CHAPTER 5

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The Rise and Fall of Screen Time

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"Parents: Don't Let the Screens Win" (Wall Street Journal, 4/28/20)

"Too Much Screen Time? Here's How to Dial Back" (New York Times, 12/14/19)

"There's Worrying New Research about Kids' Screen Time and Their Mental Health" (*Time*, 10/29/18)

"Screen Time May Actually Be Good for Kids" (Forbes, 10/22/19)

"We've Got the Screen Time Debate All Wrong. Let's Fix It" (Wired, 20/12/18)

In the battle between parents and screen media, parents will struggle. When screen time becomes a battle between parents and children, everyone loses. Parents are constantly told that too much screen time turns children into zombies, makes them obese, destroys their chance of academic success, and more. The solution, they are also told, is to impose "screen time rules." Yet these rules are controversial among scientists for relying on contested evidence. They are also controversial as policy advice, for their purpose is unclear and the results of implementing them untested. They are certainly controversial in family life.

In one sense, the screen time controversy is centuries-old, for deep anxieties about technological and social change go back to Plato's worry that writing would erase memory, to the Catholic church's fear that the print press would undermining its authority by democratizing access to knowledge, and to public anxieties over the circus, comic books, the cinema, radio—each in turn feared for unleashing the unruly or immoral impulses of the weak-willed. Traditionally, these were women, children, and the working classes,

though at the turn of the twentieth century, "children were being redefined sympathetically as innocent and impressionable, a departure from earlier Calvinist conceptions of children as evil barbarians in need of discipline" (Butsch, 2000: 152).

In another sense, the screen time controversy is modern—reliant on the emergence of the discipline of psychology and its embrace of statistical techniques pioneered in relation to mass media by market research organizations to price and sell screen time to advertisers (by measuring audience attention or "eyeballs"). The result was innovative ways to measure and track trends in the population's behavior, even in the privacy of their home, and to correlate these with body weight or school grades or crime rates or any other societal problem of the day. While this enabled the development of public policy concerned with child welfare, it obscured the significance of screen content, meanings or contexts of use in the everyday lives of children.

This chapter argues that, instead of trying to resolve the screen time controversy, it is time to leave it behind as ill-founded. Although claims for and against screen time continue to make the headlines, for even old controversies sell stories, I suggest that the concept of screen time has lead scientists, policy makers and the public down a blind alley, wasting a vast amount of energy that could have been better directed toward supporting children's well-being in a mediated world.

Screen Time Controversies in the Family

One mother, during an interview for our book, *Parenting for a Digital Future* (Livingstone & Blum-Ross, 2020), interrupted us to call to her 14-year old son doing his homework in the next room—"Have you turned your *Self-Control* on?" It turned out that the laptop his school had given him to take home was preloaded with a screen time app. Meanwhile mother had her own app called K9 (after the police sniffer dogs) to manage her children's digital activities. We came away from that family concerned that, when we asked the mother about parenting style, she unhappily called herself a "police-woman."

In other families, a father of a 15-year old son with autism told us that he was trying to "cut [screen time] down... until it's at a manageable level, which should be no more than two hours." The mother of an 8- and 10-year old told us "in the news I heard...no more than two hours." Another mother complained, we've got so much information now, about screen time is bad, or just stuff pumped at us; you sort of feel guilty if you let them have ...yes, if you let them have too much." Another was "pulling her hair out" trying to find the right "level of exposure" for her 12-year old video-gaming son.

The mother of a wakeful three-year old and a new baby told us how she started each day feeling guilty in breaking the rules about screen time when she handed her three-year old child the tablet first thing in the morning so as to get the household up and ready for the day. And yet another told us that "the conversation about screen time is a big thing, because I think a lot of parents worry firstly about how long is OK and secondly about the impact".

This research was conducted in London with families from many walks of life, and we were struck by how often we heard some version of the American Academy of Pediatrics' (AAP) "2x2" screen time rules (no screen time for children under two years old; no more than two hours for older children). These usually surfaced unattributed in our interviews, applied to all kinds of screen media, although they were originally intended for American parents trying to manage their children's television viewing. Notably, they were more often cited as a source of difficulty and guilt than of solace. Zaman et al. (2020) similarly document how public discourse in Australia also refers to parents feeling blamed, guilty, judged, worried about their digital parenting.

In short, irrespective of the original intent behind the screen time rules, in practice these rules have become a problem. While the rules promise an authorized way to cut short seemingly unending family disputes, the result is often the opposite. Allowing or withdrawing digital technologies has become parents' go-to reward or punishment; consequently, it has also become children's chosen battlefield to assert their agency. Our national survey of British parents found that they were far more concerned about screen *time* than about the actual activities their children engaged in online (or many of their offline activities; Livingstone & Blum-Ross, 2020). Parent-child conflict generates evasion by children, as illustrated by our discovery that the children in the first family mentioned above had figured out how to get the tablets out of the household safe in the middle of the night.

Also problematic are the implications for family relations. If "good parenting" is "policing" screen time, what are children—criminals? Parenting guidance and media headlines are full of injunctions to police: control, ban, monitor, and spy on children. This undermines family harmony, and the efforts of recent generations to rethink family dynamics —to become less hierarchical, less gendered, and more democratic. After all, children are neither ignorant nor wicked but, rather, keen to participate in family decision making, positive when their agency is respected, frustrated when it is not.

Recently the screen time rules have been "app-ified," as illustrated by the first mother above. This not only points to a problem experienced by parents but also to the very considerable market in promised solutions (parental controls), a market that, as critics put it, first created and now profits from

parental paranoia (Lee et al., 2014). Now that the iPhone comes with a Screen Time app pre-installed, our lives and those of our children are constantly quantified, monitored and, indeed, commodified by those who trade in the data collected.

Yet none of this resolves the pressing ambivalence that many parents feel, since as well as restricting screen time, they feel urgently that they must equip their child for the digital world. It is this, as much as their children's demands, that leads them to acquire all the digital devices they can afford, to help their child "keep up," "get ahead," prepare for the jobs not yet invented that supposedly await them in the digital future. As one middle-class mother told us, on the one hand she was so anxious about the "tsunami" of devices in the home that she kept a spreadsheet to control her 12-year old daughter's Internet use, but on the other she wanted to support her daughter learning Scratch at school, sharing poems online, and more broadly having the chance to experiment and gain resilience online and offline. Other parents worried about homework or shopping online, video chat with grandparents, or staying in touch with distant family. "What counts" as screen time, they asked us? Where's the flexibility?

So how did this sorry situation come about? While one could go back further in terms of research on children and screens, to the days of cinema, attention to whether screen time displaces valuable childhood activities really began with the arrival of television.

Early Research on Children and Television

No informed person can say simply that television is bad or that it is good for children.

This is the first sentence of Schramm, Lyle, and Parker's seminal book, Television in the Lives of Our Children, published in 1961 just as television was becoming a mass phenomenon for American families, and as the public and policy makers were becoming anxious about yet another technological revolution. In setting out their research, they observed that "the most serious and frequent question raised about television is this": Does its violence teach children violence and crime? Their conclusions were noteworthy (though not great material for the headlines) and, by and large, they have stood the test of time: "the relationship is always between a kind of television and a kind of child in a kind of situation" (p.169).

Schramm et al. asked, further, does television make children aggressive? Answer: It depends on their circumstances: "Children who come to television with aggression will be more likely to remember aggressive acts and be able to apply them when they are aggressive in real life" (p.163). Does it make them mentally ill? Again, it depends on the child: "We see no evidence whatsoever that television *makes* a child withdrawn, or *makes* passivity. Rather, it encourages and reinforces those tendencies when they exist in dangerous amounts" (p.160).¹

Pipping Schramm et al. to the post was another influential book. Television and the Child was published in the UK by Himmelweit, Oppenheim, and Vince in 1958. It set the frame for innumerable studies responding to society's worries about media representations of violence and its potential to make children aggressive, along with anxieties about "addiction" and adverse effects on children's reading, health, and school work. Its conclusions were similarly qualified, however, pointing more to the factors in a child's life that influence their response to television than to television's "impact" on them. Certainly, Himmelweit et al. did not conclude that television made children "passive"—somewhat testily, they distinguished at least five possible meanings of this popular claim before pointing to the evidence to rebut each in turn. But perhaps they raised questions in the public mind by distinguishing displacement effects (the activities that are reduced to make time for viewing) from the effects of program content. And Schramm et al. raised similar questions that struck a chord with the American public.

As it turned out, the UK findings for displacement effects were equivocal, with a range of contextual factors making it difficult to conclude that, say, television reduced book reading or seeing friends. While their findings were more marked, albeit with differences measured in minutes not hours per day, Schramm et al. concluded dramatically that:

Comparing pretelevision with television communities, we saw that the new medium reorganizes leisure time and mass media use in a spectacular manner. It cuts deeply into movie-going, radio-listening, comic book and pulp magazine reading. It reduces the time for play. It postpones bedtime slightly. It dominates the child's leisure. (p. 69)

With the benefit of hindsight, we can see that, although children still read, sleep, play, and see their friends—and, crucially, not notably less than they did half a century ago—television's reorganization of our daily lives and, as parents often observe, of their children's attention and interests, has indeed been spectacular. No wonder time spent on viewing, and the time consequently less available for other activities, raise concerns. Now that the internet has yet further reorganized our lives, encompassing not only our

leisure time but also time spent on education, work, commerce, and civic participation, these concerns are far from laid to rest.

Time as the Problem

Neither of these agenda-setting books used the term "screen time" (though Schramm et al. did mention "mass communication time" when summing the time children spent on television and radio). But they did address concerns about screen time as well as about screen content, and thus they can be judged part of the cultural problematization of time that is inherent in the idea of screen time.

A quarter of a century on, and now approaching the end of the heyday of television, the research agenda was little changed. For sure, a wealth of studies had expanded the array of contextual factors understood to affect the relation between viewing and effects, and "the child" had gained more of a voice and a personality in the family. For example, Dorr's (1986) "Television and Children" found that "viewing time" displaced just a few daily minutes of sleep, homework, and unstructured outdoor play, though it did not displace adult-directed activities such as school, chores, or extracurricular activities. Acknowledging the many qualifications attached to the claim that either viewing time or television content harms children, Dorr concluded instead with a concern that time spent viewing offers little improvement in children's lives since most of what they watch "was not designed with children's welfare in mind, and some of it is decidedly aggressive, sexist, ageist, racist, consumption oriented, sexy, inane, or moronic" (p.82).

Note how the two hypotheses—that viewing time displaces other (better) activities, and that viewing problematic content has adverse effects on children's attitudes or behavior - easily become entangled. For measuring viewing time is much simpler than keeping track of exactly what children watch, let alone how they interpret it. In other words, for researchers seeking reliable measures, viewing time offers a simple proxy for media content, since viewing particular (violent, stereotyped) content takes up time. After all, it seems reasonable to assume that the more time spent viewing, the greater the effects of the content.

Yet although a voluminous body of research has explored this hypothesis, generally reporting a modest correlation, few studies eliminate confounding factors or control for third causes. When the latter are included in study designs, it generally turns out that influential factors in the child's background (socio-economic status, family difficulties, emotional problems) are

linked both to greater viewing and to the child's (aggressive, stereotyped) attitudes or behavior. As Schramm et al. observed decades earlier.

But measuring children's attitudes and behaviors is difficult, especially using carefully controlled research designs. So viewing time came to offer a proxy not only for media content but also for media effects. Hence the head-lines—"Two hours gaming!" "Boys spend more hours viewing than girls!" "Children view for longer than ever before!" As if measuring time spent is in and of itself evidence of a problem.

But what problem? Consider the many studies reporting a link between time spent viewing television and childhood obesity, sparked by the evident increase in both during the post-war decades. As the experts concede, not only is the observed correlation inconsistent and small, but it remains unexplained, for neither the cause nor the effect are clearly specified (Cairns et al., 2019).

Is the problem that more time spent viewing displaces physical activity, or that it exposes the child to more junk food advertisements and, thus, different attitudes to food, or that while they are viewing they tend to snack more? Research has not disentangled these, nor has it adequately addressed the alternative explanations, notably the hypothesis that poorer children can't access parks and play streets so stay home and watch more television and, also, poorer children live in food deserts with parents working shifts, so their diet includes more junk food. Yet these matter when deciding to build more sporting facilities, or pass stronger advertising regulation, or impose a sugar tax or, most radical, provide more resources for poorer families.

The Invention of "Screen Time"

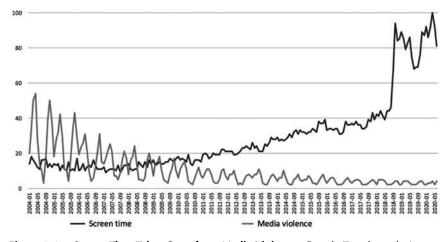
Writing in 2008 about moral panics accompanying the introduction of each new medium, Critcher observes that arguments about television's displacement of other activities are "dwarfed in importance by the one dominant accusation, that violence on television begets violence in real life." (p.97). Yet the discourse was already changing. Figure 1 shows the results of a Google Trends analysis, based on all US online searches, for the maximum time period that the analysis allows. First, I searched for mention of "screen time." After some experimentation, it seemed that Critcher was right; what really gathered interest in relation to children and media before screen time was "media violence" (as Schramm et al. had observed some decades earlier).

The timeline in figure 1 is telling. At least since 2004, and possibly earlier, interest in media violence has been steadily falling, though it seems unlikely that either violent content or, indeed, the problem of violence in society, has

been falling over this period. Meanwhile, through the same period, interest in screen time has been rising, at first steadily, but faster over the past decade than the one before, and with a striking jump in 2018.

What's going on? Explaining that "contemporary calls to reduce screen time are rooted in the 'television-free' movement that first emerged in the 1970s," Alper observes that as early as May 1975, when "reporting on the 1971 National Symposium on Children and Television, sponsored by the parent group Action for Children's Television, the *Hartford Courant* led with the headline 'Screen Time Calculated'" (2014: 20, 21). Notwithstanding this early mention, a search of the online news database Nexis reveals that for most of television's history, building on the influence of the cinema, the term "screen time" meant time on the screen—as in discussions of how special effects dominated a film's screen time, or how a fight took seven minutes of screen time, or actors battling for screen time, or the amount of screen time occupied by advertising.²

Everyday terminology only began to shift in the 1990s. In the May–June 1991 edition of Mother Jones Magazine, Tom Engelhardt wrote an article wittily entitled "The Primal Screen" in which, echoing Schramm et al., he expressed concern that "the screen offers only itself as an organizing principle for children's experience" (p.69), such that screen time has become more real for children than "real time." Though Engelhardt's concern was more with the quality than the quantity of viewing time, he distinguished what is on-screen from screen time, using the latter to refer to the daily hours that children sit in front of the multiple screens in the modern American home. ³



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Figure 5.1 Screen Time Takes Over from Media Violence. Google Trends analysis

Authoritative Rules Limiting Screen Time

From the early 1990s onwards, screen time, initially put in quotation marks, was increasingly used to refer to the time a person (in fact from the start, a child) spends in front of the screen, while the former usage was increasingly marked out as "on-screen time." After all, that was the decade in which television itself was being taken over by digital media of several kinds, each jostling for attention with television, often by being literally plugged into it (think of the video recorder or games console or early home computer).

A new terminology was needed—"viewing" no longer captured all the ways that children engaged with screens; "television" was no longer the only medium; people's time (and attention) was being commodified by a multimedia marketplace; and parents were more anxious about what was widely called "new media" than about the suddenly-familiar television. Researchers too were seeking new ways to measure all these different forms of media use, and several academic reports on the amount of time children spent on all the media available in the home gained significant press attention.⁴

In 1999 the Committee on Public Education of the AAP published an influential report on Media Education. It noted evidence linking children's time spent on television and other media to (1) the displacement of creative, active, or social pursuits; (2) aggressive and sexualized behavior, (3) tobacco and alcohol consumption; (4) obesity; and (5) attentional problems that adversely affect school performance. It then called for more and better (a) media education in schools; (b) scrutiny of media industry programming; (c) media education for pediatricians; and (d) pediatrician advice to parents on program selection, critical discussion of content with children, "limiting and focusing time spent with media," good parental role modeling, provision of alternative activities, media-free bedrooms, and avoidance of use of media as an electronic babysitter (p.342). Others may have explored the success of the first three recommendations, but there is no doubt that the fourth hit a nerve with the public.

Even so, there was no authoritative and widely-noticed mention of the notion of screen time until a couple of years later when, in 2001, the same committee published its report on media violence. With media violence then greatly in the public eye (as can be surmised from figure 1), this report urged that:

Pediatricians should encourage parents to adhere to the AAP Media Education recommendations, including making thoughtful media choices and coviewing with children, limiting screen time (including television, videos, computer and video games) to 1 to 2 hours per day, using the v-chip, avoiding violent video

games in homes where they may be observed or played by young children, and keeping children's bedrooms media free. (p. 1224)

Although the AAP Media Education report does say that "Pediatricians should urge parents to avoid television viewing for children under the age of 2 years" (p.342), in fact, the 1–2 hour rule came from the much earlier report of the AAP's Committee on Communications on Children, Adolescents, and Television (1990). Concerned primarily about rising obesity among American children, and observing that "In 1989 the average child in the United States still spent more time watching television than performing any other activity except sleeping," this recommended that pediatricians advise parents to limit "television time" to 1–2 hours per day, following the advice of consultant Vic Strasburger (2018: 43).

And thus the famous (or perhaps infamous) 2x2 screen time rules were born. Thereafter, the term "screen time" is used increasingly often, by the AAP, the mass media and more widely in academic and policy discourses. At the time of writing, the AAP policy collection includes 74 statements on screen time, beginning in 2001 and linking use of television (mainly) to children's obesity, attention problems, smoking, violent behavior, and other problems.

It might be of regret or even frustration to the Academy that the press seemingly took little note of their other recommendations (on media education, for instance, or on the value of parent-child co-viewing). Instead, their guidance was translated for parents by journalists on the one hand, and clinicians, nurses, and other health professionals on the other, and they were transformed from guidance into hard-and-fast rules. Rules that seemed to apply irrespective of media content, or of a child's circumstances or needs. Rules that implied a dose-response relationship—so that for every hour (or quarter hour, even) that the limit was exceeded, the outcomes for the child would be worse; even though the research does not support such precision, and even though the adverse outcome itself was generally unspecified.

The Revision and Fall of Screen Time

The idea of screen time worked because it is simple, measurable, and memorable, needed by parents facing new technological uncertainties, and has science behind it. But it didn't work for similar reasons: its simplicity overrides the specifics of screen content and context; the focus on time measurement precludes attention to the quality of a child's engagement with the screen; it does not, in fact, help parents either in skilling their child for a digital future or building their resilience to technologically mediated harms.

Recognizing that children's media lives were changing, in 2016, the AAP revised its recommendations to offer families greater flexibility (Council on Communications and Media, 2016). The ban on screen time for infants and toddlers was brought down to those under 18 months old, and an exception made for interactive video chats. From 18 months, high-quality television content is acceptable, provided a parent watches with the child. For 2- to 5-year-olds, screen time should be limited to one hour per day, again, with parents present to help to interpret the content.

For older children, families are urged develop a "media plan" (the AAP provides an interactive tool), including designated "media-free" times. And parents are repositioned from policing screen time to acting as their child's "media mentor," including managing their own screen time as a model for their child. This last goes some way toward recognizing that, in the digital age, parents themselves have a measure of digital interests and expertise, and this could support their parenting and be of value to their child.

Although this revision was based on a new review of the scientific literature, one that recognized some positive as well as negative effects of screen time (Chassiakos et al., 2016), the evidence base has weaknesses. Most studies report correlations that are unable to substantiate the causal claim that increased screen time results in increased harm to children. Still, most of the research comes from the heyday of television rather than addressing today's digital and multimedia environment, especially its interactive forms. The evidence to support a one-hour limit for 2–5 year olds is hard to find, and only one study is cited on the benefits of Skype interactions for 18 month olds.

More importantly, the 2016 revision was too little, too late. For families, the idea of counting screen time as an indicator of likely harm has become increasingly problematic. For parents whose child plays several hours of sport and then likes to collapse in front of a screen, the idea that such viewing will cause obesity seems misplaced. For parents whose toddlers love to play in front of a noisy screen even though they're hardly looking at it, counting hours will surely raise unnecessary anxieties. For parents whose children are learning coding or creating their own video content or turning to You-Tube to learn a new guitar chord, the lack of specificity about "screen use" is undermining. The rationale for a media plan, meanwhile, is sensible, and carefully argued, but it risks seeming to be middle-class proselytizing.

The most striking feature of Figure 1 comes in the most recent period when, far from falling, attention to screen time sharply rises. Perhaps this

was due to Twenge's (2017) book positioning the iPhone as the latest new technology to raise questions about screen time harms and children's welfare. Certainly her September 2017 article in *The Atlantic* entitled "Have smartphones destroyed a generation?" gathered worldwide attention. But it generated considerable criticism too, for rehashing the moral panics already addressed in the long history of previously "new" media, for inferring causation from correlation, neglecting to examine a range of more likely causes of childhood ills, and over-interpreting descriptive statistics (Livingstone, 2018; Orben & Przybylski, 2019).

Indeed, recent years have been equally notable for a series of high profile reviews of the field drawing very modest conclusions regarding the importance of screen time. The World Health Organization's (2019) *Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age* found little convincing evidence that screen time *per se* was the problem. In the UK, the Royal College of Paediatrics and Child Health published a systematic review of reviews which concluded that "the contribution of screen time to wellbeing is small when considered together with the contribution of sleep, physical activity, eating and bullying as well as poverty" (p.3). Odgers and Jensen (2020: 336) concluded from their recent review that:

The most recent and rigorous large-scale preregistered studies report small associations between the amount of daily digital technology usage and adolescents' well-being that do not offer a way of distinguishing cause from effect and, as estimated, are unlikely to be of clinical or practical significance.

So the apparent recent peak in interest in screen time may evidence not its rise but its fall. In practical terms, this process has been unexpectedly accelerated by the COVID-19 pandemic of 2019–2020, for suddenly children globally, and especially in the United States and other wealthy countries where Internet access is widespread, have found themselves relying on screen media for their learning, information, communication, and entertainment. But in terms of policy and parenting advice, the controversy is revived—two hours a day of screen time may seem today like a quaint limit, but whether the result is good or bad for kids—this debate will, it seems, run and run:

Social Media Study Reveals Parents Ignore Screen Time Limits during COVID-19 (Forbes, 5/28/20).

Coronavirus Lockdowns Are Worsening Child Obesity due to Kids Spending an extra FIVE HOURS Per Day in Front of a Screen (*The Daily Mail*, 6/4/20)

Children's Daily Screen Time Skyrockets under Coronavirus Lockdown, and That's Not Necessarily a Bad Thing (*The Oregonian*, 5/28/20)

Toward a Solution

Wartella and Robb (2008: 8) argue that "not only is children's use of time of concern to parents, it is also public policy concern," and has been "at the root of the recurring controversies about children and media" over the past century, because "how children and adolescents spent their time became a barometer of their health and welfare during this period." But, after a huge scientific and policy effort, it is still not clear what kind of a barometer time use is, or what it tells us. However, from this effort, several points have become clear, and perhaps these show the way forward for those advising families on their children's media engagement, and for families themselves.

First, to paraphrase Schramm et al., no informed person can say simply that screen time is bad or good for children. Public anxieties always have and doubts always will arise as society innovates and embraces technological change. While this is too often panicky, extreme in its claims and often prejudiced in castigating those who use the technology "too much" or somehow "badly," the scientific attention and debate thereby attracted allows us to understand better the changes we are living through, and to reach some balanced recommendations.

Second, while parents talk about screen time rules with anxiety and guilt, at the same time their actions show how, in diverse and context-appropriate ways, they actively seek to engage with technological change in ways that are meaningful to them. What matters surely is to encourage families to gain needed skills, deliberate together on their values, and find a way of living in today's digital world, and bringing up their children, that suits their circumstances and interests.

Third, it is important to recognize that, salient though they are, digital technologies are but one of a long list of influences on children's welfare and life chances. Many other factors have repeatedly been shown to matter more. Some of these are under parents' control, more or less. Many of them are not, especially forms of socio-economic deprivation and other structural disadvantages that families face. To really make a difference to children's lives, therefore, we need to worry less about the child in front of the screen and pan back to see the bigger picture.

Notes

- 1. All italics from Schramm et al. are in the original.
- 2. The Merriam-Webster dictionary traces the first use of 'screen time' in this sense to 1921.
- 3. The Guardian claims that this is the first mention of screen time in its current use, but clearly the Hartford Courant long preceded this. https://www.theguardian.com/books/2019/feb/01/from-cinema-to-smartphones-how-screen-time-became-a-problem
- 4. Notably, reports by the Annenberg Public Policy Center (1999) and the first UCLA Internet Report (2000).

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