Online gaming addiction: moderation versus legislation

The recent death of a man who had been playing an internet game in a Chinese internet café for three days, despite legislation introduced in an attempt to limit time spent playing online games, is sure to draw attention back towards the perceived problem of addiction to internet games. Professor Mark Griffiths, director of the International Gaming Research Unit at Nottingham Trent University, examines internet gaming addiction and whether legislation is needed to protect the public.

Over the last few years, ‘online gaming addiction’ has become an increasingly growing issue — at least in the media. Countries such as China have introduced laws to limit the amount of time that people can spend playing online games and other countries, such as Holland and South Korea, have seen the opening of dedicated treatment clinics for gaming addiction. I have studied ‘technological addictions’ for two decades and the areas that I am interested in are whether online gaming addictions really exist and if they do, are they a problem for today’s society?

Perhaps the first issue to address is whether an individual can become addicted to online gaming in the same way that other individuals become addicted to activities such as smoking, drinking and drug taking. For many, the concept of online gaming addiction seems far fetched, particularly if their concepts and definitions of addiction involve the taking of drugs. Despite the predominance of drug-based definitions of addiction, there is now a growing movement which views a number of behaviours as potentially addictive including many behaviours that do not involve the ingestion of a psychoactive drug (e.g. gambling, computer game playing, exercise, sex, internet use). Such diversity has led to new all encompassing definitions of what constitutes addictive behaviour.

At a basic level, addictions are all about constant reinforcement (i.e., rewards). A person cannot become addicted to something unless they are constantly rewarded for the behaviour they are engaged in. Online gaming is potentially addictive, although the number of people who are genuinely addicted is small in number. In my research, I have only come across a handful of addicts playing over 80 hours a week on games like 'World of Warcraft' and 'Everquest'. It is also worth noting that playing excessively does not mean someone is addicted (although other problems may arise from excessive play).

Online gaming addiction can be partly explained by what we psychologists call the partial reinforcement effect (PRE). This is a critical psychological ingredient of gaming addiction whereby the reinforcement is intermittent, i.e., people keep responding in the absence of reinforcement hoping that another reward is just around the corner. Knowledge about the PRE gives the game designer an edge in designing appealing games. Magnitude of reinforcement is also important. Large rewards lead to fast responding and greater resistance to extinction — in short, to more 'addiction'. Instant reinforcement is also satisfying. Online gaming involves multiple reinforcements (what I call the 'kitchen sink' approach) in that different features might be differently rewarding to different people. In video gaming more generally, the rewards might be intrinsic (e.g., improving your highest score, beating your friend’s high score, getting your name on the ‘hall of fame’, mastering the machine) or extrinsic (e.g., peer admiration). In online gaming, there is no end to the game and there is the potential to play endlessly against (and with) other real people. This can be immensely rewarding and psychologically engrossing. For a small minority of people, this will lead to addiction where online gaming is the single most important thing in that person’s life and which leads to the compromise and neglect of everything else in their life.

Currently, there is little research indicating how the addiction establishes itself and what people are actually addicted to. As with all addictions, there is a potential for long-term physical and psychological damage but the good news is that based on research to date, very few people appear to have developed such problems. Healthy enthusiasms add to life, addictions take away from them. Some recent research published earlier this year on 7,000 online gamers reported that 12% of gamers experienced ‘addictive’ signs of playing, but the researchers made it clear that this does not mean the players were addicted. Recent research has also shown that some of the ‘addictive’ qualities of online gaming, like losing track of time and escaping problems, are the reasons why some people play in the first place and are seen as positive benefits for the players. The vast majority of excessive gamers say their activity (even when taken to excess) has positive effects for them. Furthermore, there are many people who play online games excessively without having any negative impact on their life at all.

There is also lots of evidence suggesting that gaming can have very positive effects in peoples’ lives. Online gaming can make
The internet may be providing a potentially ever-present addictive medium

people feel psychologically better about themselves and can help raise their self-esteem. The immersive and dissociative experience of gaming can also be very therapeutic and help people deal with every day stresses and strains. Many would argue that this is more positive than drug use, drinking alcohol or other potential behavioural addictions like pathological gambling. Simulated environments also allow people to explore their personalities (e.g. gender swapping) and test out boundaries.

In a recent review of the literature, it was concluded that adverse effects of videogame playing are likely to be relatively minor and temporary, resolving spontaneously with decreased frequency of play, or to affect only a small subgroup of players. However, I would concede that playing to excess, even if the person is not addicted, can lead to other types of problems. For instance, very excessive gaming has consistently been associated with a wide range of negative health consequences including case reports of photosensitive epilepsy, auditory hallucinations, enuresis, encoprisis, wrist pain, neck pain, elbow pain, tenosynovitis, hand-arm vibration syndrome, repetitive strain injuries, and obesity.

In a minority of cases, excessive online gaming has also been shown to impact negatively on personal relationships, friendships, work and/or educational performance, and sleep. Whether such activity needs to be legislated for is arguable. Having studied the area for 20 years, I think it comes down to moderation and common sense. Any activity when taken to excess can cause problems in a person’s life. We would not legislate against people excessively reading or exercising - why should online gaming be treated any differently?

As I said at the start of this article, I have only come across a handful of genuine gaming addicts in all the time I have been researching. However, I am the first to admit that online gaming can be problematic to some individuals. One of the reasons why online gaming may be more problematic than ‘stand alone’ gaming is that 24/7 online games are never ending (unlike ‘stand alone’ games, which can be paused and returned to some time later). In some cases, the internet may be providing a potentially ever-present addictive medium for those with a predisposition for excessive game playing.

The answer most probably lies not in legislation, but in education and prevention. For the vast majority of individuals, online gaming is an enjoyable and harmless activity - at least that is what the empirical evidence says. Maybe the situation will change over time and/or research will show there are cultural differences (suggesting different policies in different countries). Real life problems need applied solutions and alternatives, and until there is an established body of literature on the psychological, sociological and physiological effects of online gaming and online gaming addiction, directions for education, prevention, intervention, treatment and legislative policy will remain limited in scope. More research is clearly needed to help inform educators and other stakeholders to make evidence-based policy decisions.

Mark Griffiths, Professor of Gambling Studies and Director of the International Gaming Research Unit Nottingham Trent University mark.griffiths@ntu.ac.uk

e-commerce law & policy

Many leading companies, including Amazon, BT, eBay, FSA, Orange, Vodafone, Standard Life, and Microsoft have subscribed to ECLR to aid them in solving the business and legal issues they face online. ECLR was nominated in 2000 and again in 2004 for the British & Irish Association of Law Librarian's Legal Publication of the Year.

A twelve month subscription is £390 (overseas £410) for twelve issues and includes single user access to our online database.

e-commerce law reports

You can now find in one place all the key cases, with analysis and comment, that affect online, mobile and interactive business. ECLR tracks cases and regulatory adjudications from around the world.

Leading organisations, including Clifford Chance, Herbert Smith, Baker & McKenzie, Hammonds, Coudert Brothers, Orange and Royal Mail are subscribers.

A twelve month subscription is £380 (overseas £400) for six issues and includes single user access to our online database.

data protection law & policy

You can now find in one place the most practical analysis, and advice, on how to address the many problems - and some opportunities - thrown up by data protection and freedom of information legislation.

DPLP's monthly reports update an online archive, which is an invaluable research tool for all those who are involved in data protection. Data acquisition, SMS marketing, subject access, Freedom of Information, data retention, use of CCTV, data sharing and data transfer abroad are all subjects that have featured recently.

Leading organisations, including the Office of the Information Commissioner, Allen & Overy, Hammonds, Lovells, BT, Orange, West Berkshire Council, McCann Ferrerulli, Devon County Council and Expertare are subscribers.

A twelve month subscription is £355 (public sector £255, overseas £375) for twelve issues and includes single user access to our online database.

world online gambling law report

You can now find in one place analysis of the key legal, financial and regulatory issues facing all those involved in online gambling and practical advice on how to address them. The monthly reports update an online archive, which is an invaluable research tool for all those involved in online gambling.

Poker, payment systems, white labelling, jurisdiction, betting exchanges, regulation, testing, interactive TV and mobile gaming are all subjects that have featured in WOGLR recently.

Leading organisations, including Ladbrokes, William Hill, Coral, Sportingbet, BetbyB, DCMS, PMU, Orange and Clifford Chance are subscribers.

A twelve month subscription is £485 (overseas £505) for twelve issues and includes single user access to our online database.

world sports law report

WSLR tracks the latest developments from insolvency rules in football, to EU Competition policy on the sale of media rights, to doping and probity. The monthly reports update an online archive, which is an invaluable research tool for all involved in sport.

Database rights, sponsorship, guerilla marketing, the Court of Arbitration in Sport, sports agents, image rights, jurisdiction, domain names, ticketing and privacy are subjects that have featured in WSLR recently.

Leading organisations, including the England & Wales Cricket Board, the British Horse Board, Hammonds, Radgate Fielder, Clarke Willmott and Skadden Arps Meagre & Rom are subscribers.

A twelve month subscription is £485 (overseas £505) for twelve issues and includes single user access to our online database.

All subscriptions last for one year. You will be contacted at the end of that period to renew your subscription.

Name

Job Title

Department

Company

Address

City

Country

Postcode

Telephone

Fax

Email

Signature

Date

Purchase order number

Cheque

VISA

MASTERCARD

Credit card

Card No.

Expiry Date

Signature

Date

Payment

VAT No. (if ordering from an EC country)

Periodically we may allow companies, whose products or services might be of interest, to send you information.

Please tick here if you would like to hear from other companies about products or services that may add value to your subscription.