

## Internet addiction: New-age diagnosis or symptom of age-old problem?

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Doctors don't tell patients with broken limbs or open wounds that their health problems aren't real, but ambiguity creeps in when a trauma is mental rather than physical. One topic stirring debate in the mental health community is Internet addiction. Some say it's becoming a major problem, and can be as destructive to a person's life as an addiction to alcohol or gambling. But some say the very idea of being addicted to a communications medium is ludicrous. Others are loitering on the fringe of the debate, waiting for mental health researchers to agree on a definition of Internet addiction.

Kimberly Young, director of the online resource The Center for Internet Addiction ([www.keithadkins.com/netaddiction](http://www.keithadkins.com/netaddiction)), says that Internet addiction may not yet be clearly defined, but you know it when you see it. People who use computers excessively suffer many of the same problems as other addicts: failed marriages, lost jobs, neglected children, sleep deprivation. Some addicts — whether their problem is gaming, pornography, gambling, social networking, day trading or shopping — spend up to 18 hours a day online, which can also lead to physical problems, such as back strain, eye strain and carpal tunnel syndrome.

"Some describe the Internet as just being a tool, but if it is causing a detriment to your life, then you have a problem," says Young, author of *Caught in the Net*.

Few in the mental health community dispute that pathological use of technology is a problem, but there is disagreement about whether Internet addiction is worthy of the ultimate stamp of approval: inclusion in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*, tentatively scheduled for publication in 2012.

Some mental health experts say this is unlikely, because although the Internet has become a ubiquitous presence in modern society, the research community



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Sleep deprivation, eye strain, back strain and carpal tunnel syndrome are among ailments that some attribute to Internet addiction.

has been slow to examine how it is affecting mental health. In 2008, researchers from South Korea and the United States performed a meta-analysis of empirical studies on Internet addiction published in academic journals from 1996–2006 (*Cyberpsychol Behav* 2008;12:203–7). They concluded that “researchers should work to develop a standardized definition of Internet addiction with supporting justification.”

Another problem, says Young, is that the story of the Internet has, for the most part, been a love story. Luddites excepted, most people praise technology as a means to eradicate drudgery and improve productivity. The Internet has made many things, from banking to communication to accessing music and movies, more convenient. Therefore a sort of “halo effect” surrounds the Internet, and the problems it causes are viewed as paltry when compared to its many benefits. And the last thing computer companies, Internet providers and makers of video games want is for psychologists to claim that their products can be destructive to some people's lives, says Young. “The Internet has inherent value and utility ... but there is this dark side.”

Or is there? Not according to Vaughan Bell, a visiting research fellow with the Department of Clinical Neuroscience, Institute of Psychiatry, King's College London in the United Kingdom. Bell has argued that the Internet is not an activity, and therefore Internet addiction is a flawed idea (*J Ment Health* 2007;16:445–57).

“Fundamentally, the Internet is a medium of communication,” says Bell, who claims that one can no more be addicted to the Internet than to radio waves. “The concept itself doesn't make sense.”

Bell acknowledges that some people use the Internet and other technologies to excess, but believes they do so to avoid dealing with underlying problems, such as depression or social anxiety disorder, which have well-established treatments. Mental health problems often result in obsessions, which could range from watching too many hockey games to reading too much science fiction. In Japan, for instance, many youth are obsessed with comic books, though this is framed as a social withdrawal problem, not a comic book addiction.

Creating new “addictions” is misleading and confusing, says Bell, and will only prevent people from getting the help they need, while undermining their self-efficacy.

“The overmedicalization of life's problems is damaging,” he adds. “Your actual difficulty may be that you are in a bad relationship or you are depressed, not addicted to the Internet. It's a neat placebo explanation that doesn't fully address the complexity of people's problems.”

As for adding Internet addiction to the *Diagnostic and Statistical Manual of Mental Disorders*, it's often a challenge as it must be demonstrated that symptoms are of such severity as to cause impairment or distress, that the disorder is unique from others already in the manual and that it won't generate false positives.

Bell believes Internet addiction won't meet the test, if for no other reason than the inconsistency of the research in the field. His opinion is shared by Dr. Elias

Aboujaoude, director of the Impulse Control Disorders Clinic at the Stanford University School of Medicine in California, who laments the lack of biological data about the effects on the brain of human–technology interaction. “The science is just not there yet, unfortunately, for something that has so radically and irreversibly changed our lives,” says Aboujaoude.

Some mental health experts are, however, trying to rectify that. For example, researchers from the National Health Insurance Corporation in Seoul, South Korea, have been using functional Magnetic Resonance Imaging to study neurophysiologic differences between hardcore and casual online

gamers while observing video of the game *World of Warcraft*. Their initial findings, presented in May at the American Psychiatric Association’s 162nd annual meeting, suggest that activity in the frontal lobes of the brains of the study group (whose members played online games an average of eight hours a day) was significantly different than for the control group (whose members played online games an average of three hours a day), though the researchers admit they aren’t yet sure how to interpret these results.

Although the scientific evidence is spotty and inconclusive, Aboujaoude, unlike Bell, believes Internet addiction is a real problem and that the Internet is

not a typical communications medium. Unlike television or movies or print, the Internet is not inanimate. It communicates back, in a sense, allowing users to feel a sense of connectedness with others. But the ease and appeal of substituting virtual relationships for real-world friendships can be dangerous for some.

“By and large, these relationships tend to be superficial,” says Aboujaoude. “They do not provide the kind of nurturing connectedness that will help you navigate your way through life. If social networking has replaced long-term, grounded friendships, that’s a problem.” — Roger Collier, *CMAJ*

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## Medical faculties decimated by violence in Iraq

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Iraq’s medical schools have been disproportionately targeted in the attacks on university faculties that have ensued since the 2003 invasion of Iraq by United States-led forces, says the Baghdad-based Iraqi Association of University Teachers.

Some 118 medical faculty members have since been murdered, according to Dr. Ismail Jalili, a London, England-based surgeon who conducted a detailed analysis of data from the teachers’ association and the Iraq Body Count, a database of violence-related deaths compiled from morgue data, official health data and media reports.

About 30% of all assassinated faculty members came from the country’s 12 medical schools, Jalili notes in a report describing “the targeted and systematic murder of academics, intellectuals and experts.”

The murders appear motivated by sectarian politics or greed, Jalili says. “The killers seem to have targeted medical faculty because of their public importance and possibly because of their relative wealth.”

The faculty killings peaked in 2006 and have dwindled over the past few years. But they reflect a broader ongoing disaster for the country’s medical



Reuters/Mushraq Muhammad

An Iraqi policewoman raises an AK-47 as she celebrates the withdrawal of US troops on June 30. Since 2003, about 118 members of medical faculties in Iraq have been murdered in what some believe is a systematic effort to decimate secular, scientifically trained elites.