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Hot topics: Gambling blocking apps, loot boxes, and 'crypto-trading addiction'

During the last couple of months, there have been a number of gambling-related topics that have hit the headlines. In this short article, Dr Mark Griffiths, Professor of Behavioural Addiction at Nottingham Trent University's International Gaming Research Unit, provides a brief overview of some of the most significant developments including: banks introducing gambling blocking apps, gaming disorder and the buying of in-game loot boxes, and 'crypto-trading addiction.'

Banks introducing blocking software At present, those who want to block themselves from engaging in gambling activities typically have to contact individual gambling operators to block their accounts via temporary self exclusion¹ and/or have to buy general blocking software (e.g., Net Nanny, K9 Web Protection) or specific gambling software (e.g., gamban, Betfilter, GamBlock)².

However, perhaps the easiest way for problem gamblers or anyone else who does not want to gamble is for banks and building societies to simply stop gambling transactions via debit and credit cards. In November 2017, the Money and Mental Health Policy Institute published a 'policy note' calling for banks and other debit/credit card providers to introduce services that would allow their customers to simply block all gambling transactions made on debit/credit cards³. In May 2018, Monzo Bank introduced gambling blocking software that enables their customers to block betting payments from their accounts via an app⁴. Starling Bank followed suit in June 2018⁵. In short, any attempted transactions to registered gambling operators will now be automatically declined by these banks both online and offline.

As someone who has been researching problem gambling for over 30 years, this

is a responsible gambling initiative that I welcome. However, I recently published a systematic literature review⁶ that examined every study that has evaluated responsible gambling tools (e.g., limit setting, pop-up messaging, personalised messaging, etc.), and there has (to date) never been any empirical research on whether blocking software or apps actually works (i.e., does such software actually prevent problem gamblers from playing and/or reduce the amount of time and money that they spend gambling?). I have always advocated that gamblers should not have to pay for blocking tools themselves and that gambling companies should foot the costs if they want to protect their players and minimise harm. The new blocking apps provided by the banks are free so this is another reason I welcome such apps. In my view, all other banks should follow the example set by Monzo and Starling. I would also add that I echo the thoughts of Starling's CEO Anne Boden that the introduction of these blocking apps is not about stopping individuals from gambling, but empowering gamblers to gamble responsibly⁷.

Gaming disorder and the ingame buying of 'loot boxes'

In June 2018, the World Health Organization ('WHO') officially included 'Gaming Disorder' into the latest (eleventh) edition of the *International* *Classification of Diseases (ICD-11)*⁸. I was one of the academic members of the WHO Working Party and I have spent almost as long researching video game addiction as I have gambling addiction. It was in 1991 that I published my first major review highlighting the many psychological and behavioural similarities between the playing of video games and slot machines⁹, and since then I have published many papers examining the convergence of gambling and gaming activities¹⁰⁻¹³. In the *ICD-11*, gaming disorder is defined as:

'[...] a pattern of gaming behavior ('digitalgaming' or 'video-gaming') characterized by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences. For gaming disorder to be diagnosed, the behaviour pattern must be of sufficient severity to result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning and would normally have been evident for at least 12 months¹⁴.'

This is very similar to the definition of gambling disorder and just like gambling, video gaming in its most extreme form is a behaviour that can compromise almost At present, the UK Gambling Commission does not consider loot boxes as a form of gambling because (they claim) the ingame items have no real-life value outside of the game.

- Griffiths, M.D. (2012). Self-exclusion services for online gamblers: Are they about responsible gambling or problem gambling? World Online Gambling Law Report, 11(6), 9-10.
- GamCare (2018). Blocking software. Located at: http://www.gamcare org.uk/get-advice/what-can-you-do/blocking-software
- Murray, N. (2017). Know the odds: The links between mental health problems and gambling. Money and Mental Health Institute, Policy Note No.11. Located at: https://www.moneyandmentalhealth.org/wpcontent/uploads/2017/11/Know-the-odds-Gambling-policy-note.pdf
- Monzo Bank (2018). Supporting people to self-exclude from gambling. May 16. Located at: https://monzo.com/blog/2018/05/16/gambling-self-exclusion/
- Starling Bank (2018). Introducing: Merchant blocking for gambling and betting. June 13. Located at: https://www.starlingbank. com/blog/merchant-blocking-gambling-betting/
- Harris, A. & Griffiths, M.D. (2017). A critical review of the harm-minimisation tools available for electronic gambling. Journal of Gambling Studies, 33, 187–221.
- Finextra (2018). Starling Bank introduces gambling blocker tech. June 13. Located at: https://www.finextra.com/newsarticle/32245/ starling-bank-introduces-gambling-blocker-tech
- World Health Organization (2018). Gaming disorder. Located at: http://www.who.int/features/qa/gaming-disorder/en/
- Griffiths, M.D. (1991). Amusement machine playing in childhood and adolescence: A comparative analysis of video games and fruit machines. Journal of Adolescence, 14, 53-73.
- Griffiths, M.D. (2008). Digital impact, crossover technologies and gambling practices. Casino and Gaming International, 4(3), 37-42.
- King, D.L., Delfabbro, P.H. & Griffiths, M.D. (2010). The convergence of gambling and digital media: Implications for gambling in young people. Journal of Gambling Studies, 26, 175-187.
- Griffiths, M.D. (2011). Gaming convergence: Further legal issues and psychosocial impact. Gaming Law Review and Economics, 14, 461-464.
- Griffiths, M.D., King, D.L. & Delfabbro, P.H. (2014). The technological convergence of gambling and gaming practices. In Richard, D.C.S., Blaszczynski, A. & Nower, L. (Eds.). The Wiley-Blackwell Handbook of Disordered Gambling (pp. 327-346). Chichester: Wiley.
- 14. See footnote 8
- 15. Griffiths, M.D., Kuss, D.J. & King, D.L. (2012). Video game addiction:

Past, present and future. Current Psychiatry Reviews, 8, 308-318.

- Griffiths, M.D., Kuss, D.J. & Pontes, H. (2016). A brief overview of Internet Gaming Disorder and its treatment. Australian Clinical Psychologist, 2(1), 20108.
- Griffiths, M.D., Kuss, D.J., Lopez-Fernandez, O., & Pontes, H.M. (2017). Problematic gaming exists and is an example of disordered gaming. Journal of Behavioral Addictions, 6, 296-301.
- Griffiths, M.D. & King, R. (2015). Are mini-games within RuneScape gambling or gaming? Gaming Law Review and Economics, 19, 64-643.
- Griffiths, M.D. (2018). Is the buying of loot boxes in videogames a form of gambling or gaming? Gaming Law Review, 22(1), 52-54.
- 20. Ibid.
- 21. Griffiths, M.D. (1995). Adolescent Gambling. London: Routledge.
- 23. Gambling Commission (2017). Virtual currencies, esports and social casino gaming position paper. Birmingham: Gambling Commission.
- 24. Ibid.
- Balakrishnan, J. & Griffiths, M.D. (2018). Loyalty towards online games, gaming addiction, and purchase intention towards online mobile game features. Computers in Human Behavior, 87, 238–246.
- Griffiths, M.D. (2018). Gripped by 'crypt': A brief look at 'crypto-trading addiction'. April 9. Located at: https://drmarkgriffiths.wordpress. com/2018/04/09/gripped-by-crypt-a-brief-look-at-crypto-trading-addiction/
- Griffiths, M.D. (2000). Day trading: Another possible gambling addiction? GamCare News, 8, 13-14.
- Griffiths, M.D. (2013). Financial trading as a form of gambling. i-Gaming Business Affiliate, April/May, 40-41.
- 29. Reddan, F. (2018). 'It's addictive': Why investors are still flocking to bitcoin and crypto. Irish Times, February 13. Located at: https:// www.irishtimes.com/business/financial-services/it-s-addictive-whyinvestors-are-still-flocking-to-bitcoin-and-crypto-1.3388392
- 30. Jeong, E-Y. & Russolillo, S. (2017). South Korea mulls taxing cryptocurrency trade as fears mount about bitcoin addiction, speculation. Market Watch, December 13. Located at: https://www. marketwatch.com/story/south-korea-mulls-taxing-cryptocurrencytrade-as-fears-mount-about-bitcoin-addiction-speculation-2017-12-13

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everything in an individual's life (including close relationships and educational and/ or occupational activities)¹⁵⁻¹⁷. Clearly convergence is playing an informing and reinvigorating role in gambling and gaming and beginning to subvert 'traditional' gambling forms. While there are many advantages of convergence in a wide variety of contexts, there may be some disadvantages for those who use convergent technology excessively. For instance, there are now elements within video game playing that are gambling in all but name (such as 'Squeal of Fortune' and 'Treasure Hunter' in Runescape¹⁸ and the buying of loot boxes in many recent and popular online video games¹⁹).

Loot boxes (or equivalents such as crates, chests, cases, bundles, and card packs) are everywhere and in my view are akin to gambling²⁰. There are many games such as Overwatch. Middle-earth: Shadow of War, Star Wars Battlefront 2, FIFA Ultimate Team, Mass Effect: Andromeda, Fortress 2, Injustice 2, Lawbreakers, Forza Motorsport 7, and For Honor that allow players to buy the chance to win prizes for in-game play. When buying loot boxes, players occasionally have the opportunity to win great things but often the 'prizes' are of little value and are certainly of less value than the price paid for them. Occasionally there may be a particular weapon that helps in progressing through the game - but these are the exceptions. Gambling typically involves the use of money to try and win something of greater financial value. This is what is happening when players pay to open up loot boxes, crates, chests, etc.

Although there are many definitions in many disciplines defining gambling, there are a number of common elements that occur in the majority of gambling instances that distinguish 'true' gambling from mere risk taking²¹. These include: (i) the exchange is determined by a future event, which at the time of staking money (or something of financial value) the outcome is unknown, (ii) the result is determined (at least partly or wholly) by chance, (iii) the re-allocation of wealth (i.e., the exchange of money or something of financial value) usually without the introduction of productive work on either side, and (iv) losses incurred can be avoided by simply not

taking part in the activity in the first place²². Added to this it could be argued that the money or prize to be won should be of greater financial value than the money staked in the first place. Based on these elements, the buying of loot boxes (or equivalents) would - in my view - be classed as a form of gambling.

For me, buying a loot box is like buying a raffle ticket. You may win a prize but the prize could be of much less financial value than the cost of a ticket. At present, the UK Gambling Commission does not consider loot boxes as a form of gambling because (they claim) the in-game items have no real-life value outside of the game²³. However, this is not the case because there are many websites that allow players to trade in-game items and/or virtual currency for real money. The Gambling Commission appear to acknowledge this point and claim that the buying of in-game loot boxes (and their equivalents) are not gambling but if third party sites become involved (by allowing the buying and selling of in-game items), the activity does become a form of gambling²⁴.

At present, there are a number of countries (mainly in South East Asia such as China and Japan) who do view the buying of loot boxes as a form of gambling and have incorporated such activities into their gambling regulation. However, most countries have either not considered regulating the buying of loot boxes at all, or (like the UK) have ruled out that buying loot boxes does not currently meet their regulatory definition of gambling. Even if the buying of loot boxes is not deemed a form of gambling, the buying of in-game items does mean that there are financial consequences to playing video games beyond the buying of hardware and software. Those who play video games excessively are more likely to buy in-game virtual assets, and a recent study that I co-authored demonstrated that those addicted to playing video games were more likely to purchase in-game items²⁵. This means that - just like addicted gamblers addicted video game players do not just lose large amounts of time but may also spend (or lose in the case of loot boxes) beyond their disposable incomes.

'Crypto-trading addiction'

In April and May 2018, there were

numerous reports in the media about Castle Craig (a drug and alcohol rehabilitation centre in Scotland) treating individuals with 'crypto-trading addiction.' I was asked by many newspapers and the broadcast media for my opinions about 'crypto-trading'. In short, I view 'crypto-trading addiction' as a form of gambling addiction²⁶ and that it is not totally new. I argued that crypto-trading addiction was a sub-type of online day trading addiction (on which I first published an article back in 2000²⁷) and/ or stock market trading addiction²⁸.

The issue was also discussed in a February 2018 article in the Irish Times by Fiona Reddan²⁹. Interviewing Nicholas Charalambous, the Managing Director of Alpha Wealth, he was quoted as saying: "Previously, I would have described cryptos as 'shares on steroids'; now I would say they're shares with ietpacks and boosters and then some." While Bitcoin shares have fallen, there are plenty of new cryptocurrencies that individuals can dabble buying shares in (ethereum, litecoin, ripple, putincoin and dogecoin) and all are arguably akin to gambling. One country that has taken crypto-trading addiction seriously is South Korea. Their Government's Office for Government Policy Coordination recently introduced new rules to inhibit the speculation on cryptocurrencies. According to an article in *Market Watch*³⁰:

"The proposed measures [...] range from levying capital-gain taxes on trading cryptocurrencies, to restricting financial firms from holding, acquiring and investing in them [...]. The new regulations come amid mounting concern within South Korea about the potential for people to become addicted to bitcoin trading."

The country's Prime Minister Lee Nak-Yon went as far as to say that the increasing interest in cryptocurrencies could "lead to some serious distorted or pathological phenomenon³¹." Given that addictions rely on constant rewards and reinforcement, there is no theoretical reason why cryptotrading cannot be addictive. However, there is only anecdotal evidence of addicted individuals and if they are addicted a case could be made that this is a type of gambling addiction.