Future research and recommendations about kids and screen

Fortunately, a new longitudinal data set may help illuminate some of the outstanding questions about adolescents and screen time. In 2015, the National Institutes of Health began funding the [Adolescent Brain Cognitive Development](https://www.addictionresearch.nih.gov/abcd-study) (ABCD) Study, the largest ever longitudinal study on teen brain and behavioral development in the United States. More than 10,000 9- to 10-year-olds have been recruited and are being followed to young adulthood. Screen time data are among the information being collected, and researchers are already using the first wave: Goldfield’s cognition and impulsivity studies drew from ABCD data. “We’re pretty excited about this database,” he says.

In the meantime, some experts recommend a mindful approach to media. Simply banning screens may backfire, says Jon Lasser, PhD, a psychologist at Texas State University and co-author, with Mike Brooks, PhD, of the 2018 book “Tech Generation: Raising Balanced Kids in a Hyper-Connected World.”

“It’s important for kids to develop the capacity to self­-regulate,” Lasser says, “and parents who try to micromanage screen time may inadvertently interfere with that self-­regulatory development.”

Lasser and Brooks include a tool in their book called the Family Assessment of Screen Time, or FAST, which family members can use to gauge their feelings about screen time—their own and each other’s. The tool is similar to AAP’s Family Media Use Plan, in which parents and children, 5 years and older, negotiate limits and boundaries around screen usage.

Finally, parents should keep co-viewing media with their kids. Keeping an open line of communication around media helps protect kids when they inevitably run into content they aren’t ready to see, Strasburger says. A healthy, nonrancorous relationship around media also makes it easier to enforce boundaries when required.

“The number one recommendation that we give to parents is [to] spend time engaged with their kids,” Lasser says. “It’s simple, it’s good parenting and it promotes a healthy relationship.”

Key findings to date

1. Children under age 2 don’t learn from screens as well as they do from live interactions.
2. Co-viewing media with parents can protect young kids against many downsides of screen time.
3. Television viewing time is correlated with obesity in youth.
4. Meeting sleep, screen time and physical activity guidelines is associated with the best mental health outcomes in teens, but few adolescents meet all three. <https://www.apa.org/monitor/2020/04/cover-kids-screens>

PIMU

## How can Problematic Interactive Media Use (PIMU) affect children?

Ongoing [research](https://www.ncbi.nlm.nih.gov/pubmed/25212714) shows that when media are overused or used compulsively, they can interfere with a child’s daily life and lead to poor school performance, family conflicts, emotional and psychological concerns and relationship problems. While these problems have been called a variety of different names such as, “Internet Addiction”, “[Internet Gaming Disorder](https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/DSM/APA_DSM-5-Internet-Gaming-Disorder.pdf),” “[Gaming Disorder](http://www.who.int/features/qa/gaming-disorder/en/),” and “Media Addiction”, these terms all refer to Problematic Interactive Media Use (PIMU).

* [Problematic Interactive Media Use](http://www.springerpub.com/internet-addiction-in-children-and-adolescents.html) often appears in one of the following four ways:
  + Video gaming–including excessive gaming on a computer, console, or mobile device, where the child or teen plays for hours on end, often only taking breaks when forced.
  + Social media–including using social media as a primary way to connect with others instead of through face-to-face communication.
  + Pornography–including obsessive pornography use that results in sexual dysfunction.
  + Information-seeking–including spending hours of time online surfing websites and binge-watching videos in place of other activities.
* While one of the most common symptoms of PIMU is a fixation with screen media, other symptoms exist. If your child changes in any of the following areas, be sure to talk to your child, and your child’s doctor:
  + Poorer [personal hygiene](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3898449/)
  + Decrease in [school performance](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3830174/)
  + Social [withdrawal](http://www.sciencedirect.com/science/article/pii/S0149763416305917)
* Children and teens suffering from PIMU may also suffer from other conditions, such as [ADHD](https://www.ncbi.nlm.nih.gov/pubmed/25466226), [social anxiety](https://www.ncbi.nlm.nih.gov/pubmed/24939704), [depression](https://www.ncbi.nlm.nih.gov/pubmed/24457034), and [substance use](https://www.ncbi.nlm.nih.gov/pubmed/25662370). PIMU can also contribute to health problems, such as [weight gain](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3898449/), [eating disorders](https://www.ncbi.nlm.nih.gov/pubmed/23952625), and problems [sleeping](http://link.springer.com/article/10.1007/s11469-013-9461-2).
* Screen media cannot be avoided easily, as children and teens will need access to the Internet for school, socializing, and entertainment. Review how long, how often, and how many screens are used in order to better understand how media are used by all members of the family—including yourself.

## What YOU Can Do

Although many children and teens use the internet, mobile devices and video games, making sure that they do so as part of a balanced diet of experiences can help ensure that they don’t overuse or develop compulsive behaviors around media use. Here are several suggestions to help you guide your child’s media use:

Use Media Mindfully

Talk to your kids about using media purposefully and only when appropriate (for example, using a tablet to research a school project is a great use of media, but inappropriate during family meal time). Set time limits and parameters around media use with your children, and make sure that these expectations are enforced. [Research](https://www.ncbi.nlm.nih.gov/pubmed/20547642) shows that children are more likely to abide by media use rules when they are held accountable. Designate time for media use such as playing video games, socializing and completing homework, then turn the devices off and engage in a non-media related activity.

Notice Problematic Behaviors

Know how your children are using media, and look out for [possible signs of problematic behaviors](http://www.education.vic.gov.au/Documents/about/programs/bullystoppers/smproblematic.pdf) such as; spending time online or watching TV instead of participating in other activities, playing video games or using a tablet for a longer period of time than agreed, lying about the amount of time spent with media in order to cover-up excessive usage, using video games and the internet to escape from other issues such as anxiety and depression. If these behaviors continue after you address them, be sure to consult your child’s doctor.

### Be a Media Role Model

Be aware of how you are using media, especially when your child is present. Know that even if they are young, they are aware of your behaviors. If you are spending excessive amounts of time using media such as the internet or video games, your child may believe that this behavior is acceptable and even begin to overuse media themselves. Additionally, modeling healthy media use practices by using media with your children can help them learn how to balance their media use with other important activities.

### Remove Screens from Children’s Bedrooms

Keep TVs, computers and video game systems out of children’s bedrooms, and make sure that all other internet connected devices such as tablets and smartphones are left in a common room or your bedroom to charge overnight. By keeping these electronics in a common area, parents can monitor their use more easily and be aware of how much media their children are using and if the content is developmentally appropriate.

If you are concerned that your child may have a health related issue connected to her/his media use, please schedule an appointment at our [Clinic for Interactive Media and Internet Disorders (CIMAID)](https://digitalwellnesslab.org/parents/clinical-care/) at Boston Children’s Hospital.

<https://digitalwellnesslab.org/parents/pimu/>

Technologies design for an addiction

One of the things that Wade L. Robinson discusses in his book, *Engineering Ethics*, is the importance of avoiding “error-provocative” designs, in which the technological artifact not only allows for the possibility of human fallibility but actively steers the user into the direction of harm. He spends a great deal of time discussing stove knobs, for example. I imagine most of us have had the frustration of thinking that we are activating one burner of the stove, say the left front, only to find that another burner, the back right, has actually heated. It turns out that every stove manufacturer has a slightly different way of aligning the knobs to the burners, and this design problem is surprisingly complex. Most of the time, the mismatch between knobs and burners simply causes frustration, but it can cause a fire in some cases, and it only takes a minute or two for a house fire to reach out-of-control levels. Robinson also discusses a plane crash in Colombia that was caused by a glitch in the autopilot software and other instances of design problems leading to injury and death, like the ignition switch failures in GM cars back in 2015.



Source: Deposit Photos

Tech companies now face criticism for breakdowns caused by design. Recently much discussion has been focused on social media companies and the way that they manipulate human psychology to keep eyeballs glued to the screen. There is the problem of the “time suck” related to compulsively checking Facebook, but there are also the social problems that these technologies appear to be exacerbating. [Even some tech executives](https://www.theguardian.com/media/2017/dec/20/facebook-twitter-mental-health-sean-parker) have been joining the criticism of Silicon Valley tech giants or are being forced to go on the defensive after years of wide-eyed enthusiasm for social media. A [video](https://www.realclearpolitics.com/video/2017/12/11/fmr_facebook_exec_social_media_is_ripping_our_social_fabric_apart.html) of a Stanford interview with former Facebook executive Chamath Palihapitiya has been making the rounds on the internet, as Palihapitiya directs absolutely devastating criticism towards the social media giants. “The short-term [dopamine](https://www.psychologytoday.com/us/basics/dopamine)-driven feedback loops that we have created are destroying how society works,” Palihapitiya says, having grown jaded with the need for venture-funded, short-term gains at the expense of quality of life and civic dialogue. “It literally is a point now where I think we have created tools that are ripping apart the social fabric of how society works. That is truly where we are. I would encourage all of you, as the future leaders of the world to really internalize how important this is. If you feed the beast, that beast will destroy you.” The fact that this criticism comes from a high-level tech insider makes it that much more shocking.

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Think for a second about how some of the most powerful technology the world has ever seen is now being used not to solve world hunger or send astronauts to the moon, but to get people to click on ads and buy stuff on Amazon. The feedback loops of social media also drive political polarization and [confirmation bias](https://www.psychologytoday.com/us/basics/motivated-reasoning), as we are constantly pushed in the direction of content that aligns with what we already believe and fits with the demographic groups to which we already belong. As we get more and more used to the creep of technology into our lives, this comes to seem completely normal. Those of us who remember life before the internet will be fewer and fewer, and eventually, no one will know what life was like without constant access to the internet and social media. No one will remember what it was like to eat dinner without taking a picture of it or have a conversation without referencing a meme. All of this “disruption” is driven by technologies purposely designed to be addictive.

Nir Eyal, a friend of mine from college, wrote a book called *Hooked: How to Build Habit-Forming Products*, in which he outlines, step-by-step, the [operant conditioning](https://www.psychologytoday.com/us/basics/behaviorism) tricks used to make an app addictive. By using variable rewards, in which a digital “treat,” like Reddit upvotes and gold, the gems and coins in various games, the likes in Facebook etc., which are only sometimes distributed, the user comes to anticipate the slight rush of the fleeting reward. Because the reward is not reliable, the twitchy behavior is triggered, in which we feel like we have to keep checking for messages, likes, and status updates. Eyal is a consultant for companies looking to develop these habit-forming features in their products, but, to his credit, he does include a section on ethics in his book, titled, “The [Morality](https://www.psychologytoday.com/us/basics/ethics-and-morality) of Manipulation,” and he avoids the trap of fobbing off responsibility for addictive products onto the end user. He stresses that designers should take the good of the end user into account when offering a digital product or service. But he also implicitly recognizes that we are conducting a massive, uncontrolled experiment on the human psyche with the advent of social media and digital [advertising](https://www.psychologytoday.com/us/basics/consumer-behavior).

In my experience, some people have the ability to override the addictive impulse, and others less so. All of us, to some extent, can say to ourselves, “Okay, if I scroll all the way to the bottom of this feed, it will just load a new batch of entries.” The continuous nature of feeds on Facebook and Reddit leave no natural stopping points where it would make sense to just quit surfing. Apps that swipe left and right mean that there are loops in all directions: up, down, and sideways. So we can logically know that the feed keeps going forever, but can we take the next step and disconnect from the platform? There are multiple sites dedicated to [video game addiction](http://ww.bbc.com/news/technology-42541404), with some games, [World of Warcraft](http://www.wowaholics.org/) being the most famous example, leading users to quit their jobs, neglect children, and get [divorced](https://www.psychologytoday.com/us/basics/divorce)--all just to keep playing the game. As games get even more immersive, with augmented reality and virtual reality features, combined with monetized incentives and built-in conditioning, the addictive aspects seem likely to increase in the years ahead. So far, Facebook and Twitter use are less likely to be stigmatized than compulsive video game playing, but they are arguably just as addictive.

You may be reading this and thinking, “Okay, so people are checking their phones all the time, posting pictures of themselves on Instagram, and getting addicted to dorky little games, but what’s the problem? Where’s the harm?” Well, starting with actual death, the [CDC estimates](https://www.cdc.gov/motorvehiclesafety/distracted_driving/index.html) that every day in the United States, nine people are killed and 1000 are injured as a result of distracted driving. While distracted driving is nothing new (Americans have been eating hamburgers and fries while driving for decades), texting while driving is particularly dangerous because it combines [multiple types of distraction](https://www.cdc.gov/motorvehiclesafety/distracted_driving/index.html). Looking at a text takes the driver’s eyes off the road (visual distraction), at least one hand off the wheel (manual distraction), and the mind off the task (cognitive distraction). It’s easy to say that people should not text and drive, and many states and countries have passed laws to this effect. But the design problem, the “error-provocative” aspect of the technology, has not been addressed in a meaningful way. It seems likely that more accidents will occur, such as the [recent train derailment](https://www.nytimes.com/2017/12/19/us/amtrak-derailment-washington.html) in Washington, in which the conductor was distracted, possibly as a result of cellphone use, and three people were killed. A comprehensive solution would link the cellphone to the heavy machinery in such a way that the engine would not run without certain cell phone features being disabled.

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To shift to more intangible harms, the problem of wage stagnation has gotten a lot of headlines in recent years as income inequality grows. Meanwhile, [productivity](https://www.psychologytoday.com/us/basics/productivity) has soared. The excess productivity has gone towards increasing corporate profits and C-suite pay, but workers have been largely shut out of the monetary benefits. Some of the gains in productivity and efficiency, I suspect, are going directly to social media use, in the absence of increased wages. Even as workers feel more [stressed](https://www.psychologytoday.com/us/basics/stress) and undervalued than ever before, they are not working fewer hours. Instead, they channel job-related stress and dissatisfaction into social media and digital games, in a slowdown strike of massive proportions. Users in the United States now spend about [five hours per day](https://techcrunch.com/2017/03/03/u-s-consumers-now-spend-5-hours-per-day-on-mobile-devices/) on smartphones, with television now being outpaced by time spent on apps. Instead of a shorter, more compressed workday, work is now spread throughout the waking hours, with frequent “breaks” on social media. Of course, these “breaks” are actually *unpaid work* performed on behalf of the social media companies themselves. Every vacation photo, every email, every digital interaction is now a vector for big data profiteering. This would not be a problem if life satisfaction and overall health were actually increasing, but it seems to be the case that incomes are stagnating and lifespan is actually decreasing in some cases.

According to a paper by economist Devrim Dumdalug in the*International Review of Economics*, income levels in the United States doubled in the postwar period, but self-reported [happiness](https://www.psychologytoday.com/us/basics/happiness) barely budged. Since the economic downturn of 2007-2008, we have a situation of increased productivity but with stagnant wages. Again, this would not be a problem if workers were generally happy and healthy, but instead, we have huge public health problems like obesity, diabetes, and high blood pressure, along with higher rates of [depression](https://www.psychologytoday.com/us/basics/depression) and [anxiety](https://www.psychologytoday.com/us/basics/anxiety), suggesting that digital entertainment is not the best way to spend leisure time. Given the choice between a walk outside and twenty minutes on Facebook, the better choice for both mental and physical health would be taking a walk outside. My main point here is that people are not making the choice for better health because of the addictive features built into the technology. Rather than simply blaming the end-user, we should hold the technology companies accountable for the way that they deliberately foster addictive behavior.

We need to stop using words like “addictive” and “disruptive” as though they were compliments and demand that both corporations and governments take the public good into account when designing and regulating new products and services. Technology by itself doesn’t automatically improve our lives: it has to be used in conscious and deliberative ways to improve our wellbeing. Designers and engineers must stop building distraction into the systems that we use because our safety and wellbeing are at stake. In the meantime, it seems we are left to our own devices (no pun intended!) to stop scrolling down and start living the sorts of lives that we want to live. The first step is to realize that [addiction](https://www.psychologytoday.com/us/basics/addiction) is built right into the app and to become more conscious users of social media. Then we can begin to reclaim our time, to live more sane, peaceful, and healthy lives. We don’t have to give up technology, even if that were possible, but we do have to be more careful in our use of it.

https://www.psychologytoday.com/us/blog/boundless/201801/technology-designed-addiction

# Dark Patterns

# **What are dark patterns?**

Dark patterns are tricks used in websites and apps that make you do things that you didn't mean to, like buying or signing up for something. The purpose of this site is to spread awareness and to shame companies that use them.

# **How do dark patterns work?**

When you use websites and apps, you don’t read every word on every page - you skim read and make assumptions. If a company wants to trick you into doing something, they can take advantage of this by making a page look like it is saying one thing when it is in fact saying another. You can defend yourself by learning about dark patterns on this site.

# **Types of dark pattern**

## [Trick questions](https://www.darkpatterns.org/types-of-dark-pattern/trick-questions)

While filling in a form you respond to a question that tricks you into giving an answer you didn't intend. When glanced upon quickly the question appears to ask one thing, but when read carefully it asks another thing entirely.

## [Sneak into basket](https://www.darkpatterns.org/types-of-dark-pattern/sneak-into-basket)

You attempt to purchase something, but somewhere in the purchasing journey the site sneaks an additional item into your basket, often through the use of an opt-out radio button or checkbox on a prior page.

## [Roach motel](https://www.darkpatterns.org/types-of-dark-pattern/roach-motel)

You get into a situation very easily, but then you find it is hard to get out of it (e.g. a premium subscription).

## [Privacy zuckering](https://www.darkpatterns.org/types-of-dark-pattern/privacy-zuckering)

You are tricked into publicly sharing more information about yourself than you really intended to. Named after Facebook CEO Mark Zuckerberg.

## [Price comparison prevention](https://www.darkpatterns.org/types-of-dark-pattern/price-comparison-prevention)

The retailer makes it hard for you to compare the price of an item with another item, so you cannot make an informed decision.

## [Misdirection](https://www.darkpatterns.org/types-of-dark-pattern/misdirection)

The design purposefully focuses your attention on one thing in order to distract your attention from another.

## [Hidden costs](https://www.darkpatterns.org/types-of-dark-pattern/hidden-costs)

You get to the last step of the checkout process, only to discover some unexpected charges have appeared, e.g. delivery charges, tax, etc.

## [Bait and switch](https://www.darkpatterns.org/types-of-dark-pattern/bait-and-switch)

You set out to do one thing, but a different, undesirable thing happens instead.

## [Confirmshaming](https://www.darkpatterns.org/types-of-dark-pattern/confirmshaming)

The act of guilting the user into opting into something. The option to decline is worded in such a way as to shame the user into compliance.

## [Disguised ads](https://www.darkpatterns.org/types-of-dark-pattern/disguised-ads)

Adverts that are disguised as other kinds of content or navigation, in order to get you to click on them.

## [Forced continuity](https://www.darkpatterns.org/types-of-dark-pattern/forced-continuity)

When your free trial with a service comes to an end and your credit card silently starts getting charged without any warning. In some cases this is made even worse by making it difficult to cancel the membership.

## [Friend spam](https://www.darkpatterns.org/types-of-dark-pattern/friend-spam)

The product asks for your email or social media permissions under the pretence it will be used for a desirable outcome (e.g. finding friends), but then spams all your contacts in a message that claims to be from you.

<https://www.darkpatterns.org/types-of-dark-pattern>

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just couple sentences

# Intelectual property. Do not steal etc

## Privacy Act

**Privacy Act 2020 and the Privacy Principles**

[The Privacy Act 2020](http://www.legislation.govt.nz/act/public/2020/0031/latest/LMS23223.html) governs how organisations and businesses can collect, store, use and share your information.

It ensures that:

* *you know when your information is being collected*
* *your information is used and shared appropriately*
* *your information is kept safe and secure*
* *you can get access to your information*

There are also [Privacy Codes of Practice](https://www.privacy.org.nz/privacy-act-2020/codes-of-practice/) that have privacy rules for personal information in specific areas, such as health, telecommunications, and credit reporting.

Visit [Your Rights](https://www.privacy.org.nz/your-rights/your-privacy-rights/) to learn more about your privacy rights under the Act. If you collect personal information, visit [Your Responsibilities](https://www.privacy.org.nz/responsibilities/your-obligations/) to learn about your obligations when collecting, storing and sharing this information.

The Privacy Act 2020 came into force on 1 December 2020, replacing the Privacy Act 1993. [Visit our comparison table](https://www.privacy.org.nz/publications/guidance-resources/comparing-the-privacy-acts-1993-and-2020/) for a section-by-section comparison of the old and new Privacy Acts.

The Privacy Act has 13 privacy principles that govern how businesses and organisations should collect, handle and use personal information.

The links below explore each of the privacy principles in more detail. We also have case notes that show real-life examples of how the principles have been applied.

* [Principle 1   - Purpose for collection](https://privacy.org.nz/privacy-act-2020/privacy-principles/1/)
* [Principle 2   - Source of information - collection from the individual](https://privacy.org.nz/privacy-act-2020/privacy-principles/2/)
* [Principle 3   - What to tell the individual about collection](https://privacy.org.nz/privacy-act-2020/privacy-principles/3/)
* [Principle 4   - Manner of collection](https://privacy.org.nz/privacy-act-2020/privacy-principles/4/)
* [Principle 5   - Storage and security of information](https://privacy.org.nz/privacy-act-2020/privacy-principles/5/)
* [Principle 6   - Providing people access to their information](https://privacy.org.nz/privacy-act-2020/privacy-principles/6/)
* [Principle 7   - Correction of personal information](https://privacy.org.nz/privacy-act-2020/privacy-principles/7/)
* [Principle 8   - Ensure accuracy before using information](https://privacy.org.nz/privacy-act-2020/privacy-principles/8/)
* [Principle 9   - Limits on retention of personal information](https://privacy.org.nz/privacy-act-2020/privacy-principles/9/)
* [Principle 10 - Use of personal information](https://privacy.org.nz/privacy-act-2020/privacy-principles/10/)
* [Principle 11 - Disclosing personal information](https://privacy.org.nz/privacy-act-2020/privacy-principles/limits-on-disclosure-of-personal-information-principle-11/)
* [Principle 12 - Disclosure outside New Zealand](https://privacy.org.nz/privacy-act-2020/privacy-principles/12/)
* [Principle 13 - Unique identifiers](https://privacy.org.nz/privacy-act-2020/privacy-principles/13/)
* https://privacy.org.nz/privacy-act-2020/privacy-principles/