

Are we too switched on for our own good?

If you're tired and forgetful, and finding it hard to concentrate, log off the laptop and take a digital detox, says Dan Roberts

As a writer, I spend a lot of my time glued to my computer screen: researching and pitching ideas, dealing with emails, keeping abreast of breaking news and, occasionally, even writing. While recently trying to launch an online magazine, my screen time increased still further and, unable to resist the temptation any longer, I also answered the call of Twitter. Setting aside BlackBerry time at evenings and weekends, I was devoting eight hours a day to digital media.

After a month, strange things started to happen. I found it difficult to concentrate on any given task for more than a few minutes. My mind felt scattered and my focus wandered from email to web page to tweet to email and back again. Despite working ever more furiously, I would reach the end of a 10-hour day and feel I had achieved almost nothing. What had I learnt? Which of those hundreds of bite-size pieces of information had actually lodged in my brain? What had I created – which is, after all, my primary working function? The answer, frustratingly, was usually very little.

But while distractedly surfing, I discovered what was ailing me. It was spelt out in a piece of research published in March by Lila Davachi, a New York University neuroscientist: my gluttony for digital media came at a price: a

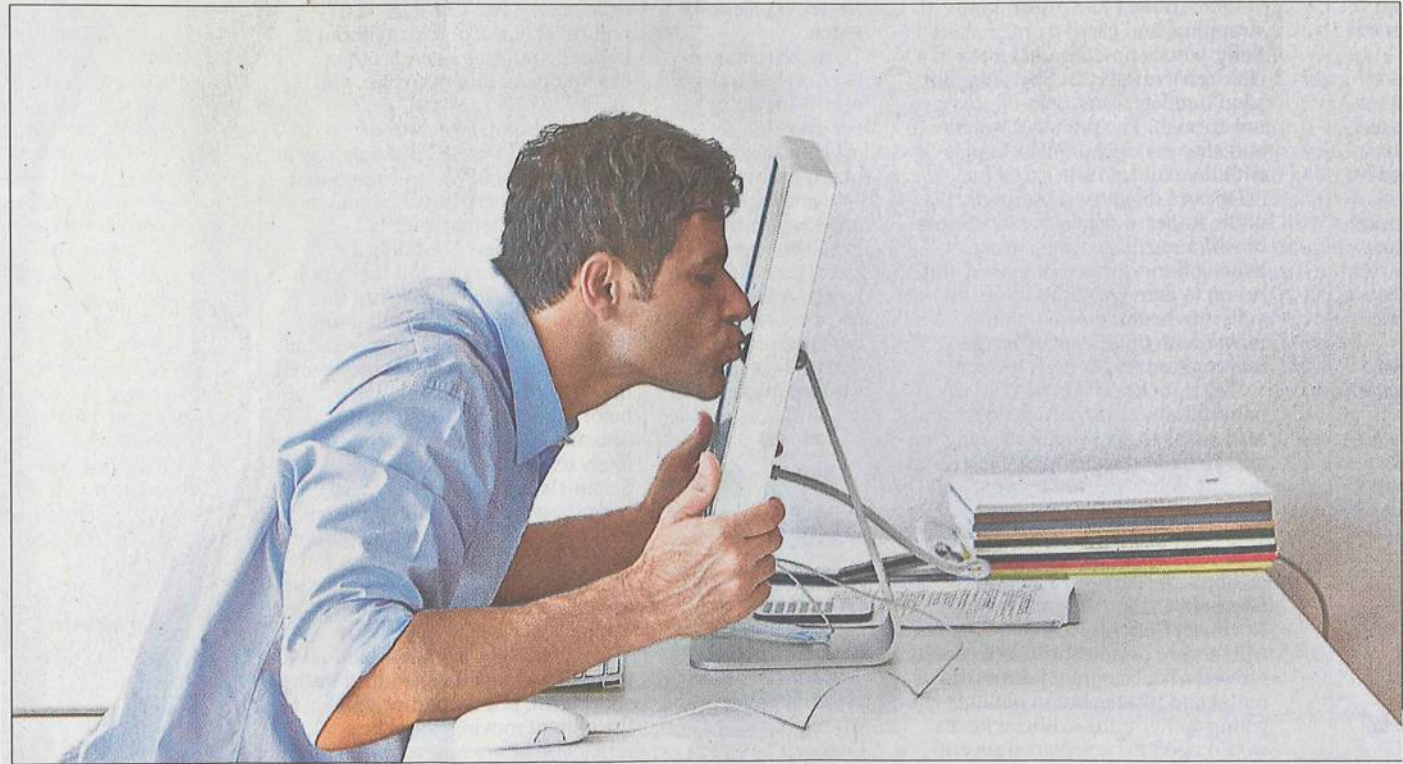
severe impact on cognitive function, in particular memory.

In her study, the brains of 16 men and women, aged 22 to 34, were scanned by a functional magnetic imaging machine (fMRI) while they looked at three different pictures: an object, a face and a mountain scene. After viewing the photos, and while their brains were still being scanned, the participants were asked to lie still, rest and let their minds wander. When they were shown the pictures again, they were better able to remember the details than they were before they took a rest – the daydreaming had improved their recall.

“Our data suggests that if you are not giving yourself a break, you are hindering your brain’s ability to consolidate memories and experiences,” said Davachi.

My constant cyber-hopping meant that I had never really stopped, taken a deep breath and let my poor, overcooked brain rest. Hardly rocket science, then, that my thoughts were so fragmented.

These findings follow the warnings last year by Baroness Susan Greenfield, leading neuroscientist and former director of the Royal Institution, that social networking sites such as Facebook, which has 350 million users worldwide, and Twitter, which generates 50 million tweets a day, risk “infantilising” the 21st-century mind. Our social-media-saturated brains are, she said, characterised



Glued to the screen: some people spend so much time with their computer that it can be classed as an addiction

by a short attention span, sensationalism, inability to empathise and a shaky sense of identity. Although her remarks received a mixed reception from the medical and scientific communities, they certainly strike a chord with fellow extreme digital media users.

But, is there any solid evidence to suggest that Twittering can really affect our brain function? “Nobody has studied this question directly,” says Dr Gary Small, professor of psychiatry and biobehavioral sciences at the University of

California, Los Angeles, and author of *iBrain: Surviving the Technological Alteration of the Modern Mind*.

“Although a causal relationship has not been confirmed, many studies have found an association between more time with technology and a lower attention span.”

While the speed with which technology has become a crucial part of our lives means that medical research into the phenomenon is still catching up, some doctors believe that our love of the latest technology could be turning into a 21st-century addiction.

“I am convinced that we can become addicted to technology, because it involves the same dopamine neural circuits that control rewards in the brain with other forms of addiction,” says Dr Small. “In parts of Asia, rehab centres are helping teens kick their video-game addiction.”

The Capio Nightingale Hospital in London is now also running a course for “addicts”. In February, the hospital reported an increase in social media and technology addiction among those suffering from mental health disorders and

burnout. It has dubbed the phenomenon “E-ddiction”. We are, it says, turning into a “tired but wired” society, unable to relax or unwind.

“Technology can cause addiction, burnout and sleep problems, and people need to reflect on how they use it to ensure it doesn’t become a problem,” says Dr Nerina Ramlakhan, a sleep and energy-management specialist at the hospital.

His recommendations for combating E-ddiction include – you guessed it – spending some smartphone-free time each day; leaving laptops and BlackBerries behind when taking a holiday; prising yourself from the office for a lunch-break stroll; limiting the amount of time spent online and on screen; and eschewing cyber-chats for conversations on the phone or face to face. Imagine.

As for me? I rarely use Facebook now and I’ve dumped Twitter. I’ve unsubscribed from dozens of e-newsletters and allotted fixed times each day to check emails. The long hours I used to spend surfing news sites are now spent pleasurably reading books and newspapers. And my brain seems deeply grateful. I feel less stressed and distracted. I can focus on a single task and retain a great deal more information. For those who are similarly afflicted, I thoroughly recommend a digital detox, and fast.

Capio Nightingale Hospital: 020 7535 7700; www.nightingalehospital.co.uk

‘iBrain: Surviving the Technological Alteration of the Modern Mind’, by Dr Gary Small and Gigi Vorgan, £16.99