

## Internet addiction: are your kids at risk?



Our addiction to the small screen is messing with our minds. In the process, it's creating a new set of mental problems that have health specialists worried.



by [Anne Hyland](#)

Towards the end of last year Dr Ben Teoh, a psychiatrist at the [South Pacific Private hospital](#) in Sydney, met with a successful lawyer, aged in his mid-40s, who'd arrived to be treated for severe alcohol addiction.

The lawyer had hidden his habit from colleagues but not so well from his wife, who'd encouraged him to get professional help. The lawyer's problems, however, were more layered and complex than even his wife knew. The lawyer had kept secret his other addictions, to cocaine and online pornography.

"He accessed the internet quite regularly and intensely," says the softly spoken Teoh, a specialist in addiction medicine.

Teoh and other mental health experts have noticed a sharp rise in patients requiring treatment for online addictions, even if it's not the main reason they first seek help. It may be for drug or alcohol addiction but, as a patient's history is investigated and the layers peeled back, increasingly present are online addictions that didn't exist a decade ago.



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For the depressed lawyer it was addiction to alcohol, cocaine and online porn. For a young person with self-esteem issues it might be an obsession with body image and an addiction to social media sites such as Facebook, Instagram or Snapchat, where images of one's ideal self can be posted, with flaws cropped or filtered out.

## Dysmorphia on the rise

Alastair Mordey, a program director at [addiction treatment centre The Cabin](#), is seeing more and more body dysmorphia among young men and women.

“Australia is terrible for it, especially with young men suffering megarexia who’ve become ridiculously large and are having issues with steroids and being addicted to the gym,” he says. “They’re absolutely neurotic and hyper-anxious about their body image. We get what looks like a meth addict coming in for treatment and we have a terrible problem getting him off Facebook and other social media. What’s driving that is the need to post photos of his own image and persona.”

The *International Journal of Eating Disorders* has published research linking social media use to higher rates of eating and distorted body image disorders. Mordey, himself a former heroin and ice user, has worked in addiction services for almost two decades. He says there’s no doubt the internet is playing a role in mental health disorders.



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## Pathological internet use

In Australia, addiction specialists, psychologists and psychiatrists have many stories about patients being treated for what has been variously labelled internet addiction disorder, problematic internet use, pathological internet use or compulsive internet use.

"Internet addiction is definitely a problem but it's still not accepted as a formal diagnosis at this stage," says Teoh. "We recognise people with internet addiction have all the features of the people with chemical addiction. Clinically we can see that they are addicted to it – to make it a formal diagnosis you have to be very careful."



Internet addiction is a global phenomenon, with internet addiction rehabilitation centres from Algeria to China, Australia, Europe and the United States. Sam Benntt

Teoh is cautious because online addictions – which can range from porn, gaming and gambling to shopping, social media and video streaming – aren't yet recognised by the psychologists' and psychiatrists' bible, the *Diagnostic and Statistical Manual of Mental Disorders 5*. The manual, referenced by all mental health experts, typically lags public and professional medical opinion – often by decades. It was only in 2013 that gambling was recognised as an addiction.

The debate about defining online addictions is fierce as experts try to answer a slew of chicken-and-egg questions. Does internet addiction lead to mental health problems or do mental health problems lead people to using the internet in problematic ways? Or do mental health and internet addiction mutually influence each other? Does a person who trawls the internet for online gambling sites have a gambling

problem or an internet addiction? Do people become addicted to the platform or to the content of the internet?

In broad terms, internet addiction is the compulsive need to spend excess amounts of time engaged in online activities, while other important areas of life – work, school, friendships and family – are neglected. Internet addiction appears to share similarities with other addictive disorders, such as withdrawal problems, tolerance and negative social repercussions.

## **How to spy an internet junkie**

Dr Daniel King of the University of Adelaide, who's studied online addictions, says someone who can take a break from the internet for a few days is clearly not an internet junkie. But someone who experiences withdrawal symptoms such as irritability, agitation, anger or distress – where it continues to occupy their thoughts – has “impaired control”.

He tells the story of an Adelaide man in his 40s who was addicted to online gaming. “He was hiding from his flatmate because he felt ashamed of how much he was gaming,” says King. “He was urinating into soft-drink bottles. It led to him having a major personal crisis and finally seeking help.”

In South Korea and China there have been extremes of addiction to online gaming, where people have spent weeks online gaming and in the worst circumstances have ended up dead or neglecting their children, who have died. The problem became so big in South Korea that its government introduced the so-called Cinderella law, which banned those aged under 16 from online gaming between midnight and 6am.

Internet addiction, however, is a global phenomenon, with dedicated rehabilitation centres from Algeria to China, Australia, Europe and the United States.

## **Mental health disorder**

A person may turn to the internet to cope with negative feelings such as guilt, anxiety or depression, to escape from their loneliness or to procrastinate from work or studies.

Different research puts the prevalence of internet addiction in Australia at between 5 and 10 per cent of the population, which is in line with estimates in Asia, the US and Europe. What hasn't occurred in Australia yet is individuals suing for online addictions, which has happened in the US.

The focus on internet addiction as a potential mental health disorder has intensified as more and more time is spent online, particularly with the explosion in social media use.

Snapchat, which was founded only five years ago, now claims 10 billion videos are watched daily. YouTube, launched in 2005, is now the world's busiest “television” platform. Dating app Tinder was started in 2012 and now receives more than a billion left and right swipes daily. And every 24 hours on Facebook billions of likes are clicked. Facebook only introduced the like button in 2009.

The [2016 AIA Healthy Living Index survey](#) reported Australians on average spend four hours in front of a screen daily for non-work use, compared with the regional average of three hours. In the same survey, almost two-thirds of adults admitted to finding it hard to break the habit of spending too much time online, up from 56 per cent in 2013. Half of those surveyed said social media and being online was becoming addictive for them, up from 45 per cent.

Such figures should be no surprise. Everywhere people are hunched over their phones scrolling through endless pages and updating news feeds. Whether they're standing in a coffee queue, waiting for a lift, at dinner with friends, on public transport or supposedly watching their children play sport. People respond Pavlovian-like to every notification, buzz and ding. More Australian households now own a smartphone than a TV, according to Deloitte.

## **From parody to reality**

The idea of internet addiction disorder was first proposed as a parody in 1995. Most of us didn't know what the internet was back then; it was still in the realm of geeks, academics and the US Department of Defence. Google, Instagram and Facebook didn't exist. Within a decade most of us were accessing the internet on our desktops and laptops, but it was the arrival of the smartphone in 2007 that changed everything. Suddenly, the internet was available everywhere.

Its ubiquity wasn't the only change. Technology companies introduced more and more powerful algorithms that could manipulate and exploit human psychological vulnerabilities.

Nir Eyal's book *Hooked: How to Build Habit-Forming Products* outlines how technology companies can influence the reward-motivated behaviour parts of the brain to keep people glued to their websites for longer. The company that keeps the eyeballs for longer is typically more profitable.

When a person experiences a reward – for example winning a race – the level of dopamine, the feel-good chemical in the brain, rises. The person feels pleasure and excitement, an experience the loser doesn't. Many addictive drugs such as cocaine and ice increase dopamine activity. Research suggests that online content from social media, porn, gaming and gambling also activates dopamine levels in our brain.

"When you look at the neuroscience that explains addiction as a disorder then it becomes clear how it's possible for the internet to be an addiction," says The Cabin's Mordey. "Anything that increases mid-brain dopamine tone, which improves your brain's reward chemistry – or feelings of reward and pleasure – anything that increases that can be an addiction. It's more likely to happen to someone who has a natural or environmentally created deficiency of dopamine."

## **Withdrawal fuels aggression**

Jane Williams, clinical director at The Sanctuary, a rehabilitation centre in Byron Bay, says PET scans of the brain have been done while people access certain online content. "The areas that light up are the same areas that light up when you're addicted to heroin," she says. "It's tapping into the reward system in the brain and can become addictive. It's why children often get very angry and aggressive when you want to take away their PlayStations."

Consider the attraction of social media websites. They tap into the brain's reward system. You put up a post on Facebook, Instagram, Snapchat or Twitter, and when it's shared or liked you smile from the hit of dopamine. It exploits the human desire for social approval.

In 2010, when Eric Schmidt was Google's chief executive, he warned that "the internet is the first thing that humanity has built that humanity doesn't understand". Perhaps this global experiment on human brains and behaviour patterns by technology companies was what he was warning about.

Dr Philip Tam, a psychiatrist who works with children and adolescents, has a long-standing interest in the field of problematic internet use. He expects social media is triggering a big increase in internet addiction,

as people are enticed into spending more and more time there. “It’s no secret these companies are there to make a profit and that means maximising the usage of their various websites.”

Dr Tam co-founded the [Network for Internet Investigation and Research in Australia](#). “I wouldn’t be surprised if the next wave of clinical patients present around that because of social media’s endless links, loops and updates.”

He started seeing patients who were referred to him and colleagues with internet-related problems a decade ago. Now, he says, “it’s really up to all stakeholders to take responsibility: parents, young people, schools, government and technology companies”.

Mordey agrees but prefers to put the responsibility squarely on the shoulders of technology companies. “They’re responsible for creating social media or gaming addictions just as food manufacturers are increasing obesity and overeating.”

## Status anxiety

Mordey says status is probably at the root of social media addiction. “You get an instant, affirmative reply; your tweet or message in a roundabout way boosts your status within the pack or tribe.” Sites such as Snapchat even promote the ability to compare people in real time. It publicly displays scores of those who have exchanged the most snaps so it becomes a popularity contest.

According to the [2016 Sensis Social Media Report](#), two-thirds of Australian adults have a social media account. On average they spend 12.5 hours each week on Facebook, a three-fold increase from the previous year. Another survey, *State of the Nation*, conducted by the Australian Psychological Society, found social media is both a cause and a way of managing stress. One in two of those surveyed visited social media as a form of stress relief, up from one in three in 2011. This implies that using social media can have positive benefits irrespective of whether we’re trading reality for virtual reality.

Indeed, social media and the internet are an accepted part of modern life and communication, and enable us to maintain established networks, particularly with friends interstate or overseas, or organising to meet friends after work.

Social media may even increase a person’s confidence in relating to others without the usual added social pressures. It has also created awareness around charitable causes, even protests across the globe from Hong Kong to Syria.

Teoh agrees, saying younger generations are arguably more informed. Where social media becomes a problem, he says, is when a person becomes so dependent on it they give up normal relationships, socialising and hobbies such as sports.

## More research needed

While mental health experts and academics are still trying to quantify the negative consequences of social media and the internet, there have already been dire predictions around excess use in TV series such as *Black Mirror* and books such as Dave Eggers’ novel *The Circle*.

To truly understand the effects of online content on mental health, more longitudinal studies are needed.

“It looks to me like the incidence of internet addiction is increasing,” says Mordey. “The reason we don’t get a very clear picture is that addiction researchers are focused almost completely on substances.”

Dr Mubarak Rahamathulla, of Adelaide's Flinders University, has studied risk-taking on the internet, particularly among adolescents. He believes teenagers and those susceptible to a mid-life crisis are most at risk of addiction.

"As part of mid-life crisis, men in particular seem to develop an interest in porn where they're reinventing their sexual fantasies and desires."

When this happens, the risk, says The Sanctuary's Williams, is that a person's normal sexual relationship becomes "very vanilla and boring". "They need greater and greater highs to feel that was the peak sexual experience."

## **One in 10 uni students addicted**

Rahamathulla recently conducted a study in which he observed 460 university students. He concluded that almost one in 10 were addicted.

"We only dealt with uni students and the small study was not a broader sample of society. My prediction is across society the numbers would be higher."

Teoh says research increasingly suggests those vulnerable to developing internet addictions often suffered some form of trauma or abuse in childhood, either emotional, physical or sexual, which some have theorised depleted their dopamine levels. Mordey agrees, and says individuals often develop problems such as sex or social media addiction as part of a need to feel validated by others, something they didn't get in their early years.

"People think a person is addicted to a drug or a device but they're not," says Mordey. "They're addicted to raising their own brain dopamine."

## **Teenagers most at risk**

Mordey worries about adolescent use of social media, which he describes as hyper-rewarding, particularly those that may have a predisposition to addiction. He says while human brains throughout a person's life continually develop new pathways according to what is learnt, brains are most plastic in childhood and adolescence.

"If someone is getting a lot of highly dopamine-enhancing activity going on in adolescence through social media, a thing called dopamine depleting will start to occur when they're not doing it. Their dopamine tone will go down drastically and they'll become stuck in a vicious circle of needing those hyper-rewarding experiences to get enough dopamine to feel well.

"Social media, smartphones and online games are all types of things we're wholly unadapted to and they're very powerful dopamine agonists."

Schools and universities have already reached out to educate their cohorts on responsible internet use. Sydney's Knox Grammar is one of many education centres offering parent information nights. The University of Sydney's counselling service has issued a pamphlet warning of signs of compulsive internet use. Dr Tam, who travels around schools lecturing on better internet use, says education needs to start from about 10 years old. "A lot of parents are really struggling with this."

## Adults included

And not just limiting their children's internet use but their own. Adults who need to unplug are being targeted by travel agencies and even charities. Intrepid Travel boasts tours for digital addicts, where you are forced to unplug because there's no internet or mobile phone reception. Charities such as the Royal Society for the Blind have also tapped into our desire to be less hooked, asking people to forgo their online lives for 48 hours to raise money.

Psychologists, psychiatrists and treatment centres use cognitive behaviour therapy, abstinence, yoga, meditation, encouraging catch-ups with friends and family and sporting activities as steps to begin treating internet addiction. The Cabin's Mordey says the first three months should involve no phone or computer, followed by a gradual reintroduction with certain conditions.

"You can't abstain from food, sex or computers because they're so necessary to lead a full life," he says. "So you slowly reintroduce those with certain controls. This might include blocking certain websites."

Flinders University's Rahamathulla believes a way of helping people who might be developing an addiction to online content is to train GPs to ask about it when someone visits them and reports symptoms of depression, anxiety or a condition such as bulimia. He also believes that Australia's government needs to step up and become more involved, particularly with the classification of content on the internet.

## Warning: no warnings here

Television broadcasters are required to issue warnings about content, from violence, sexual material and age appropriateness. Yet anyone of any age can come across porn online. Try googling a children's nursery rhyme such as *Little Miss Muffet* and there'll be a porn video for it.

Rahamathulla believes it's a "major public health concern" as the internet has expanded the boundaries of childhood into aspects of life that were traditionally considered only part of an adult world.

For those not addicted but instead worried about the narcotic-like properties of online content, and how much time they're spending on it as well as the fracturing of their attention, experts recommend some simple steps. These include permanently disabling notifications and alerts – or even just for a weekend. Other recommendations include keeping devices away from the dinner table and bedroom, where they take away from human interaction, and limiting the checking of social media to once a day.

It worries The Sanctuary's Williams that people don't have any time for their brains to settle and for their brains not to be on. "They're in continual responsive and awareness mode unless they're meditative or they take time out to go out and be with nature and to sit and stare, which is not encouraged," she says. "It's often seen as bludging or not doing something. It's problematic."

So it's time to stop and smell the roses. But as Williams wryly remarks: "You can get a rose online in an emoji now. You don't have to smell it – I can send you one this minute."