Smith, R. (2021). "Do Health, Environmental and Ethical Concerns Affect Purchasing Behavior? A Meta-Analysis and Narrative Review." *Social Sciences*, 10: 1-24

- O'Keefe, D. J. (2002). *Persuasion: Theory and research*. Sage Publications

- Oh, B. (2019). "Direct-to-consumer genetic testing: advantages and pitfalls." *Genomics & informatics*, 17(3)

- Oppenheimer, D. M., & Alter, A. L. (2014). "The search for moderators in disfluency research," *Applied Cognitive Psychology*, 28: 502-504

- Patton, M.Q. (1999). "Enhancing the quality and credibility of qualitative analysis." *Health Sciences Research*, 34: 1189–1208

- Pennycook, G., Cannon, T. D., & Rand, D. G. (2018). "Prior exposure increases perceived accuracy of fake news," *Journal of Experimental Psychology: General*, 147: 1865-1880

- Petty, R. E., Cacioppo, J. T., Petty, R. E., & Cacioppo, J. T. (1986). "The elaboration likelihood model of persuasion," *Advances in Experimental Social Psychology*: 1-24

- Petty, R.E. & Briñol, P., (2012), "The Elaboration Likelihood Model," *Handbook of Theories of Social Psychology*. SAGE

- Pratkanis, A. R. (2007). "Social influence analysis: An index of tactics." In A. R. Pratkanis (Ed.), *The science of social influence: Advances and future progress* (pp. 17–82).

- Pratkanis, A., & Aronson, E. (2001). *The Age of propaganda: The Everyday use and abuse of persuasion*. New York: W. B. Freeman

- Rai, T. S., & Fiske, A. P. (2011). "Moral psychology is relationship regulation: moral motives for unity, hierarchy, equality, and proportionality." *Psychological review*, 118(1): 57

- Rides, G., Pote, H., & Watling, D. (2024). "Adolescents' perceptions of using likes, comments, and other reactions—A qualitative investigation." *British Journal of Developmental Psychology*, 00:1–16

- Sachs, J. S. (1967). "Recognition memory for syntactic and semantic aspects of connected discourse." *Perception & Psychophysics*, 2(9): 437–442

- Saloojee, Y., & Dagli, E. (2000). "Tobacco industry tactics for resisting public policy on health." *Bulletin of the World Health Organization*, 78: 902-910

- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston: Houghton Mifflin.

- Sharma, E., Mazar, N., Alter, A. L., & Ariely, D. (2014). "Financial Deprivation Selectively Shifts Moral Standards and Compromises Moral Decisions." *Organizational Behavior and Human Decision Processes*, 123: 90-100

- Simon, H. A. (1971). "Designing organizations for an information rich world." In M. Greenberger, *Computers, communications, and the public interest*

- Slomkowski C, Rende R, Conger KJ, Simons RL, Conger RD. (2001) "Sisters, brothers, and delinquency: evaluating social influence during early and middle adolescence." *Child Development*, 72(1):271-83

- Smith, D., Leonis, T., & Anandavalli, S. (2021). "Belonging and loneliness in cyberspace: Impacts of social media on adolescents' well-being." *Australian Journal of Psychology*, 73:12–23

- Sørenssen, I.K., (2018), "Disney's High School Musical and the construction of the tween audience." *Global Studies of Childhood*, 8(3):213-224

- Staddon, J. E. R., & Cerutti, D. T. (2003). "Operant conditioning." *Annual Review of Psychology*, 54:115–144

- Steckel, J.H., Klein, R., and Schussheim, S., (2006), "Dilution through the Looking Glass: A Marketing Look at the Trademark Dilution Revision Act of 2005," *The Trademark Reporter*, 96(3): 616-638

- Steinberg, L. (2020). *Adolescence (12th ed.)*. McGraw-Hill Education: New York, NY

- Supran, G. and Oreskes, N. (2017) "Addendum to 'Assessing ExxonMobil's Climate Change Communications (1977–2014),' Supran and Oreskes (2017 Environ. Res. Lett. 12 084019)," *Environmental Research Letters* 15 (11) (November 1, 2020): 119401, https://doi.org/10.1088/1748-9326/ab89d5

- Swann, W.B., Jr. (1983). "Self-verification: Bringing social reality into harmony with the self." In J. Suls & A. G. Greenwald (Eds.), *Social psychological perspectives on the self* (Vol. 2, pp. 33–66). Lawrence Erlbaum Associates: NY

- Timeo, S., Riva, P., & Paladino, M. P. (2020). "Being liked or not being liked: A study on social-media exclusion in a preadolescent population." *Journal of Adolescence*, 80:173–181

- Tucker, C. J., Updegraff, K. A., McHale, S. M., & Crouter, A. C. (1999). "Older siblings as socializers of younger siblings' empathy." *Journal of Early Adolescence*, 19:176-198

- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the Social Group: A Self-Categorization Theory*. Basil Blackwell: Oxford, UK

- Tuten, T. L., & Solomon, M. R. (2021). *Social Media Marketing*. (4th ed.) Sage Publications: London, UK

- Tversky, A., & Kahneman, D. (1974). "Judgment under uncertainty: Heuristics and biases." *Science*, 185(4157), 1124–1131

- Tversky, A., & Kahneman, D. (1981). "The framing of decisions and the psychology of choice." *Science*, 211(4481): 453–458

- Twenge, J. M., Joiner, T. E., Rogers, M. L., & Martin, G. N. (2018). "Corrigendum: Increases in depressive symptoms, suicide-related outcomes, and suicide rates among

U.S. adolescents after 2010 and links to increased new media screen time." *Clinical Psychological Science*, 6:3-17

- Udry, J., & Barber, S. J. (2023). "The illusory truth effect: A review of how repetition increases belief in misinformation*," Current Opinion in Psychology*, 56
- Urala, N., A. Arvola, and L. Lähteenmäki (2003), "Strength of health-related claims and their perceived advantage." *International Journal of Food Science and Technology* 38: 815–826
- Van Den Eijnden, R. J., Lemmens, J. S., & Valkenburg, P. M. (2016). "The social media disorder scale." *Computers in Human Behavior*, 61: 478-487
- van Hulst, B.M., de Zeeuw, P., Lupas, K., Bos, D.J., Neggers, S.F.W., & Durston, S. (2015). "Reward Anticipation in Ventral Striatum and Individual Sensitivity to Reward: A Pilot Study of a Child-Friendly fMRI Task." *PLoS ONE*, 10(11): e0142413
- Watson, L., Lavack, A. M., Rudin-Brown, C., Burns, P., & Mintz, J. H. (2010). "Message content in Canadian automotive advertising: a role for regulation?" *Canadian Public Policy*, 36(Supplement 1): S49-S67
- Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. (1966). *Unobtrusive measures: Nonreactive research in the social sciences*. Chicago: Rand McNally
- Webster, F. E., & Wind, Y. (1972). "A General Model for Understanding Organizational Buying Behavior." *Journal of Marketing*, 36(2): 12–19
- Whiteman, S. D., Jensen, A. C., Mustillo, S. A., & Maggs, J. L. (2016). "Understanding sibling influence on adolescents' alcohol use: Social and cognitive pathways." *Addictive Behaviors*, 53:1-6
- Whiteman, S. D., Zeiders, K. H., Killoren, S. E., Rodriguez, S. A., & Updegraff, K. A. (2014). "Sibling influence on Mexican-origin adolescents' deviant and sexual risk behaviors: The role of sibling modeling." *Journal of Adolescent Health*, 54:587-592
- Yau, J.C. and Reich, S.M. (2019), "'It's just a lot of work': Adolescents' self-presentation norms and practices on Facebook and Instagram." *Journal of Research on Adolescence*, 29:196-209
- Zajonc, R. B. (1968). "The attitudinal effects of mere exposure." *Journal of Personality and Social Psychology*, *Monograph Supplement*, 9: 1-27
- Zimbardo, P. G., Ebbensen, E. B., & Maslach, C. (1977), *Influencing attitudes and changing behavior: An introduction to method, theory, and applications of social control and personal power* (2d ed.), Addison Wesley

- Zou, Z. et al. (2017), "Definition of substance and non-substance addiction," *Advances in Experimental Medicine and Biology*, 1010:21-41

Websites and Social Media Posts

- https://9to5google.com/2023/09/01/instagram-tablet-foldable-layout-android/
- https://www2.census.gov/programs-surveys/popest/tables/2020-2023/national/asrh/nc-est2023-syasexn.xlsx
- https://www2.census.gov/programs-surveys/popest/technical-documentation/file-layouts/2010-2019/nc-est2019-agesex-res.csv
- https://www.abc10.com/article/news/instagram-rolls-out-snapchat-style-face-filters/103-440209245
- https://abcnews.go.com/US/gen-alpha-takes-skin-care-social-media-scene/story?id=107225927
- https://about.fb.com/news/2016/11/game-on-you-can-now-play-games-on-messenger/
- https://about.fb.com/news/2017/12/introducing-messenger-kids-a-new-app-for-families-to-connect/
- https://about.fb.com/news/2020/09/the-evolution-of-facebook-watch/
- https://about.fb.com/news/2021/09/launching-reels-on-facebook-us/?locale=en_US
- https://about.fb.com/news/2018/05/measuring-our-efforts/
- https://about.fb.com/news/2018/07/working-to-keep-facebook-safe/
- https://about.fb.com/news/2018/08/manage-your-time/
- https://about.fb.com/news/2019/05/enforcing-our-community-standards-3
- https://about.fb.com/news/2019/05/measuring-prevalence
- https://about.fb.com/news/2019/11/community-standards-enforcement-report-nov-2019/
- https://about.fb.com/news/2019/11/community-standards-enforcement-report-nov-2019/#CSER-metrics
- https://about.fb.com/news/2021/02/community-standards-enforcement-report-q4-2020/
- https://about.fb.com/news/2021/07/age-verification/
- https://about.fb.com/news/2021/09/our-progress-addressing-challenges-and-innovating-responsibly
- https://about.fb.com/news/2021/09/research-teen-well-being-and-instagram/
- https://about.fb.com/news/2021/10/facebook-company-is-now-meta/
- https://about.fb.com/news/2021/11/community-standards-enforcement-report-q3-2021/
- https://about.fb.com/news/2021/11/wsj-report-ignores-our-approach-to-well-being-research/
- https://about.fb.com/news/2021/12/new-teen-safety-tools-on-instagram/
- https://about.fb.com/news/2022/10/new-ways-to-customize-your-facebook-feed
- https://about.fb.com/news/2023/09/introducing-ai-powered-assistants-characters-and-creative-tools/
- https://about.fb.com/news/2022/08/community-standards-enforcement-report-q2-2022/
- https://about.fb.com/news/2023/06/parental-supervision-and-teen-time-management-on-metas-apps/

- https://about.fb.com/news/2024/04/supporting-parents-with-screen-smart-program/
- https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-1.pdf
- https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-2.pdf
- https://about.fb.com/wp-content/uploads/2021/11/Community-Standards-Enforcement-Report-Press-Call-Transcript-11.09.21.pdf
- https://about.instagram.com/blog/announcements/continuing-to-make-instagram-safer-for-the-youngest-members-of-our-community
- https://about.instagram.com/blog/announcements/curate-instagram-stories-for-close-friends-only
- https://about.instagram.com/blog/announcements/instagram-ranking-explained
- https://about.instagram.com/blog/announcements/introducing-face-filters-and-more-on-instagram
- https://about.instagram.com/blog/announcements/giving-people-more-control
- https://about.instagram.com/blog/announcements/introducing-instagram-reels-announcement
- https://about.instagram.com/blog/announcements/raising-the-standard-for-protecting-teens-and-supporting-parents-online
- https://about.instagram.com/features/stories
- https://about.instagram.com/safety
- https://about.instagram.com/blog/announcements/introducing-instagram-stories
- https://about.instagram.com/blog/announcements/introducing-new-dm-features
- https://about.instagram.com/blog/announcements/new-dm-improvements
- https://about.instagram.com/blog/announcements/new-instagram-dm-features-update/
- https://about.instagram.com/blog/announcements/new-messaging-features-now-available-on-instagram-and-messenger
- https://about.instagram.com/blog/announcements/new-ways-to-control-what-you-see-on-instagram
- https://about.instagram.com/blog/announcements/pausing-instagram-kids
- https://about.instagram.com/features/direct
- https://about.instagram.com/features/search-and-explore
- https://about.meta.com/actions/safety
- https://about.meta.com/company-info
- https://about.meta.com/media-gallery/executives/mark-zuckerberg/
- https://about.meta.com/media-gallery/executives/nick-clegg/
- https://about.meta.com/technologies/facebook-app/
- https://www.academia.edu/1976557/Tweens_as_a_commercial_target_group_children_and_Disney_filling_the_category
- https://www.aljazeera.com/economy/2020/11/17/facebook-twitter-heads-testify-before-us-senate-live
- https://www.ama.org/topics/brand-and-branding/
- https://www.apa.org/news/apa/2022/social-media-children-teens

- https://www.apple.com/ca/newsroom/2007/01/09Apple-Reinvents-the-Phone-with-iPhone/
- https://apps.apple.com/ca/app/messenger-kids/id1285713171
- https://apps.apple.com/us/app/messenger-kids/id1285713171
- https://archive.nytimes.com/dealbook.nytimes.com/2012/04/09/facebook-buys-instagram-for-1-billion/
- https://archive.org/details/KNTV_20211207_150000_Today/start/1860/end/1920
- https://archive.org/details/KPIX_20190626_140000_CBS_This_Morning/start/1080/end/1140
- https://archive.org/details/KTVU_20210930_190000_KTVU_FOX_2_News_at_Noon/start/420/end/480
- https://associationheadquarters.com/blog/facebook-groups-associations-benefits-challenges-best-practices
- https://www.axios.com/2017/12/15/sean-parker-facebook-was-designed-to-exploit-human-vulnerability-1513306782
- https://www.axios.com/2017/12/15/sean-parker-unloads-on-facebook-god-only-knows-what-its-doing-to-our-childrens-brains-1513306792
- https://www.bbc.com/news/business-50152053
- https://www.bbc.com/news/technology-44640959
- https://www.bbc.com/news/technology-68109208
- https://www.bbc.com/news/uk-47160460
- https://www.big3.sg/blog/a-brief-history-of-instagram-and-its-rise-to-popularity
- https://www.bloomberg.com/company/values/tech-at-bloomberg/features/cornell-tech-at-bloomberg-livestream/
- https://www.brandwatch.com/blog/history-of-facebook/
- https://www.brat.tv/
- https://www.businessinsider.com/facebook-launches-ad-campaign-for-live-video-2016-10
- https://www.businessinsider.com/how-teens-use-emojis-to-talk-2013-10
- https://www.buzzfeednews.com/article/ryanmac/facebook-instagram-for-children-under-13
- https://www.buzzfeednews.com/article/ryanmac/facebook-instagram-for-children-under-13
- https://www.cbc.ca/news/canada/sephora-kids-trend-controversy-1.7088691
- https://www.cnet.com/tech/services-and-software/how-instagram-became-the-social-network-for-tweens/
- https://www.cnet.com/tech/services-and-software/instagram-users-are-young-and-facebook-users-are-old/
- https://www.cnn.com/interactive/2019/02/business/facebook-history-timeline/index.html
- https://www.commonsensemedia.org/articles/13-online-challenges-your-kid-already-knows-about
- https://www.commonsensemedia.org/research
- https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-tweens-and-teens

- https://www.commonsensemedia.org/sites/default/files/research/report/2020_zero_to_eight_census_final_web.pdf
- https://www.commonsensemedia.org/sites/default/files/research/report/2025-common-sense-census-web-2.pdf
- https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf
- https://www.commonsensemedia.org/sites/default/files/research/report/census_researchreport.pdf
- https://www.consumerreports.org/media-room/press-releases/2011/05/cr-survey-75-million-facebook-users-are-under-the-age-of-13-violating-the-sites-terms-/
- https://www.c-span.org/program/senate-committee/hearing-on-protecting-children-online/603309
- https://www.cbsnews.com/news/adam-mosseri-instagram-is-seriously-considering-hiding-likes-apps-head-reveals/
- https://www.cbsnews.com/news/facebook-whistleblower-frances-haugen-misinformation-public-60-minutes-2021-10-03/
- https://www.cnbc.com/2021/10/05/zuckerberg-denies-that-facebook-prioritizes-profits-over-user-safety.html
- https://www.cnet.com/tech/services-and-software/facebook-twitter-are-designed-to-be-like-behavioural-cocaine-for-users-insiders/
- https://www.cnn.com/2021/10/03/tech/facebook-whistleblower-60-minutes/index
- https://www.commerce.senate.gov/2021/9/protecting-kids-online-facebook-instagram-and-mental-health-harms
- https://www.commerce.senate.gov/services/files/3FC55DF6-102F-4571-B6B4-01D2D2C6F0D0
- https://www.congress.gov/117/chrg/CHRG-117shrg53125/CHRG-117shrg53125.pdf
- https://www.congress.gov/117/chrg/CHRG-117hhrg46925/CHRG-117hhrg46925.pdf
- https://www.congress.gov/117/meeting/house/111407/
- https://www.congress.gov/117/meeting/house/111407/documents/HHRG-117-IF16-Transcript-20210325.pdf
- https://www.congress.gov/event/117th-congress/house-event/111407
- https://www.congress.gov/event/117th-congress/senate-event/331205/text
- https://www.creativereview.co.uk/just-do-it-slogan/
- https://deadline.com/2023/03/2023-nickelodeons-kids-choice-awards-ratings-1235282177/
- https://edition.cnn.com/2018/11/21/tech/tiktok-app/index.html
- https://engineering.fb.com/2020/12/10/web/how-instagram-suggests-new-content/
- https://en.wikipedia.org/wiki/Facebook_Watch
- https://en.wikipedia.org/wiki/List_of_Facebook_Watch_original_programming
- https://www.eonline.com/news/725692/there-s-a-kimoji-for-every-moment-in-your-life-here-are-the-14-best-ways-to-use-them
- https://www.facebook.com/games/instantgames/category?category=482234206383476
- https://www.facebook.com/gaming/play/1331614800685579
- https://www.facebook.com/gaming/play/1418532198930152
- https://www.facebook.com/gaming/play/2486610861476113

- https://www.facebook.com/gaming/play/294903896714779
- https://www.facebook.com/help/958848942357089
- https://www.facebook.com/help/messenger-app/2561872534065550/?helpref=related_articles
- https://www.facebook.com/help/messenger-app/732544310273905
- https://www.facebook.com/messenger/photos/heres-how-to-access-and-send-facebook-stickers-tap-on-the-smiley-face-icon-which/1454339998019009/
- https://www.facebook.com/business/help/718033381901819?id=208060977200861
- https://www.facebook.com/help/240436879374301
- https://www.facebook.com/help/485502912850153
- https://www.facebook.com/help/1155510281178725
- https://www.facebook.com/help/1155510281178725?helpref=hc_fnav
- https://www.facebook.com/help/1624177224568554
- https://www.facebook.com/help/1640261589632787
- https://www.facebook.com/help/753046815962474
- https://www.facebook.com/help/862926927385914
- https://www.facebook.com/zuck/posts/10106411140260321
- https://www.facebook.com/zuck/posts/10113961365418581
- https://www.facebook.com/@NinjaKidzTV/
- https://www.facebook.com/[redacted]
- https://www.facebook.com/LankyBox/
- https://www.facebook.com/LankyBox/videos/153242360639289?comment_id=240666368399992
- https://www.facebook.com/LankyBox/videos/301708728295431
- https://www.facebook.com/NinjaKidzTV/posts/pfbid023Q284uviokWd5YRZeqohAmphRLkZzBh6cFvPpX9wsabySNAjtLYaCjuXsTqrfPt8l
- https://www.facebook.com/NinjaKidzTV/posts/pfbid0QTKN1LPSMUjZWj6dfdMFPa2uDBpncCC6XhZAWcvGPWcmaNPgMmUSJrDvFzZ3cHdml
- https://www.facebook.com/permalink.php?story_fbid=pfbid0f7Q5KFtidgGdPFXxEMmKzwq7cJK4McHePbVGhndnUs3Wu3VGkvgzwEidKz8wwugal&id=100070967029810&comment_id=137882809274545
- https://www.facebook.com/photo/?fbid=10158854516423580&set=a.378366298579
- https://www.facebook.com/photo/?fbid=724313034661157&set=a.275394276219704
- https://www.facebook.com/profile.php?id=100070967029810
- https://www.facebook.com/reel/1006483657463891
- https://www.facebook.com/reel/1227213338627283
- https://www.facebook.com/reel/2057162784695788
- https://www.facebook.com/reel/643329618449237
- https://www.facebook.com/Roblox
- https://www.facebook.com/Roblox/posts/pfbid02aFeTXGQdqc5QTo2xeKthxVWYpHj2K8scrKjSso9R5VtkSjgtWBXrDh2zQ4TGVjpTl
- https://www.facebook.com/Roblox/posts/pfbid06XCd3ba6F6DzeRj6hoDyRk2WpkfvDmzsL3PmQHVcxKVJaYGYYX4SR66cKL9o6frnl?comment_id=10159181096618580
- https://www.facebook.com/Roblox/videos/3135411450010422/

- https://www.facebook.com/share/p/15WhFCZp7B/
- https://www.facebook.com/share/p/16BoNyVr5H/
- https://www.facebook.com/share/p/16KepV1AcH/
- https://www.facebook.com/share/p/18vE5CimQp/
- https://www.facebook.com/share/p/1BXmbjcyj2/
- https://www.facebook.com/share/r/15z7bWR6za/
- https://www.facebook.com/watch/?v=1940316442787978
- https://www.facebook.com/watch/?v=462473651545032
- https://www.facebook.com/photo.php?fbid=337055341112657&id=100044245816729
- https://www.faegredrinker.com/en/insights/publications/2020/7/in-search-of-the-elusive-reasonable-consumer
- https://www.famousbirthdays.com/people/adley-mcbride.html
- https://www.famousbirthdays.com/people/ashton-myler.html
- https://www.famousbirthdays.com/people/bryton-myler.html
- https://www.famousbirthdays.com/people/[redacted]html
- https://www.famousbirthdays.com/people/[redacted]html
- https://www.famousbirthdays.com/people/heaven-king.html
- https://www.famousbirthdays.com/people/paxton-myler.html
- https://www.famousbirthdays.com/people/payton-myler.html
- https://www.famousbirthdays.com/people/presley-reese.html
- https://www.famousbirthdays.com/people/salish-matter.html
- https://www.famousbirthdays.com/webgroups/lankybox.html
- https://www.forbes.com/sites/kathleenchaykowski/2017/06/22/mark-zuckerberg-gives-facebook-a-new-mission/
- https://fortune.com/2017/05/16/instagram-face-filters-snapchat/
- https://fortune.com/2025/02/04/meta-adds-235-billion-value-longest-winning-streak-ever/
- https://www.ftc.gov/system/files/documents/public_statements/410531/831014deceptionstmt.pdf
- https://www.goodmorningamerica.com/family/story/instagram-introduces-teen-accounts-113734038
- https://www.goodto.com/family/family-news/back-to-school-grwm-videos-viral-online-parenting-expert-warns-massive-safeguarding-issue-parents-ignore
- https://hbr.org/2018/10/i-ran-4-experiments-to-break-my-social-media-addiction-heres-what-worked
- https://help.instagram.com/3237561506542117
- https://help.instagram.com/459497729122868?helpref=faq_content
- https://help.instagram.com/1986234648360433
- https://help.instagram.com/313829416281232
- https://help.instagram.com/486923551356292/?helpref=related_articles
- https://help.instagram.com/517920941588885
- https://help.instagram.com/517920941588885?helpref=faq_content
- https://help.snapchat.com/hc/en-us/articles/12142629111444-How-do-I-drop-a-pin-on-Snap-Map

- https://help.snapchat.com/hc/en-us/articles/7012334940948-When-does-Snapchat-delete-Snaps-and-Chats
- https://howbrandsarebuilt.com/drumbeat-marketing-tell-your-story-so-much-that-you-annoy-yourself/
- https://www.huffpost.com/entry/global-warming-denial-psychology_b_2170419
- https://www.humanetech.com/youth/the-attention-economy
- https://www.ijm.org/news/three-tips-teaching-online-safety-kids
- https://www.imdb.com/name/nm9268291/
- https://www.imdb.com/title/tt11097072
- https://www.imdb.com/title/tt11833388
- https://www.imdb.com/title/tt14442054/
- https://www.indestry.com/blog/the-brief-history-of-social-media-ar-filters
- https://www.inc.com/scott-mautz/facebooks-mark-zuckerberg-just-reminded-us-about-importance-of-profits-purpose.html
- https://www.inc.com/skyler-inman/ditch-your-social-media-addiction-with-these-five-tips.html
- https://www.industryleadersmagazine.com/instagram-introduces-its-daily-limit-feature/
- https://info.thorn.org/hubfs/Research/22_YouthMonitoring_Report.pdf
- https://info.thorn.org/hubfs/Research/Thorn_23_YouthMonitoring_Report.pdf
- https://www.instagram.com/explore/search/keyword/?q=%23instagramscreensmart
- https://www.instagram.com/mommyshorts/reel/DHmFiQmRNMq/
- https://www.instagram.com/momsoftampa/
- https://www.instagram.com/monicaplus_2/
- https://www.instagram.com/monicaplus_2/reel/DHeqYYgyycA/
- https://www.instagram.com/reel/DIj8LpMxPcL/
- https://www.instagram.com/reel/DIO8MZqPhnH/
- https://www.instagram.com/reel/DIO8MZqPhnH/?hl=en
- https://www.instagram.com/reel/DIWwZvwv4g7/
- https://www.instagram.com/[redacted]
- https://www.instagram.com/[redacted]hl=en
- https://www.instagram.com/[redacted]hl=en
- https://www.instagram.com/p/B0XTBezH_LW/
- https://www.instagram.com/p/Bd6m20aD8u7/
- https://www.instagram.com/p/BmvmDCABoui/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/1784481594501344/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/1785556523713325/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/1786036823849558O/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/1786532812977763O/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/1786669498948483O/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/1786708562338151 3/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/1786999120055062O/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/1787169248244149 7/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/1787306422645024 6/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/1790171779346569 3/?img_index=1

- https://www.instagram.com/p/BmvmDCABoui/c/17904362347746309/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/17907838414316786/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/17908063417645277/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/17930906233402656/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/17982756916283436/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/17999880679242912/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18010902463231339/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18020658292213913/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18022434922240769/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18030798604194684/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18035183314204040/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18044324350147057/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18047337679151738/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18056357998172661/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18059166937116506/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18067861393137667/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18076009714181362/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18082969600008999/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18112891237032961/?img_index=1
- https://www.instagram.com/p/BmvmDCABoui/c/18113179066089921/?img_index=1
- https://www.instagram.com/p/Bn6pUzXjiY5/
- https://www.instagram.com/p/BSiN8XuDDmB
- https://www.instagram.com/p/Bto1glHlstT/?img_index=1
- https://www.instagram.com/p/C_vOQgEpoGO/?hl=en
- https://www.instagram.com/p/C_x_A79J93H/?hl=en
- https://www.instagram.com/p/C1iRPMhJL5t/
- https://www.instagram.com/p/C5NbrNFtkL6/c/18026969512846982/?img_index=1
- https://www.instagram.com/p/C6oOlaluK6A/c/18258633820216612/?hl=en&img_index=1
- https://www.instagram.com/p/C76nBRooiXM
- https://www.instagram.com/p/C76nBRooiXM/
- https://www.instagram.com/p/C7XXZpxy321/c/18009245324583607/?img_index=1
- https://www.instagram.com/p/CmSJ4DsJA6e/
- https://www.instagram.com/p/Cxafwx7ArBa/?hl=en
- https://www.instagram.com/p/CxF15oMAjYk/?hl=en
- https://www.instagram.com/p/CxG2NwTgyFC/?hl=en
- https://www.instagram.com/p/DA_IHumoSDN/
- https://www.instagram.com/p/DAJBGeboCTP/?img_index=1
- https://www.instagram.com/p/DC4xfX7h1u1/?hl=en
- https://www.instagram.com/[redacted]hl=en
- https://www.instagram.com/[redacted]p/BXB9_mJDRBc/?hl=en
- https://www.instagram.com/therocksquad/?hl=en
- https://www.instagram.com/[redacted]
- https://www.instagram.com/officialblueytv/

- https://www.instagram.com/dcsuperherogirls/
- https://www.instagram.com/disneyjunior/
- https://www.instagram.com/drseuss/
- https://www.instagram.com/dragonballsuper/
- https://www.instagram.com/hasbro/
- https://www.instagram.com/hellokitty/
- https://www.instagram.com/hotwheelsofficial/
- https://www.instagram.com/itsjojosiwa/
- https://www.instagram.com/lego/
- https://www.instagram.com/mickeymouse/
- https://www.instagram.com/miraculous/
- https://www.instagram.com/monsterhigh/
- https://www.instagram.com/mylittlepony/
- https://www.instagram.com/nickelodeonfamily/
- https://www.instagram.com/nickelodeon/
- https://www.instagram.com/paddingtonbear/
- https://www.instagram.com/officialpatrickstar/
- https://www.instagram.com/pawpatrol/
- https://www.instagram.com/pbskids/
- https://www.instagram.com/officialpeppa/
- https://www.instagram.com/pokemon/
- https://www.instagram.com/rugrats/
- https://www.instagram.com/sesamestreet/
- https://www.instagram.com/sonicthehedgehog/
- https://www.instagram.com/spongebob/
- https://www.instagram.com/tmnt/
- https://www.instagram.com/thomasandfriends/
- https://www.instagram.com/transformersofficial/
- https://instagramseo1.medium.com/the-evolution-of-instagram-likes-from-double-taps-to-emojis-6ac83f502397
- https://www.inverse.com/article/31645-instagram-copies-snapchat-face-filters
- https://www.inverse.com/input/culture/instagram-avatar-feature-ripoff-snapchat-bitmoji
- https://investor.atmeta.com/investor-news/press-release-details/2025/Meta-Reports-Fourth-Quarter-and-Full-Year-2024-Results/default.aspx.
- https://www.ipsos.com/en-us/about-eight-ten-parents-children-under-18-traditional-social-media-apps-worry-about-their-children
- https://joanganzcooneycenter.org/wp-content/uploads/2021/05/jgcc_missingmiddle.pdf
- https://www.judiciary.senate.gov/committee-activity/hearings/breaking-the-news-censorship-suppression-and-the-2020-election
- https://www.judiciary.senate.gov/imo/media/doc/2024-01-31_-_testimony_-_zuckerberg.pdf
- https://katu.com/news/local/your-kids-are-using-instagram-is-it-safe
- https://www.kidscorp.digital/resources/blog/youtube-or-youtube-kids-reaching-the-right-audience-effectively-and-safely

- https://lankyboxshop.com/
- https://www.linkedin.com/in/sheryl-sandberg-5126652/
- https://www.linkedin.com/in/diwanji/
- https://media.ford.com/content/fordmedia/fna/us/en/news/2017/07/27/ford-celebrates-100-years-truck-history.html
- https://mention.com/en/reports/instagram/followers/
- https://www.merriam-webster.com/wordplay/what-does-finsta-mean-fake-instagram
- https://www.messengerkids.com
- https://money.cnn.com/2017/05/16/technology/instagram-face-filters/index.html
- https://my.clevelandclinic.org/health/diseases/23940-generalized-anxiety-disorder-gad
- https://my.clevelandclinic.org/health/diseases/24481-clinical-depression-major-depressive-disorder
- https://www.naag.org/wp-content/uploads/2021/05/NAAG-Letter-to-Facebook-Final-1.pdf
- https://www.nbcnews.com/health/cancer/talc-baby-powder-linked-ovarian-cancer-jj-lawsuit-rcna152493
- https://www.ncbi.nlm.nih.gov/books/NBK545476/
- https://www.newsweek.com/mark-zuckerberg-says-claim-facebook-pushes-angry-content-profit-deeply-illogical-1635966
- https://news.gallup.com/poll/512576/teens-spend-average-hours-social-media-per-day.aspx)
- https://news.sky.com/story/molly-russell-inquest-teenager-died-by-self-harm-while-suffering-negative-effects-of-online-content-coroner-finds-12707322
- https://www.nick.com/kids-choice-awards/articles/rebzs2/every-kids-choice-2024-winner
- https://www.nick.com/kids-choice-awards/articles/rwskx2/every-kids-choice-awards-2023-winner
- https://nickclegg.medium.com/you-and-the-algorithm-it-takes-two-to-tango-7722b19aa1c2
- https://www.npr.org/sections/shots-health-news/2024/07/12/nx-s1-4990677/teens-skin-care-social-media-tweens-tiktok-influencers
- https://www.npr.org/2021/12/08/1062541547/instagrams-ceo-senators-testimony-mosseri
- https://www.nytimes.com/2006/09/12/technology/12online.html
- https://www.nytimes.com/2015/04/03/fashion/mens-style/should-grown-men-use-emoji.html
- https://www.nytimes.com/2016/09/17/business/media/a-social-network-frequented-by-children-tests-the-limits-of-online-regulation.html
- https://www.nytimes.com/2020/12/31/technology/farmville-zynga-facebook.html
- https://www.nytimes.com/2022/03/09/technology/metas-pavni-diwanji-departs.html
- https://www.nytimes.com/1999/02/28/nyregion/coming-to-grips-with-a-legacy-of-asbestos.html
- https://www.nytimes.com/2017/01/27/technology/millennial-social-media-usage.html
- https://www.nytimes.com/2020/01/17/business/instagram-likes.html
- https://www.nytimes.com/2021/11/18/technology/meta-instagram-investigation-teens.html
- https://www.nytimes.com/2025/01/31/technology/meta-incorporation-delaware.html

- http://online.wsj.com/article/SB10001424052702303506404577444711741019238.html
- https://www.pbs.org/newshour/nation/watch-live-facebook-ceo-mark-zuckerberg-testifies-before-senate-committee
- https://people.com/human-interest/instagram-will-no-longer-allow-adults-to-message-teens-who-dont-already-follow-them/
- https://petapixel.com/2017/05/16/instagram-copies-snapchat-launches-face-filters/
- https://www.pewresearch.org/internet/2015/04/09/teens-social-media-technology-2015/
- https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/
- https://www.pewresearch.org/short-reads/2019/01/17/where-millennials-end-and-generation-z-begins/
- https://www.pewresearch.org/internet/2024/12/12/teens-social-media-and-technology-2024/
- https://www.pewresearch.org/internet/fact-sheet/social-media
- https://www.pewresearch.org/journalism/fact-sheet/social-media-and-news-fact-sheet/
- https://www.pewresearch.org/short-reads/2022/12/15/explicit-content-time-wasting-are-key-social-media-worries-for-parents-of-u-s-teens/
- https://www.pewresearch.org/short-reads/2023/04/24/teens-and-social-media-key-findings-from-pew-research-center-surveys
- https://www.pewresearch.org/wp-content/uploads/sites/20/2025/04/PI_2025.04.22_teens-social-media-mental-health_REPORT.pdf
- https://phillipian.net/2024/02/08/are-makeup-and-social-media-the-reasons-why-tweens-are-going-extinct/
- https://play.google.com/store/search?q=messenger%20kids&c=apps&hl=en
- https://www.politico.com/story/2018/04/11/zuckerberg-hearings-facebook-congress-477287
- https://qz.com/quartzy/1238074/instagrams-new-wellbeing-team-will-address-its-effect-on-mental-health
- https://www.redbrick.me/the-influx-of-sephora-kids-and-toddler-get-ready-with-me-videos/
- https://www.reuters.com/data/magnificent-seven-monitor-2024-10-30/
- https://www.reuters.com/investigates/special-report/johnsonandjohnson-cancer/
- https://www.rev.com/transcripts/facebook-head-of-safety-testimony-on-mental-health-effects-full-senate-hearing-transcript
- https://www.socialmediatoday.com/news/instagram-enable-users-create-custom-sticker-still-image/704854/
- https://www.socialmediatoday.com/news/instagram-launches-add-yours-sticker-to-facilitate-more-engagement-in-sto/609267/
- https://www.socialmediatoday.com/news/instagram-new-stickers-location-sharing-dms/733927
- https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide
- https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/
- https://www.statista.com/topics/751/facebook/#topicOverview

- https://studentreportinglabs.org/news/youth-react-to-facebooks-wow-feature/
- https://support.tiktok.com/en/using-tiktok/creating-videos/duets-settings
- https://techcrunch.com/2017/10/04/instaface/
- https://techcrunch.com/2017/12/04/facebook-messenger-kids/
- https://techcrunch.com/2024/03/07/bored-go-play-this-hidden-game-in-your-instagram-dms/
- https://techcrunch.com/2018/07/19/facebok-under-13/
- https://www.techpolicy.press/red-herrings-to-watch-for-at-the-senates-child-safety-hearing/
- https://www.teenvogue.com/info/about-us
- https://www.teenvogue.com/story/facebook-emoji-reactions
- https://www.theguardian.com/commentisfree/2014/jun/18/adults-emoji-grow-up-emoticons-teenagers
- https://www.theguardian.com/games/2024/nov/18/what-is-roblox-everything-you-need-to-know-about-online-game-platform
- https://www.theguardian.com/lifeandstyle/2016/feb/25/kim-kardashian-teens-book-celebrity-social-media-american-girls
- https://www.theguardian.com/technology/2010/oct/07/facebook-groups
- https://www.theguardian.com/technology/2017/nov/01/facebook-quarterly-revenue-profits-russia
- https://www.theguardian.com/technology/2017/nov/09/facebook-sean-parker-vulnerability-brain-psychology
- https://www.theguardian.com/technology/2019/aug/23/social-media-addiction-gambling
- https://www.theguardian.com/technology/2022/sep/30/how-molly-russell-fell-into-a-vortex-of-despair-on-social-media
- https://www.thestreet.com/technology/history-of-snapchat
- https://www.theverge.com/2017/3/28/15081398/facebook-stories-snapchat-camera-direct
- https://www.theverge.com/2021/3/31/22360544/instagram-reels-remix-tiktok-duet-feature-launch
- https://www.theverge.com/2021/10/19/22735612/facebook-change-company-name-metaverse
- https://www.theverge.com/2021/9/21/22685863/facebook-safety-security-staff-spending-misinformation-abuse-wall-street-journal-reports
- https://www.thorn.org/about/
- https://time.com/3559340/instagram-tween-girls/
- https://time.com/4114886/oxford-word-of-the-year-2015-emoji/
- https://www.today.com/parents/got-slime-trend-creating-tween-bosses-across-u-s-t108682
- https://transparency.meta.com/
- https://transparency.meta.com/policies/community-standards/
- https://transparency.meta.com/policies/community-standards/adult-nudity-sexual-activity/
- https://transparency.meta.com/policies/community-standards/adult-sexual-exploitation/
- https://transparency.meta.com/policies/community-standards/bullying-harassment/

- https://transparency.meta.com/policies/community-standards/child-sexual-exploitation-abuse-nudity/
- https://transparency.meta.com/policies/community-standards/hateful-conduct/
- https://transparency.meta.com/policies/community-standards/inauthentic-behavior/
- https://transparency.meta.com/policies/community-standards/intellectual-property/
- https://transparency.meta.com/policies/community-standards/locally-illegal-products-services
- https://transparency.meta.com/policies/community-standards/misinformation/
- https://transparency.meta.com/policies/community-standards/suicide-self-injury/
- https://transparency.meta.com/policies/community-standards/violence-incitement/
- https://transparency.meta.com/policies/improving/prevalence-metric/
- https://transparency.meta.com/reports/community-standards-enforcement
- https://www.ttclabs.net/about
- https://www.ttclabs.net/news/metas-best-interests-of-the-child-framework
- https://www.usatoday.com/story/tech/2021/05/25/instagram-kids-facebook-mark-zuckerberg-petition/7419278002/
- https://www.usf.edu/arts-sciences/departments/journalism/documents/lims2025/lims2025.pdf
- https://variety.com/2016/digital/news/facebook-reactions-emotion-buttons-1201713676/
- https://variety.com/2019/tv/features/nickelodeon-40th-anniversary-rugrats-blues-clues-spongebob-kids-choices-awards-ryans-mystery-playdate-1203164889/
- https://www.voguebusiness.com/story/beauty/the-sephora-kids-arent-going-anywhere
- https://www.vox.com/2018/8/8/17641256/instagram-stories-kevin-systrom-facebook-snapchat
- https://www.vox.com/recode/23002679/reels-facebook-tiktok-video-
- https://www.washingtonpost.com/technology/interactive/2021/how-facebook-algorithm-works/
- https://web.archive.org/web/20180207144011/https://www.facebook.com/KimKardashian/
- https://web.archive.org/web/20190526134116/https://www.instagram.com/txunamy/
- https://web.archive.org/web/20190623033349/https://www.cbsnews.com/team/gayle-king/
- https://web.archive.org/web/20190829162353/https://xp.wired.com/
- https://web.archive.org/web/20191112063234/https://www.wired.com/story/wired25-livestream-2019
- https://web.archive.org/web/20191112063234/https://www.wired.com/story/wired25-livestream-2019/
- https://web.archive.org/web/20211110015903/https://www.washingtonpost.com/technology /2021/11/09/facebook-community-standards-report-oversight/
- https://web.archive.org/web/20220217122638/https://transparency.fb.com/sr/community-standards/
- https://web.archive.org/web/20240202004957/https://investor.fb.com/investor-news/press-release-details/2024/Meta-Reports-Fourth-Quarter-and-Full-Year-2023-Results-Initiates-Quarterly-Dividend/default.aspx
- https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health

- https://www.wired.com/video/watch/adam-mosseri-and-tracee-ellis-ross-in-conversation-with-arielle-pardes
- https://www.wired.com/2016/02/facebook-reactions-totally-redesigned-like-button/
- https://www.wsj.com/articles/tiktok-wants-to-grow-up-but-finds-it-tough-to-keep-kids-out-11581858006
- https://www.wsj.com/articles/the-facebook-files-11631713039
- https://www.wsj.com/tech/facebook-instagram-kids-tweens-attract-11632849667
- https://x.com/facebook/status/1493633545444675589
- https://www.youtube.com/live/5kY4etXpJhs?si=AQqn5Vqnc9WPQcG0&t=2362
- https://www.youtube.com/watch?v=2f7YIxRoSQQ&t=2600s
- https://www.youtube.com/watch?v=Dr82g6IYAdw
- https://www.youtube.com/watch?v=JZSpoCYijfA&t=1925s
- https://youtu.be/Dr82g6IYAdw?si=3K6lorqmY0_bUY9o&t=175
- https://youtu.be/Dr82g6IYAdw?si=jjdvXWyHhPYW_1kS&t=78
- https://youtu.be/Dr82g6IYAdw?si=U-gDQ787jRJUFiQv&t=42
- https://youtu.be/JZSpoCYijfA?si=RDvmZC4IpO6AlrwL&t=1925
- https://www.youtube.com/@NinjaKidz
- https://www.youtube.com/@Roma
- https://www.youtube.com/@THEROCKSQUAD
- https://www.youtube.com/channel/UCBJuxfqZuiibvcwSc8ViGsQ
- https://www.zynga.com/about/our-story