

Notes and Sources

Part 1: The Tech Wizards' Rise—and Their Lies

p. 20 “ . . . baby alligators have been sliding down muddy banks as if they’re waterslides!”:

University of Tennessee at Knoxville, “Crocodiles Just Wanna Have Fun, Too,” *ScienceDaily*, February 11, 2015, <https://www.sciencedaily.com/releases/2015/02/150210212044.htm>.

p. 25 “ . . . crime rates in the U.S. began falling sharply in the 1990s”: “Let Grow Takes a Look at

Crime Statistics,” Let Grow, last modified December 16, 2022, <https://letgrow.org/crime-statistics/>. See also Christopher Ingraham, “There’s Never Been a Safer Time to Be a Kid in America,” *The Washington Post*, April 14, 2015, <https://www.washingtonpost.com/news/wonk/wp/2015/04/14/theres-never-been-a-safer-time-to-be-a-kid-in-america/>. See also John Gramlich, “What the Data Says About Crime in the U.S.,” Pew Research Center, April 24, 2024, <https://www.pewresearch.org/short-reads/2024/04/24/what-the-data-says-about-crime-in-the-us/>.

p. 27 “Almost no one had access to the internet until the 1990s.”: Jennifer Cheeseman Day, Alex Janus, and Jessica Davis, *Computer and Internet Use in the United States: 2003*, U.S. Census Bureau, October 2005, <https://www.census.gov/content/dam/Census/library/publications/2005/demo/p23-208.pdf>.

p. 29 “ ‘Every once in a while, a revolutionary product comes along that changes everything.’—Steve Jobs, CEO of Apple”: “Original iPhone Introduction with Steve Jobs—MacWorld 2007 | AppleArchivesPro,” presented by Steve Jobs, at 0:12, posted January 25, 2021, by AppleArchivesPro, YouTube, 1 hr., 17 min., 26 sec., <https://www.youtube.com/watch?v=pvSYz6r2HQw>.

p. 32 “ ‘The thought process that went into building these [social media] applications . . . was all about: ‘How do we consume as much of your time and conscious attention as possible?’ ”—Sean Parker, first president of Facebook”: Sean Parker, “Facebook Founding President Sean Parker Sounds Alarm,” interview by Mike Allen, *BBC News*, November 9, 2017, <https://www.bbc.com/news/av/technology-41937476>. See also Mike Allen, “Sean Parker Unloads on Facebook: ‘God Only Knows What It’s Doing to Our Children’s Brains,’” *Axios*, November 9, 2017, <https://www.axios.com/2017/12/15/sean-parker-unloads-on-facebook-god-only-knows-what-its-doing-to-our->

childrens-brains-1513306792.

p. 33 “‘When Facebook was getting going, I had these people who came up to me and they would say, “I’m not on social media. . . . I value my real-life interactions, I value the moment, I value presence, I value intimacy.” And I would say “We’ll get you eventually.”’ —

Sean Parker, first president of Facebook”: Sean Parker, “Facebook Founding President Sean Parker Sounds Alarm,” interview by Mike Allen, *BBC News*, November 9, 2017,

<https://www.bbc.com/news/av/technology-41937476>. See also Mike Allen, “Sean Parker Unloads on Facebook: ‘God Only Knows What It’s Doing to Our Children’s Brains,’ ” *Axios*, November 9, 2017,

<https://www.axios.com/2017/12/15/sean-parker-unloads-on-facebook-god-only-knows-what-its-doing-to-our-childrens-brains-1513306792>.

p. 34 “By 2015, a startling number of young people around the world were feeling worried and sad a lot (or even most) of the time.”: Centers for Disease Control and Prevention, *Youth Risk Behavior Survey Data Summary & Trends Report: 2013–2023*, U.S. Department of Health and Human Services,

2024, <https://www.cdc.gov/yrbs/dstr/index.html>.

p. 34 “By 2024, the U.S. Surgeon General had become so convinced that using social media was dangerous for teenagers’ mental health that he said social media apps should come with warning labels, like the ones on cigarettes.”: Vivek H. Murthy, “Surgeon General: Why I’m

Calling for a Warning Label on Social Media Platforms,” *The New York Times*, June 17, 2024.

<https://www.nytimes.com/2024/06/17/opinion/social-media-health-warning.html>.

p. 35 “Girls who spend five or more hours each day on social media (which is surprisingly common!) are three times more likely to be depressed than girls who spend little or no time on social media.”: Claim based on data from Yvonne Kelly et al., “Social Media Use and Adolescent

Mental Health: Findings from the UK Millennium Cohort Study,” *EClinicalMedicine* no. 6, (2018): 59–68,

<https://doi.org/10.1016/j.eclinm.2018.12.005>.

p. 35 “Boys who spend five or more hours a day on social media are two times more likely to be depressed than boys who spend little or no time on social media.”: Claim based on data

from Yvonne Kelly et al., “Social Media Use and Adolescent Mental Health: Findings from the UK Millennium Cohort Study,” *EClinicalMedicine* no. 6, (2018): 59–68, <https://doi.org/10.1016/j.eclinm.2018.12.005>.

p. 35 “When young adults who usually spend a lot of time on social media spend less time on it for a few weeks, they usually feel happier and less anxious.”: C. G. Davis et al., “Limiting Social Media Use Decreases Depression, Anxiety, and Fear of Missing Out in Youth with Emotional Distress: A Randomized Controlled Trial.” *Psychology of Popular Media* no. 14.1, (2025): 1–11, <https://doi.org/10.1037/ppm0000536>. See also Jonathan Haidt, *The Anxious Generation: How the Great Rewiring of Childhood Is Causing an Epidemic of Mental Illness* (Penguin Press, 2024), chap. 6. See also After Babel’s series “The Case Against the Phone-Based Childhood,” *After Babel*, Substack, <https://www.afterbabel.com/t/the-case-against-the-phone-based>.

p. 35 “When people block the internet on their smartphones, so that they can just use them as phones, most of them feel better and say that it’s easier for them to concentrate and pay attention to things.”: Allison Aubrey, “A Break from Your Smartphone Can Reboot Your Mood. Here’s How Long You Need,” *NPR*, February 24, 2025, <https://www.npr.org/2025/02/24/nx-s1-5304417/smartphone-break-digital-detox-screen-addiction>.

p. 36 “. . . as soon as most young people got smartphones and began spending a lot more time on social media (in the early 2010s)”: Mary Madden et al., “Main Findings,” *Teens and Technology 2013*, Pew Research Center, March 13, 2013, <https://www.pewresearch.org/internet/2013/03/13/main-findings-5/>. See also Amanda Lenhart, “Teens, Social Media & Technology Overview 2015,” Pew Research Center, April 9, 2015, <https://www.pewresearch.org/internet/2015/04/09/teens-social-media-technology-2015/>.

p. 36 “. . . as soon as most young people got smartphones and began spending a lot more time on social media (in the early 2010s), rates of loneliness began to rise, not fall, as you can see in this graph”: Monitoring the Future surveys 8th, 10th, and 12th graders about many attitudes and behaviors every year. The graph shows data with the recommended weighting applied and grouped into two-year buckets. See “Ch6.Girls.Data,” Google Sheets, data compiled from Monitoring the Future, <https://docs.google.com/spreadsheets/d/1xVA9ejMn8JOlULufQi7zjfotOSpgV2zLHXXrHs895DA/edit?gid=1545251846#gid=1545251846>. See also National Addiction & HIV Data Archive Program, Monitoring the Future, <https://www.icpsr.umich.edu/web/NAHDAP/series/35/variables>.

p. 42 “Nearly half of people between eighteen and twenty-seven say they wish that some of the most popular social media platforms and apps, such as TikTok, X, and Snapchat, had

never been invented!”: 50% for X, 47% for TikTok, 43% for Snap: AJ Skiera, “What Gen Z Thinks About Its Social Media and Smartphone Usage,” Harris Poll, September 10, 2024, <https://theharrispoll.com/briefs/gen-z-social-media-smart-phones/>.

p. 43 “ . . . the average American teenager spends about five hours per day on social media (including YouTube)”: Jonathan Rothwell, “Teens Spend Average of 4.8 Hours on Social Media Per Day,” Gallup, October 13, 2023, <https://news.gallup.com/poll/512576/teens-spend-average-hours-social-media-per-day.aspx>.

p. 43 “ . . . nearly half of teens say that they’re online ‘almost constantly.’”: Michelle Faverio et al., “Teens, Social Media and Technology 2024,” Pew Research Center, December 12, 2024, <https://www.pewresearch.org/internet/2024/12/12/teens-social-media-and-technology-2024/>.

p. 43 “Ninety-five percent of young adults who have smartphones keep their phone near them almost all the time.”: See graph titled “Indicators of Americans’ Attachment to Their Smartphone, by Age” in Lydia Saad, “Americans Have Close but Wary Bond with Their Smartphone,” Gallup, June 20, 2022, <https://news.gallup.com/poll/393785/americans-close-wary-bond-smartphone.aspx>.

p. 44 “How do I stop this crippling addiction I have with my phone?”: One place to get started: [reddit.com/r/nosurf/](https://www.reddit.com/r/nosurf/).

p. 45 “ . . . your brain changes *especially* fast during puberty, which can begin even before age ten, and which is generally finished by around age sixteen.”: Laurence Steinberg, *Adolescence*, 13th ed. (McGraw Hill, 2024).

Part 2: Secrets of the Tech Wizards

p. 53 “The CEO (chief executive officer) of TikTok has said that he doesn’t let his own kids use TikTok.”: Anna Skinner, “Who Is Shou Chew? TikTok CEO Who Doesn’t Let His Kids Use App,” *Newsweek*, March 23, 2023, <https://www.newsweek.com/who-shou-chew-tiktok-boss-kids-use-app-1789945>.

p. 53 “The CEO of Snapchat limited his kid’s screen time to ninety minutes *per week*”: Nick Bastone, “Snapchat Founder Evan Spiegel and Wife Miranda Kerr Limit Their Seven-Year-Old Child to 1.5 Hours of Screen Time per Week,” *Business Insider*, December 29, 2018, <https://www.businessinsider.com/evan-spiegel-miranda-kerr-screen-time-2018-12>.

p. 53 “ . . . according to his wife, he [Evan Spiegel] himself ‘avoids screens at all times’ ” :

Maira Butt, “Miranda Kerr Says Snapchat CEO and Co-Founder Husband ‘Avoids Screens at All Times,’ ” *The Independent*, June 20, 2024, <https://www.the-independent.com/life-style/snapchat-founder-ceo-evan-spiegel-screen-time-miranda-kerr-b2565759.html>.

p. 53 “One of the founders of a major video game company called Storm8 says he doesn’t let his own kids play the games he’s created. He says, ‘Knowing all the techniques with

which we tried to bring about addiction, I realized I didn’t want my children exposed to

that risk.’ ” : William Siu, “I Make Video Games. I Won’t Let My Daughters Play Them,” *The New York Times*,

October 2, 2022, <https://www.nytimes.com/2022/10/02/opinion/video-game-addiction.html>.

p. 54 “Some tech leaders make their children’s babysitters and nannies sign a contract

swearing that they will not let the children have contact with smartphones, games, or any

screens at all.” : Nellie Bowles, “Silicon Valley Nannies Are Phone Police for Kids,” *The New York Times*,

October 26, 2018, <https://www.nytimes.com/2018/10/26/style/silicon-valley-nannies.html>.

p. 55 “Meta is worth more than a trillion dollars.” : “Meta Platforms (Meta) Statistics & Valuation,”

StockAnalysis, accessed September 18, 2025, <https://stockanalysis.com/stocks/meta/statistics/>.

p. 59 “‘That’s the ultimate goal: to build habit-forming games that have players coming back every day’—William Siu, co-founder of the mobile gaming developer Storm8” :

William Siu, “I Make Video Games. I Won’t Let My Daughters Play Them,” *The New York Times*, October 2, 2022,

<https://www.nytimes.com/2022/10/02/opinion/video-game-addiction.html>.

p. 63 “The social media wizards may say that their apps are designed to help ‘empower

people to express themselves, live in the moment, learn about the world, and have fun

together’ (Snapchat), or ‘bring you closer to the people and things you love’ (Instagram), or

‘inspire creativity and bring joy’ (TikTok). ” : “About Snap,” Snapchat Investor Relations, accessed

September 19, 2025, <https://investor.snap.com/about-snap/default.aspx>; “About Instagram,” Instagram, accessed

September 18, 2025, <https://about.instagram.com/>; “About.” TikTok, accessed September 18, 2025,

<https://www.tiktok.com/about?lang=en>.

p. 63 “Sarah Wynn-Williams, a former executive at Meta, told the U.S. Congress that

Instagram can detect when teenage girls feel bad about themselves by, for example,

identifying when they delete a few selfies. According to Wynn-Williams, the app then uses that as an opportunity to show the girls ads for beauty products.”: Cristiano Lima-Strong,

“Transcript: Former Exec Sarah Wynn-Williams Testifies on Facebook’s Courtship of China,” *Tech Policy Press*, April 9, 2025, <https://www.techpolicy.press/transcript-former-exec-sarah-wynnwilliams-testifies-on-facebooks-courtship-of-china/>.

p. 66 “‘I felt like I was wasting my life away. If I live ninety years, but thirty of those years are on my phone, did I really live those ninety years?’—Kailani, 15”: David Knowles, “How 3 Cellphone Addicts Say They Cut down on Screen Time and Improved Their Lives,” *Yahoo! News*, February 15, 2025, <https://www.yahoo.com/news/how-3-cellphone-addicts-say-they-cut-down-on-screen-time-and-improved-their-lives-215814961.html>.

p. 67 “As you know, American teens spend an average of about five hours a day on social media (including watching videos on TikTok and YouTube).”: Jonathan Rothwell, “Teens Spend Average of 4.8 Hours on Social Media Per Day,” Gallup, October 13, 2023, <https://news.gallup.com/poll/512576/teens-spend-average-hours-social-media-per-day.aspx>.

p. 67 “Add in the additional time they’re spending on other screens—for example, watching television and visiting websites—and the average rises to more than eight hours on screens every day.”: Note that this statistic includes time spent watching television and online videos, playing video games, using social media, browsing websites, creating content, e-reading, and other digital activities. (E-books account for just six minutes among tweens and eight among teens.) See p. 3 in Victoria Rideout et al., *The Common Sense Census: Media Use by Tweens and Teens, 2021*, Common Sense Media, March 9, 2022, https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf.

p. 67 “‘I can’t help but wonder about what our brains might have done with all the time we’ve dedicated to staring at our screens.’—Juliet, 17”: Juliet Weisfogel, “I’m a 17-Year-Old TikTok Junkie. I Need This Ban,” *The New York Times*, January 19, 2025, <https://www.nytimes.com/2025/01/19/opinion/tiktok-ban-teenagers.html>.

p. 76 “The CEO of Netflix was once asked who the company’s biggest competitors were. You might think he’d have said Amazon, or another streaming service. But he said, ‘We’re

competing with sleep.’”: Aatif Sulleyman, “Netflix’s Biggest Competition Is Sleep, Says CEO Reed Hastings,” *The Independent*, April 19, 2017, <https://www.independent.co.uk/tech/netflix-downloads-sleep-biggest-competition-video-streaming-ceo-reed-hastings-amazon-prime-sky-go-now-tv-a7690561.html>. See also Alex Hern, “Netflix’s Biggest Competitor? Sleep,” *The Guardian*, April 18, 2017, <https://www.theguardian.com/technology/2017/apr/18/netflix-competitor-sleep-uber-facebook>.

p. 76 “(Teens need about eight to ten hours of sleep a night—sometimes even eleven.)”:

“What to Know about Teens and Sleep,” National Sleep Foundation, March 7, 2024, <https://www.thensf.org/what-to-know-about-teens-and-sleep/>.

pp. 76–77 “When you sleep, your body recovers from the day, and your brain has a chance to recharge itself and organize all that you’ve learned so that you can remember it later.”:

Erin J Wamsley, “Dreaming and Offline Memory Consolidation,” *Current Neurology and Neuroscience Reports* 14, no. 3 (2014), <https://doi.org/10.1007/s11910-013-0433-5>.

p. 77 “. . . encouraging people to binge-watch shows isn’t the only way that screens make people miss out on sleep.”: Jean M. Twenge et al., “Decreases in Self-Reported Sleep Duration Among U.S.

Adolescents 2009–2015 and Association with New Media Screen Time,” *Sleep Medicine* 39 (2017): 47–53, <https://doi.org/10.1016/j.sleep.2017.08.013>.

p. 85 “‘Brain hacking’: Anderson Cooper, “What Is ‘Brain Hacking’? Tech Insiders on Why You Should Care,” *CBS News*, April 9, 2017, <https://www.cbsnews.com/news/brain-hacking-tech-insiders-60-minutes/>. See also Tristan Harris, “How Your Brain Is Getting Hacked: Facebook, Tinder, Slot Machines | Tristan Harris | Big Think,” posted by Big Think, YouTube, July 4, 2017, 5 min., 42 sec., https://www.youtube.com/watch?v=JgkvTRz_Alo.

p. 90 “‘We need to . . . give you a little dopamine hit every once in a while. [It’s] exactly the kind of thing that a hacker like myself would come up with, because you’re exploiting a vulnerability in human psychology.’—Sean Parker, first president of Facebook”:

Sean Parker, “Facebook Founding President Sean Parker Sounds Alarm,” interview by Mike Allen, *BBC News*, November 9, 2017, <https://www.bbc.com/news/av/technology-41937476>. See also Mike Allen, “Sean Parker Unloads on Facebook: ‘God Only Knows What It’s Doing to Our Children’s Brains,’” *Axios*, November 9, 2017, <https://www.axios.com/2017/12/15/sean-parker-unloads-on-facebook-god-only-knows-what-its-doing-to-our-childrens-brains-1513306792>.

p. 95 “‘We get rewarded in these short-term signals—hearts, likes, thumbs-up—and we [confuse] that with value . . . [but] what it really is, is fake, brittle popularity that’s short-term and that leaves you . . . empty.’—Chamath Palihapitiya, former Facebook executive”:

Chamath Palihapitiya, “Chamath Palihapitiya, Founder and CEO Social Capital, on Money as an Instrument of Change,” interview for Stanford Graduate School of Business *View From the Top: The Podcast*, at 24:50, posted November 13, 2017, YouTube, 56 min., 15 sec., <https://www.youtube.com/watch?v=PMotykw0SIk>.

p. 96 “‘Wow, we should add more addicting features like this.’—Snapchat employee, referring to Snapchat streaks soon after the feature was added”: State of New Mexico ex rel. Raúl Torrez, Attorney General v. Snap Inc., No. D-101-CV-2024-02131, Amended Complaint for Abatement and Civil Penalties and Demand for Jury Trial at 111, ¶ 273 (N.M. First Jud. Dist. Ct. Oct. 1, 2024) https://nmdoj.gov/wp-content/uploads/2024-10-01-SNAP-NM-Amended-Complaint_Redacted.pdf.

p. 98 “. . . there are so many similarities between slot machines and smartphones that some experts call smartphones ‘slot machines that we keep in our pockets.’”: Tristan Harris, “Silicon Valley Insider on Why Smartphones Are ‘Slot Machines,’” interview by Anderson Cooper on *CBS Mornings*, April 10, 2017, YouTube, 4 min., 57 sec., <https://www.youtube.com/watch?v=gvQxtotEX-M>.

p. 101 “When you’re being brain-hacked, it feels like a sugar rush: You get a quick burst of excitement, but this excitement fades fast and leaves you unsatisfied, and sometimes unhappy.”: Jonathan Haidt, *The Anxious Generation: How the Great Rewiring of Childhood Is Causing an Epidemic of Mental Illness* (Penguin Press, 2024), 140.

p. 107 “‘You don’t realize it, but you are being programmed.’—Chamath Palihapitiya, former vice president of user growth at Facebook”: Chamath Palihapitiya, “Chamath Palihapitiya, Founder and CEO Social Capital, on Money as an Instrument of Change,” interview for Stanford Graduate School of Business *View From the Top: The Podcast*, at 26:10, posted November 13, 2017, YouTube, 56 min., 15 sec., <https://www.youtube.com/watch?v=PMotykw0SIk>.

p. 108 “Sitting still for long periods of time, on the other hand—which often happens when people are on screens—is really bad for your body *and* your brain.”: Jung Ha Park et al., “Sedentary Lifestyle: Overview of Updated Evidence of Potential Health Risks,” *Korean Journal of Family Medicine* 41, no. 6 (2020): 365–73, <https://doi.org/10.4082/kjfm.20.0165>.

p. 110 “If you get interrupted while working hard on something, it often can take twenty-five minutes to fully get back on track.”: Gloria Mark et al., “No task left behind?: examining the nature of fragmented work,” *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (2005): 321–30, <https://doi.org/10.1145/1054972.1055017>.

p. 112 “Most American teenagers who have smartphones report getting more than 230 notifications a day—and nearly 25 percent of them arrive when they’re at school.”: Jenny S. Radesky et al., “Constant Companion: A Week in the Life of a Young Person’s Smartphone Use,” *Common Sense Media*, September 26, 2023, https://www.commonsensemedia.org/sites/default/files/research/report/2023-cs-smartphone-research-report_final-for-web.pdf, 6.

p. 113 “The tech wizards like to say that their products help people be creative—for example, TikTok says that the app is meant to ‘inspire creativity.’”: “About,” TikTok, accessed September 18, 2025, <https://www.tiktok.com/about?lang=en>.

p. 113 “The people who make the Oxford English Dictionary chose ‘brain rot’ as 2024’s ‘word of the year.’”: “‘Brain Rot’ Named Oxford Word of the Year 2024,” Oxford University Press, December 2, 2024, <https://corp.oup.com/news/brain-rot-named-oxford-word-of-the-year-2024/>.

p. 114 “‘Because of phones, we always have the ability to jump out of ourselves. But unless you learn how to be in your head, you’ll never learn how to create.’—Lin-Manuel Miranda, creator of *Hamilton: An American Musical* and composer of music for *Moana* and *Encanto*”: Michael Hainey, “Lin-Manuel Miranda Thinks the Key to Parenting Is a Little Less Parenting,” *GQ*, April 26, 2016, <https://www.gq.com/story/unexpected-lin-manuel-miranda>.

p. 115 “Spending hours a day hunched over a phone or tablet can mess up your posture and lead to painful conditions like ‘tech neck,’ ‘cell phone elbow,’ and ‘texting thumb.’”: “Is Your Screen Time Hurting You? 3 Common Tech-Related Pain Conditions,” *Raleigh Orthopaedic*, last modified July 12, 2018, <https://www.raleighortho.com/blog/prevention/tech-neck-texting-thumb-tablet-elbow-conditions-caused-by-the-overuse-of-technology/>. See also “How to Prevent and Treat Cubital Tunnel Syndrome,” University of Utah Health, last modified March 12, 2025, <https://healthcare.utah.edu/healthfeed/2025/03/how-prevent-and-treat-cubital-tunnel-syndrome>.

p. 115 “And kids who spend a lot of time staring at screens are more likely to need glasses.”:

Ahnul Ha et al., “Digital Screen Time and Myopia,” *JAMA Network Open* 8, no. 2 (2025), <https://doi.org/10.1001/jamanetworkopen.2024.60026>. See also Sandra Lora Cremers et al., “New Indicator of Children’s Excessive Electronic Screen Use and Factors in Meibomian Gland Atrophy,” *American Journal of Ophthalmology* 229 (2021): 63–70, <https://doi.org/10.1016/j.ajo.2021.03.035>.

p. 121 “For example, the CEO of Meta posted a statement on his own social media account that said, ‘It’s very important to me that everything we build is safe and good for kids.’”:

Mark Zuckerberg, “I wanted to share a note I wrote to everyone at our company,” Facebook, October 5, 2021, <https://www.facebook.com/zuck/posts/10113961365418581>.

p. 121 “For example, in 2024 when U.S. lawmakers proposed a bill that would have required tech companies to add more safeguards for kids and teens to their products, the companies spent more than \$50 million to fight it.”: Amelia Minkin et al., “Big Tech Ramps up

Lobbying as Industry Seeks to Thwart Legislation to Protect Kids Online,” *Issue One*, October 22, 2024, <https://issueone.org/articles/big-tech-ramps-up-lobbying-as-industry-seeks-to-thwart-legislation-to-protect-kids-online/>. See also Georgia Wells, “Inside Big Tech’s Bid to Sink the Online Kid Safety Bill,” *The Wall Street Journal*, November 17, 2024, <https://www.wsj.com/politics/policy/meta-google-lobbying-child-online-safety-bill-5ee63dcc>.

p. 121 “This is especially upsetting because over the past few years, a lot of secret research documents and private emails have been leaked that discuss the harms that these products are causing to millions of children and teenagers.”: Jonathan Haidt et al., “Snapchat is Harming

Children at an Industrial Scale,” *After Babel*, Substack, April 16, 2025, <https://www.afterbabel.com/p/industrial-scale-snapchat>. See also Jonathan Haidt et al., “TikTok is Harming Children at an Industrial Scale,” *After Babel*, Substack, January 9, 2025, <https://www.afterbabel.com/p/industrial-scale-harm-tiktok>.

p. 122 “A secret document from Instagram said, ‘We make body image issues worse for one in three teen girls.’”: Georgia Wells et al., “Facebook Knows Instagram Is Toxic for Teen Girls, Company

Documents Show,” *The Wall Street Journal*, September 14, 2021, <https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739>.

p. 122 “Another secret document from Instagram said, ‘Teens told us that they don’t like the amount of time they spend on [Instagram]. . . . They often feel ‘addicted’ and know that what they’re seeing is bad for their mental health but feel unable to stop themselves.’”:

Georgia Wells et al., “Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show,” *The Wall Street Journal*, September 14, 2021, <https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739>.

p. 122 “Secret research from TikTok found that people who used TikTok a lot each day often felt more anxious and had a harder time thinking and remembering things, having deep conversations, and empathizing with others than people who didn’t spend as much time on the app.”: Commonwealth of Kentucky ex rel. Coleman v. TikTok, Inc., No. 24-CI-00824, Complaint at 65, ¶ 213 (Ky. Cir. Ct. Oct. 9, 2024) available at <https://linknky.com/news/2024/10/09/tiktok-lawsuit-kentucky-attorney-general/>. See our annotated version of this document here:

<https://www.dropbox.com/scl/fi/sfxbtc79imdvm4nmnjcnz/tiktok.kentuckyAG.unredacted.complete.ANNOTATED-edited.pdf?rlkey=z74c83rziez1vd68ii8boepi8&e=2&st=k5gch683&dl=0>.

P122 (UK edition) “These tech companies have commented on these issues.”

Facebook’s response is here: https://about.fb.com/news/2021/09/research-teen-well-being-and-instagram/?utm_source=chatgpt.com

TikTok’s responses is here: <https://www.independent.co.uk/news/tiktok-ap-kentucky-department-of-justice-district-of-columbia-b2628149.html>

Roblox has not commented publicly on this specific lawsuit but has made a statement about similar issues here:

https://corp.roblox.com/newsroom/2025/08/roblox-responds-to-louisiana-ag-lawsuit?utm_source=chatgpt.com

pp. 122–23 “In a lawsuit filed against Roblox, one Roblox employee was quoted saying: ‘You’re supposed to make sure that your users are safe but then the downside [to] . . . limiting users’ engagement, [is that] it’s hurting our metrics. It’s hurting the active users, the time spent on the platform, and in a lot of cases, the leadership doesn’t want that.’”:

Jane Doe v. Roblox Corp., No. 4:25-cv-03520-YGR, Doc. 1-1, at 31, ¶ 90 (N.D. Cal. filed Apr. 22, 2025) available at https://storage.courtlistener.com/recap/gov.uscourts.cand.448351/gov.uscourts.cand.448351.1.1_1.pdf.

p. 123 “They know that bullies use social media apps to torment their classmates.”: State of New Mexico ex rel. Raúl Torrez, Attorney General v. Snap Inc., No. D-101-CV-2024-02131, Amended Complaint for Abatement and Civil Penalties and Demand for Jury Trial at 126–27, ¶ 317 (N.M. First Jud. Dist. Ct. Oct. 1, 2024) available at <https://nmdoj.gov/wp-content/uploads/2024-10-01-SNAP-NM-Amended->

Complaint_Redacted.pdf.

p. 123 “The companies know that drug dealers sell drugs to teens on their platforms, including fake pills laced with extremely dangerous substances that have killed thousands of teenagers”: State of New Mexico ex rel. Raúl Torrez, Attorney General v. Snap Inc., No. D-101-CV-2024-02131, Amended Complaint for Abatement and Civil Penalties and Demand for Jury Trial at 93–95, ¶¶ 227–33, and at 100–101, ¶¶ 240–42, (N.M. First Jud. Dist. Ct. Oct. 1, 2024) available at https://nm DOJ.gov/wp-content/uploads/2024-10-01-SNAP-NM-Amended-Complaint_Redacted.pdf. See also Jan Hoffman, “Fentanyl Tainted Pills Bought on Social Media Cause Youth Drug Deaths to Soar,” *The New York Times*, May 19, 2022, <https://www.nytimes.com/2022/05/19/health/pills-fentanyl-social-media.html>.

p. 123 “They know that there are many adult men who pretend to be attractive teens online, and then convince a child or teen to send them inappropriate photos of themselves.”: Jonathan Haidt et al., “Snapchat is Harming Children at an Industrial Scale,” *After Babel*, Substack, April 16, 2025, <https://www.afterbabel.com/p/industrial-scale-snapchat>.

p. 124 “When a Meta employee asked a coworker what the company was doing to protect kids from some of these bad people, the coworker wrote back that ‘Child safety is an explicit non-goal this [half year.]’”: Barbara Ortutay, “Court Documents Underscore Meta’s ‘Historical Reluctance’ to Protect Children on Instagram,” *AP News*, January 17, 2024, <https://apnews.com/article/meta-new-mexico-instagram-lawsuit-children-75f8d147c03234d3098fdd765598c047>.

p. 125 “Believe it or not, tobacco companies used to advertise on cartoon programs and even gave out free cigarettes near schools and playgrounds!”: “10 of Some of the Really Bad Things the Tobacco Industry Has Done—and Is Doing—to Entice Kids to Start Smoking,” American Lung Association, accessed September 23, 2025, <https://www.lung.org/research/sotc/by-the-numbers/10-bad-things-to-entice-kids>. See this video for an example of cigarettes being advertised in a cartoon: “Flintstones Cigarette Commercial,” posted by Psychotronic42, YouTube, January 18, 2007, 1 min., 20 sec., <https://www.youtube.com/watch?v=NAExoSozc2c>. See also “5 Things the Tobacco Industry Didn’t Do Until It Was Forced To,” Truth Initiative, last modified June 28, 2018, <https://truthinitiative.org/research-resources/tobacco-prevention-efforts/5-things-tobacco-industry-didnt-do-until-it-was>. See also “From the Ashtray of History: Vintage Campus Cigarette Ads,” *Ivy Style*, November 6, 2014, <https://www.ivy-style.com/from-the-ashtray-of-history->

vintage-campus-cigarette-ads.html.

p. 125 “. . . they’re trying to get AI (artificial intelligence) to be used in schools too, beginning in kindergarten.”: “Advancing Artificial Intelligence Education for American Youth,” The White House, April 23, 2025, <https://www.whitehouse.gov/presidential-actions/2025/04/advancing-artificial-intelligence-education-for-american-youth/>. See also Evan Gorelick, “A Classroom Experiment,” *The New York Times*, July 9, 2025, <https://www.nytimes.com/2025/07/09/briefing/artificial-intelligence-education-students.html>.

p. 125 “According to one leaked document, the tech wizards at Meta once even tried to figure out how to use playdates to get more children to sign up for Messenger Kids.”: Georgia Wells et al., “Facebook’s Effort to Attract Preteens Goes Beyond Instagram Kids, Documents Show,” *The Wall Street Journal*, September 28, 2021, <https://www.wsj.com/tech/facebook-instagram-kids-tweens-attract-11632849667>.

p. 125 “‘What made [social media] so addictive was that I just wanted to fit in. . . . I didn’t want to be left out.’—Alexis, 20”: Jonathan Haidt, *The Anxious Generation: How the Great Rewiring of Childhood Is Causing an Epidemic of Mental Illness* (Penguin Press, 2024), 222.

p. 126 “What’s more, just like the tobacco companies, some social media companies have tried to get students to sign up for and use social media apps *while they’re hanging out together at school*—because they *know* that the best way to get teens to sign up for their apps is to give them FOMO.”: In re Social Media Adolescent Addiction/Personal Injury Products Liab. Litig., No. 4:22-md-3047-YGR, Doc. 1267, at 8 (N.D. Cal. Oct. 24, 2024) available at <https://assets.law360news.com/2251000/2251484/order.pdf>.

p. 126 “‘Getting critical mass in a high school very quickly (e.g. in the same afternoon) is extremely important.’—secret document from Instagram”: In re Social Media Adolescent Addiction/Personal Injury Products Liab. Litig., No. 4:22-md-3047-YGR, Doc. 1267, at 8–9 (N.D. Cal. Oct. 24, 2024) available at <https://assets.law360news.com/2251000/2251484/order.pdf>.

p. 128 “‘Why do we care about tweens? [Because they] are a valuable but untapped audience.’—private presentation from Facebook”: Georgia Wells et al., “Facebook’s Effort to Attract Preteens Goes Beyond Instagram Kids, Documents Show,” *The Wall Street Journal*, September 28, 2021, <https://www.wsj.com/tech/facebook-instagram-kids-tweens-attract-11632849667>.

Part 3: How to Be a Rebel

p. 133 “Nearly 50% of people aged 18 to 27 wish that TikTok, Snapchat, and X had never

been invented!”: Jonathan Haidt et al., “Gen Z Has Regrets,” *The New York Times*, September 17, 2024,

<https://www.nytimes.com/2024/09/17/opinion/social-media-smartphones-harm-regret.html>.

p. 133 “More than half of 15- to 17-year-olds say that they’re online almost constantly.”:

Michelle Faverio et al., “Teens, Social Media and Technology 2024,” Pew Research Center, December 12, 2024,

<https://www.pewresearch.org/internet/2024/12/12/teens-social-media-and-technology-2024/>.

p. 134 “The average teenager spends more than 8 hours per day on screens . . . That doesn’t include school or homework . . . That’s three and a half months per year—almost a third of

their time ALIVE!”: See p. 3 for the statistic, p. 1 which shows that the screen time quoted is for non-school-

related activities, and pp. 51–55, which show that the survey questions specified non-school-related screentime, in

Victoria Rideout et al., *The Common Sense Census: Media Use by Tweens and Teens, 2021*, Common Sense Media,

March 9, 2022, [https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-](https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf)

[report-final-web_0.pdf](https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf).

p. 135 “Most American teenagers get MORE THAN 230 notifications per day”: See p. 6 in Jenny

S. Radesky et al., *Constant Companion: A Week in the Life of a Young Person’s Smartphone Use*, Common Sense

Media, September 26, 2023, [https://www.commonsensemedia.org/sites/default/files/research/report/2023-cs-](https://www.commonsensemedia.org/sites/default/files/research/report/2023-cs-smartphone-research-report_final-for-web.pdf)

[smartphone-research-report_final-for-web.pdf](https://www.commonsensemedia.org/sites/default/files/research/report/2023-cs-smartphone-research-report_final-for-web.pdf).

p. 143 “It’s illegal for social media companies to allow anyone under thirteen to open an

account!”: “Children’s Online Privacy Protection Rule: A Six-Step Compliance Plan for Your Business,” Federal

Trade Commission, accessed September 24, 2025, [https://www.ftc.gov/business-guidance/resources/childrens-](https://www.ftc.gov/business-guidance/resources/childrens-online-privacy-protection-rule-six-step-compliance-plan-your-business)

[online-privacy-protection-rule-six-step-compliance-plan-your-business](https://www.ftc.gov/business-guidance/resources/childrens-online-privacy-protection-rule-six-step-compliance-plan-your-business).

p. 144 “‘Every time I feel good about myself, I go over to Instagram, and then it all goes

away.’—Eva, 17”: Georgia Wells et al., “Facebook Knows Instagram Is Toxic for Teen Girls, Company

Documents Show,” *The Wall Street Journal*, September 14, 2021, [https://www.wsj.com/articles/facebook-knows-](https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739)

[instagram-is-toxic-for-teen-girls-company-documents-show-11631620739](https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739).

p. 166 “About one out of ten players develops what psychiatrists call ‘Internet Gaming

Disorder’: They start spending so much time playing video games that it causes problems

with their sleep, friendships, performance at school, and/or their family life.”: Yuan-Xia Gao et al., “The Prevalence and Possible Risk Factors of Internet Gaming Disorder Among Adolescents and Young Adults: Systematic Reviews and Meta-Analyses,” *Journal of Psychiatric Research* 154 (2022): 35–43, <https://doi.org/10.1016/j.jpsychires.2022.06.049>.

p. 166 “If you’re worried that your gaming is becoming a problem, ask a trusted adult—like a parent, teacher, therapist, or coach—for help.”: “Video Game Addiction,” Cleveland Clinic, last modified May 27, 2022, <https://my.clevelandclinic.org/health/diseases/23124-video-game-addiction>.

p. 166 ““I am very familiar with game addiction, as that’s what I thought about every day for more than a decade. . . . [W]e experimented with every feature of our games to see which versions allowed us to extract the most time and money from our players. For us, game addiction was by design’—William Siu, co-founder of the mobile gaming company Storm8”: William Siu, “I Make Video Games. I Won’t Let My Daughters Play Them,” *The New York Times*, October 2, 2022, <https://www.nytimes.com/2022/10/02/opinion/video-game-addiction.html>.

p. 172 “The mere presence of a smartphone can be distracting, even if you’re not actively using it!”: Jeanette Skowronek et al., “The Mere Presence of a Smartphone Reduces Basal Attentional Performance,” *Scientific Reports* 13: 9363 (June 8, 2023), <https://doi.org/10.1038/s41598-023-36256-4>.

pp. 175–76 “This is because their brains have gotten used to unnaturally high levels of dopamine and need some time to readjust to less. That adjustment period tends to last a few weeks, with the first week being the hardest. You’ll be going through what’s called ‘withdrawal,’ and it’s the same thing that happens when people stop using addictive drugs.”: Jonathan Haidt, *The Anxious Generation: How the Great Rewiring of Childhood Is Causing an Epidemic of Mental Illness* (Penguin Press, 2024), 134–35, 170–71. See also C. G. Davis et al., “Limiting Social Media Use Decreases Depression, Anxiety, and Fear of Missing Out in Youth with Emotional Distress: A Randomized Controlled Trial,” *Psychology of Popular Media* no. 14.1, (2025): 1–11, <https://doi.org/10.1037/ppm0000536>.

p. 182 “. . . researchers have found that feeling disconnected from other people can be just as bad for your health as smoking cigarettes.”: See Figure 6 in Julianne Holt-Lunstad et al., “Social Relationships and Mortality Risk: A Meta-Analytic Review,” *PLOS Medicine* 7, no. 7 (2010), <https://doi.org/10.1371/journal.pmed.1000316>.

p. 183 “The CEO of Meta said that he wants to add more AI chatbots to his company’s apps to make people feel like they have more friends.”: Meghan Bobrowsky, “Zuckerberg’s Grand Vision:

Most of Your Friends Will Be AI,” *The Wall Street Journal*, May 7, 2025, <https://www.wsj.com/tech/ai/mark-zuckerberg-ai-digital-future-0bb04de7>.

p. 206 “. . . despite scary news headlines, rates of violent crime have fallen dramatically in the United States since the 1990s.”: “Let Grow Takes a Look at Crime Statistics,” Let Grow, last modified

December 16, 2022, <https://letgrow.org/crime-statistics/>. See also Christopher Ingraham, “There’s never been a safer time to be a kid in America,” *The Washington Post*, April 14, 2015,

[https://www.washingtonpost.com/news/wonk/wp/2015/04/14/theres-never-been-a-safer-time-to-be-a-kid-in-](https://www.washingtonpost.com/news/wonk/wp/2015/04/14/theres-never-been-a-safer-time-to-be-a-kid-in-america/)

[america/](https://www.washingtonpost.com/news/wonk/wp/2015/04/14/theres-never-been-a-safer-time-to-be-a-kid-in-america/). See also John Gramlich, “What the data says about crime in the U.S.,” Pew Research Center, April 24,

2024, <https://www.pewresearch.org/short-reads/2024/04/24/what-the-data-says-about-crime-in-the-us/>.

p. 207 “Scientists have discovered that having a few *good* friends is more important than having a *lot* of friends. So try not to worry about how *many* friends you have—even just one

good one is enough.”: Mara Brendgen et al., “Can Friends Protect Genetically Vulnerable Children from

Depression?,” *Development and Psychopathology* 25, no. 2 (2013): 277–89,

<https://doi.org/10.1017/s0954579412001058>.

p. 211 “Ever notice how different you feel after spending time outside compared to being cooped up indoors? Scientists have found that spending time outside—especially in

nature—makes people happier and less anxious.”: Peter A. Coventry et al., “Nature-Based Outdoor

Activities for Mental and Physical Health: Systematic Review and Meta-Analysis,” *SSM—Population Health* 16

(2021), <https://doi.org/10.1016/j.ssmph.2021.100934>.