## Internet addiction: genuine diagnosis or not?

You

The newly fashionable ailment of "internet addiction"—compulsive overuse of the internet and irritable or moody behaviour when

deprived of it—has attracted a certain amount of cynicism. Is it a genuine mental illness in its own right or just another imaginary ailment? And how prevalent is it?

Oliver Seemann of Ludwig-Maximilians University Psychiatric Clinic (Munich, Germany) believes that internet addiction is a real psychological disorder that—like all

dependencies—is often linked with serious co-morbidities. "Yes, there is a lot of scepticism about the diagnosis", he says. "The main argument used against it is that other psychiatric illnesses lead to a misuse of the internet. But that is also true of other addictions."

The existence of internet addiction as a discrete disorder was first proposed, albeit not entirely seriously, in 1995 by Ivan Goldberg, a New York psychiatrist. But it was a 1996 study by Kimberly Young of the University of Pittsburgh (Bradford, PA, USA) that triggered the controversy. Young reported that 396 out of 496 self-selected regular internet users were dependent on the internet (*CyberPsychology and Behavior* 1998; 1: 237–42; www.netaddiction.com/articles/newdisorder.htm).

Young says that the most recent published research vindicates her findings and that "treatment centres are emerging all across the USA so internet addiction is an accepted disorder, even one that our court and legal systems accept". But other psychologists disagree with Young. "Her estimate is certainly an exaggeration", says Dan Velea (Imagine Pharmacodependency Centre, Val d'Oise, France). Seemann goes further and says that Young's results fail because they wrongly define internet addiction by a loose analogy with pathological gambling: "There are no reasonable grounds for doing that."

In a recent, more rigorous online survey of 809 internet users, Seemann, Ulrich Hegerl, and colleagues found only 20 people who fulfilled the ICD-10 criteria of an addiction syndrome (such as withdrawal symptoms, increasing toler-

ance, and loss of control). "Our patients often complain about typical withdrawal symptoms such as nervousness, agitation, and aggression",

he explains. In addition, some studies have shown that playing games on the internet, a frequent internet addiction mode, leads dopamine release in the nucleus accumbens. This is thought to be an important neurochemical event in the generation of addiction, says Seemann.

Maressa Hecht

Orzack, a clinical psychologist at Harvard Medical School (MA, USA) has worked with computer addiction in various forms for many years. She says that she is seeing several new patients with internet addiction each week, and that the addiction can exacerbate existing, more conventional, mental problems. All her patients have at least one other problem. "Depression, social phobia, impulse control disorder, and attention deficit disorder are commonest. Several of my patients have a history of another addiction or of substance abuse. A few are bipolar, suicidal, or prone to violent outbreaks", she notes.

Seemann adds schizoid personality disorders to Orzack's list, noting that "psychotic patients like the distancing from other persons that the internet supplies". Conversely, chronic heavy use of the internet can lead to social retreat and depression, he says.

But, Orzack continues, there is no single pattern: different people are internet-dependent for different reasons. "Some use it for excitement or a new sense of identity; some to reduce tension; some for companionship; others, most tellingly, because it's a place where they belong. Typically they are lonely people."

Velea continues the theme of escaping reality. "People who lack self-esteem are more likely to become internet addicts, just as they are more likely to use drugs like speed or alcohol. It is the combination of interaction at a distance, together with the chance of creating a virtual reality, that attracts them." He is doubtful, however, about any link with more serious psychoses: "That's possible, but we don't yet know it for certain."

Could internet addiction simply be another form of computer addiction? "There are similarities between substance abuse, computer addiction, compulsion, and pathological internet use", says Seemann. But he has noticed another characteristic aspect of internet usage among his patients: "a feeling of a global home, freedom, and boundlessness. This is surely different to common computer addiction", he claims.

Just as there are different reasons for retreating into an internet-centred world, so the nature of internet overuse varies. Older addicts and women, says Orzack, are usually drawn to "chat rooms"—conversation groups in which people can anonymously exchange private messages, often for many hours, and often on sexual themes. Younger patients and men are more often drawn to games-for example, interactive role-playing games—and to pornographic websites. But just how important the "porn factor" is in internet addiction is an area where the experts disagree. Seemann prefers to downplay it, but Velea estimates that it is a factor in perhaps 30% of internet addictions in France. Sexual fantasies in which the participant assumes different identities—sometimes of the opposite sex—are common, he says.

Even though there is still disagreement about whether internet addiction is a real diagnosis, there is no doubt that the compulsive use of the internet, like other dependencies, has material as well as psychological dangers. "Addicts" can lose their jobs as they become unable to limit their time spent online, either because they fail to turn up for work or because they misuse their office computer facilities, says Orzack. And there is no doubt that the opportunities for compulsive internet use are broadening. Today, a computer is no longer necessary—services like WebTV mean a television will do just as well. And added "attractions" such as internet gambling sites and internet shopping may be the bait that will draw yet more potential addicts into the internet's web.

Even the experts do not feel safe from internet addiction. Orzack herself fears dependency, though her near-addiction was to Solitaire [the Windows patience card game]. "So now I don't have a computer at work. It was getting that serious."

Peter Mitchell