

# The Guardian

## **Your attention didn't collapse. It was stolen**

**Social media and many other facets of modern life are destroying our ability to concentrate. We need to reclaim our minds while we still can**

When he was nine years old, my godson Adam developed a brief but freakishly intense obsession with Elvis Presley. He took to singing Jailhouse Rock at the top of his voice with all the low crooning and pelvis-jiggling of the King himself. One day, as I tucked him in, he looked at me very earnestly and asked: "Johann, will you take me to Graceland one day?" Without really thinking, I agreed. I never gave it another thought, until everything had gone wrong.

Ten years later, Adam was lost. He had dropped out of school when he was 15, and he spent almost all his waking hours alternating blankly between screens – a blur of YouTube, WhatsApp and porn. (I've changed his name and some minor details to preserve his privacy.) He seemed to be whirring at the speed of Snapchat, and nothing still or serious could gain any traction in his mind. During the decade in which Adam had become a man, this fracturing seemed to be happening to many of us. Our ability to pay attention was cracking and breaking. I had just turned 40, and wherever my generation gathered, we would lament our lost capacity for concentration. I still read a lot of books, but with each year that passed, it felt more and more like running up a down escalator. Then one evening, as we lay on my sofa, each staring at our own ceaselessly shrieking screens, I looked at him and felt a low dread. "Adam," I said softly, "let's go

to Graceland.” I reminded him of the promise I had made. I could see that the idea of breaking this numbing routine ignited something in him, but I told him there was one condition he had to stick to if we went. He had to switch his phone off during the day. He swore he would.

When you arrive at the gates of Graceland, there is no longer a human being whose job is to show you around. You are handed an iPad, you put in little earbuds, and the iPad tells you what to do – turn left; turn right; walk forward. In each room, a photograph of where you are appears on the screen, while a narrator describes it. So as we walked around we were surrounded by blank-faced people, looking almost all the time at their screens. As we walked, I felt more and more tense. When we got to the jungle room – Elvis’s favourite place in the mansion – the iPad was chattering away when a middle-aged man standing next to me turned to say something to his wife. In front of us, I could see the large fake plants that Elvis had bought to turn this room into his own artificial jungle. “Honey,” he said, “this is amazing. Look.” He waved the iPad in her direction, and began to move his finger across it. “If you swipe left, you can see the jungle room to the left. And if you swipe right, you can see the jungle room to the right.”

His wife stared, smiled, and began to swipe at her own iPad. I leaned forward. “But, sir,” I said, “there’s an old-fashioned form of swiping you can do. It’s called turning your head. Because we’re here. We’re in the jungle room. You can see it unmediated. Here. Look.” I waved my hand, and the fake green leaves rustled a little. Their eyes returned to their screens. “Look!” I said. “Don’t you see? We’re *actually there*. There’s no need for your screen. *We are in the jungle room.*” They hurried away. I turned to Adam, ready to laugh about it all – but he was in a corner, holding his phone under his jacket, flicking through Snapchat.

At every stage in the trip, he had broken his promise. When the plane first touched down in New Orleans two weeks before, he took out his phone while we were still in our seats. “You promised not to use it,” I said. He replied: “I meant I wouldn’t make phone calls. I can’t not use Snapchat and texting, obviously.” He said this with baffled honesty, as though I had asked him to hold his breath for 10 days. In the jungle room, I suddenly snapped and tried to wrestle his phone from his grasp, and he stomped away. That night I found him in the Heartbreak Hotel, sitting next to a swimming pool (shaped like a giant guitar), looking sad. I realised as I sat with him that, as with so much anger, my rage towards him was really anger towards myself. His inability to focus was something I felt happening to me too. I was losing my ability to be present, and I hated it. “I know something’s wrong,” Adam said, holding his phone tightly in his hand. “But I have no idea how to fix it.” Then he went back to texting.



📷 Johann Hari at his home in London. Photograph: Antonio Olmos/The Observer

I realised then that I needed to understand what was really happening to him and to so many of us. That moment turned out to be the start of a journey that transformed how I think about attention. I travelled all over the world in the next three years, from Miami to Moscow to Melbourne, interviewing the leading experts in the world about focus. What I learned persuaded me that we are not now facing simply a normal anxiety about attention, of the kind every generation goes through as it ages. We are living in a serious attention crisis – one with huge implications for how we live. I learned there are twelve factors that have been proven to reduce people’s ability to pay attention and that many of these factors have been rising in the past few decades – sometimes dramatically.

I went to Portland, Oregon, to interview Prof Joel Nigg, who is one of the leading experts in the world on children’s attention problems, and he told me we need to ask if we are now developing “an attentional pathogenic culture” – an environment in which sustained and deep focus is harder for all of us. When I asked him what he would do if he was in charge of our culture and he actually wanted to destroy people’s attention, he said: “Probably what our society is doing.” Prof Barbara Demeneix, a leading French scientist who has studied some key factors that can disrupt attention, told me bluntly: “There is no way we can have a normal brain today.” We can see the effects all around us. A small study of college students found they now only focus on any one task for 65 seconds. A different study of office workers found they only focus on average for three minutes. This isn’t happening because we all individually became weak-willed. Your focus didn’t collapse. It was stolen.

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When I first got back from Graceland, I thought my attention was failing because I wasn't strong enough as an individual and because I had been taken over by my phone. I went into a spiral of negative thoughts, reproaching myself. I'd say – you're weak, you're lazy, you're not disciplined enough. I thought the solution was obvious: be more disciplined, and banish your phone. So I went online and booked myself a little room by the beach in Provincetown, at the tip of Cape Cod. I announced triumphantly to everyone – I am going to be there for three months, with no smartphone, and no computer that can get online. I'm done. I'm tired of being wired. I knew I could only do it because I was very lucky and had money from my previous books. I knew it couldn't be a long-term solution. I did it because I thought that if I didn't, I might lose some crucial aspects of my ability to think deeply. I also hoped that if I stripped everything back for a time, I might start to be able to glimpse the changes we could all make in a more sustainable way.

In my first webless week, I stumbled around in a haze of decompression. Provincetown is a little gay resort town with the highest proportion of same-sex couples in the US. I ate cupcakes, read books, talked with strangers and sang songs. Everything radically slowed down. Normally I follow the news every hour or so, getting a drip-feed of anxiety-provoking facts and trying to smush them together into some kind of sense. Instead, I simply read a physical newspaper once a day. Every few hours, I would feel an unfamiliar sensation gurgling inside me and I would ask myself: what is that? Ah, yes. Calm.

Later, I realised when I interviewed the experts and studied their research that there were many reasons why my attention was starting to heal from that first day. Prof Earl Miller, a neuroscientist at Massachusetts Institute of Technology, explained one to me. He said “your brain can only produce one or two thoughts” in your conscious mind at once. That's it. “We're very, very single-

minded.” We have “very limited cognitive capacity”. But we have fallen for an enormous delusion. The average teenager now believes they can follow six forms of media at the same time. When neuroscientists studied this, they found that when people believe they are doing several things at once, they are actually juggling. “They’re switching back and forth. They don’t notice the switching because their brain sort of papers it over to give a seamless experience of consciousness, but what they’re actually doing is switching and reconfiguring their brain moment-to-moment, task-to-task – [and] that comes with a cost.” Imagine, say, you are doing your tax return, and you receive a text, and you look at it – it’s only a glance, taking three seconds – and then you go back to your tax return. In that moment, “your brain has to reconfigure, when it goes from one task to another”, he said. You have to remember what you were doing before, and you have to remember what you thought about it. When this happens, the evidence shows that “your performance drops. You’re slower. All as a result of the switching.”

This is called the “switch-cost effect”. It means that if you check your texts while trying to work, you aren’t only losing the little bursts of time you spend looking at the texts themselves – you are also losing the time it takes to refocus afterwards, which turns out to be a huge amount. For example, one study at the Carnegie Mellon University’s human computer interaction lab took 136 students and got them to sit a test. Some of them had to have their phones switched off, and others had their phones on and received intermittent text messages. The students who received messages performed, on average, 20% worse. It seems to me that almost all of us are currently losing that 20% of our brainpower, almost all the time. Miller told me that as a result we now live in “a perfect storm of cognitive degradation”.

For the first time in a very long time, in Provincetown I was doing one thing at a time, without being interrupted. I was living within

the limits of what my brain could actually handle. I felt my attention growing and improving with every day that passed, but then, one day, I experienced an abrupt setback. I was walking down the beach and every few steps I saw the same thing that had been scratching at me since Memphis. People seemed to be using Provincetown simply as a backdrop for selfies, rarely looking up, at the ocean or each other. Only this time, the itch I felt wasn't to yell: You're wasting your lives, put the damn phone down. It was to yell: Give *me* that phone! *Mine!* For so long, I had received the thin, insistent signals of the web every few hours throughout the day, the trickle of likes and comments that say: I see you. You matter. Now they were gone. Simone de Beauvoir said that when she became an atheist, it felt like the world had fallen silent. Losing the web felt like that. After the rhetorical heat of social media, ordinary social interactions seemed pleasing but low volume. No normal social interaction floods you with hearts.



📷 Provincetown: a place to switch off. Photograph: Maddie Meyer/Getty Images

I realised that to heal my attention, it was not enough simply to strip out distractions. That makes you feel good at first – but then it creates a vacuum where all the noise was. I realised I had to fill the vacuum. To do that, I started to think a lot about an area of psychology I had learned about years before – the science of flow states. Almost everyone reading this will have experienced a flow state at some point. It's when you are doing something meaningful to you, and you really get into it, and time falls away, and your ego seems to vanish, and you find yourself focusing deeply and effortlessly. Flow is the deepest form of attention human beings can offer. But how do we get there?

I later interviewed Prof Mihaly Csikszentmihalyi in Claremont, California, who was the first scientist to study flow states and researched them for more than 40 years. From his research, I learned there are three key factors which you need to get into flow. First you need to choose *one* goal. Flow takes all your mental energy, deployed deliberately in one direction. Second, that goal needs to be meaningful to you – you can't flow into a goal that you don't care about. Third, it helps if what you are doing is at the edge of your abilities – if, say, the rock you are climbing is slightly higher and harder than the last rock you climbed. So every morning, I started to write – a different kind of writing from my earlier work, one that stretched me. Within a few days, I started to flow, and hours of focus would pass without it feeling like a challenge. I felt I was focusing in the way I had when I was a teenager, in long effortless stretches. I had feared my brain was breaking. I cried with relief when I realised that in the right circumstances, its full power could come back.

At the end of every day, I would sit on the beach and watch the light slowly change. The light on the cape is unlike the light anywhere else I have ever been and in Provincetown, I could see more clearly than I ever had before in my life – my own thoughts, my own goals, my own dreams. I was living in the light. So when

the time came to leave the beach house and come back to the hyperlinked world, I became convinced I had cracked the code of attention. I returned to the world determined to integrate the lessons I had learned in my everyday life. When I was reunited with my phone and laptop after taking a ferry back to where they were stashed in Boston, they seemed alien, and alienating. But within a few months, my screen time was back to four hours a day, and my attention was fraying and breaking again.

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In Moscow, the former Google engineer James Williams – who has become the most important philosopher of attention in the western world – told me I had made a crucial mistake. Individual abstinence is “not the solution, for the same reason that wearing a gas mask for two days a week outside isn’t the answer to pollution. It might, for a short period of time, keep certain effects at bay, but it’s not sustainable, and it doesn’t address the systemic issues.” He said that our attention is being deeply altered by huge invasive forces in wider society. Saying the solution was to just adjust your own habits – to pledge to break up with your phone, say – was just “pushing it back on to the individual” he said, when “it’s really the environmental changes that will really make the difference”.

Nigg said it might help me grasp what’s happening if we compare our rising attention problems to our rising obesity rates. Fifty years ago there was very little obesity, but today it is endemic in the western world. This is not because we suddenly became greedy or self-indulgent. He said: “Obesity is not a medical epidemic – it’s a social epidemic. We have bad food, for example, and so people are getting fat.” The way we live changed dramatically – our food supply changed, and we built cities that are hard to walk or cycle around, and those changes in our environment led to changes in

our bodies. We gained mass, en masse. Something similar, he said, might be happening with the changes in our attention.

I learned that the factors harming our attention are not all immediately obvious. I had been focused on tech at first, but in fact the causes range very widely – from the food we eat to the air we breathe, from the hours we work to the hours we no longer sleep. They include many things we have come to take for granted – from how we deprive our children of play, to how our schools strip learning of meaning by basing everything on tests. I came to believe we need to respond to this incessant invasion of our attention at two levels. The first is individual. There are all sorts of changes we can make at a personal level that will protect our focus. I would say that by doing most of them, I have boosted my focus by about 20%. But we have to level with people. Those changes will only take you so far. At the moment it's as though we are all having itching powder poured over us all day, and the people pouring the powder are saying: "You might want to learn to meditate. Then you wouldn't scratch so much." Meditation is a useful tool – but we actually need to stop the people who are pouring itching powder on us. We need to band together to take on the forces stealing our attention and take it back.

This can sound a bit abstract – but I met people who were putting it into practice in many places. To give one example: there is strong scientific evidence that stress and exhaustion ruin your attention. Today, about 35% of workers feel they can never switch off their phones because their boss might email them at any time of day or night. In France, ordinary workers decided this was intolerable and pressured their government for change – so now, they have a legal ["right to disconnect"](#). It's simple. You have a right to defined work hours, and you have a right to not be contacted by your employer outside those hours. Companies that break the rules get huge fines. There are lots of potential collective changes like this that can restore part of our focus. We

could, for example, force social media companies to abandon their current business model, which is specifically designed to invade our attention in order to keep us scrolling. There are alternative ways these sites could work – ones that would heal our attention instead of hacking it.

Some scientists say these worries about attention are a moral panic, comparable to the anxieties in the past about comic books or rap music, and that the evidence is shaky. Other scientists say the evidence is strong and these anxieties are like the early warnings about the obesity epidemic or the climate crisis in the 1970s. I think that given this uncertainty, we can't wait for perfect evidence. We have to act based on a reasonable assessment of risk. If the people warning about the effects on our attention turn out to be wrong, and we still do what they suggest, what will be the cost? We will spend less time being harassed by our bosses, and we'll be tracked and manipulated less by technology – along with lots of other improvements in our lives that are desirable in any case. But if they turn out to be right, and we don't do what they say, what's the cost? We will have – as the former Google engineer Tristan Harris told me – downgraded humanity, stripping us of our attention at the very time when we face big collective crises that require it more than ever.

But none of these changes will happen unless we fight for them. Just as the feminist movement reclaimed women's right to their own bodies (and still has to fight for it today), I believe we now need an attention movement to reclaim our minds. I believe we need to act urgently, because this may be like the climate crisis, or the obesity crisis – the longer we wait, the harder it will get. The more our attention degrades, the harder it will be to summon the personal and political energy to take on the forces stealing our focus. The first step it requires is a shift in our consciousness. We need to stop blaming ourselves, or making only demands for tiny tweaks from our employers and from tech companies. We own

our own minds – and together, we can take them back from the forces that are stealing them.

The above is an edited extract from *Stolen Focus: Why You Can't Pay Attention* by Johann Hari, published by Bloomsbury on 6 January.