



Addictive Gambling Products

Supporters of the gambling industry like to focus on apparently low population “problem gambling” rates, enabling them to portray the problem as being about a “few flawed individuals”. This ignores the fact that gambling is not a homogeneous enterprise, but comprises a wide range of products which includes some which are highly addictive and dangerous which should not be available in their current form.

Although the gambling industry would avoid the term ‘addictive’ preferring words like “compelling”, “engaging” or “absorbing”, a number of product design elements are generally accepted to contribute to the level of addictiveness. These include:

- speed of play/event frequency/continuity of play
- stake sizes and prize structures
- probability and frequency of winning
- a range of design features – free ‘spins’, ‘losses disguised as wins’, lights and sounds

These features can be combined to produce highly addictive high speed electronic products known as:

- **Electronic Gaming Machines (EGMs)**
 - **Fixed Odds Betting Terminals** – with “problem gambling/at risk rates” over 50%
 - **Online slots and casino games** – with “problem gambling/at risk rates” over 45%

There is also increasing concern about new sports betting products being developed to replicate the high speed continuous betting experience of EGMs, known as:

- **In Game Sports Betting/Microbetting** – a recent Australian study found “problem gambling” rates of 78% for people engaged in microbetting.

In 2016, FOBTs were associated with over half of all “problem gambling” in the UK, despite being played by only 3% of the population.

FOBTs were the first product that the government acknowledged were too dangerous to be available on the high street. In 2019 the maximum stake was reduced from £100 to £2 which should reduce the amount of money which will be lost. However, nothing was done to slow down speed of play and nothing was done about the equivalent products which are available on line.

While more research may be needed to establish the relative importance of different game features, we need to recognise that “we don’t know nothing”. Given the levels of harm arising from gambling disorder, including 250-650 gambling related suicides every year in the UK, we need to establish a “precautionary approach” whereby gambling products – like all other legally available products – should be proven to be safe before they can be marketed.

1. Background

*“Determinants of the decision not to gamble not only include the gambler’s biological and physiological constitution but also the structural characteristics of the gambling activity itself. Such characteristics may be responsible for reinforcement, may satisfy gambler’s needs, and facilitate excessive gambling. Showing the existence of such relationships has great practical importance. Not only could potentially ‘dangerous’ forms of gambling be identified but effective and selective legislation could be formulated. ... It is shown that structural characteristics of fruit machines **have the potential to induce excessive gambling regardless of individuals’ biological and psychological constitution** [our emphasis] and that such insights may help in decreasing fruit machine gambling’s “addictiveness” potential and help in formulating effective gambling policy.” [1]*

The above is taken from the abstract of a paper written in 1993, long before the term Fixed Odds Betting Terminal (FOBT) had entered public vocabulary. Instead the paper refers to “fruit machines” which perhaps conjures the image of an apparently harmless seaside attraction. Yet even back then the “addictiveness” of gambling products had been identified and the argument made that these products could addict anyone.

It is astonishing that some 25 years later, the Association of British Bookmakers, GambleAware and the Responsible Gambling Strategy Board were still arguing that there was no conclusive evidence that a reduction in the maximum stake size on FOBTs would reduce the harm that they caused! [2]

Why significant research had not been conducted in the intervening decades is not the subject of this note, but we would link it to the massive influence that the gambling industry had in setting the research agenda that the gambling industry and which it continues to exercise [3]. Instead the industry has successfully sold a model of “individual responsibility” with a small number of “vulnerable individuals” who just need identifying and treating ... once they have developed their addiction. This has meant that there has been a plethora of studies which examine individuals, their characteristics and behaviours, identifying “vulnerable” groups or evaluating individual level interventions to identify and help “problem gamblers”. Meanwhile study of gambling products and the practices of the industry has remained woefully sparse.

We acknowledge that this type of research is difficult both practically and ethically. But more crucially it requires the active cooperation and engagement of gambling operators to share the vast amount of data that they hold on individual players across a whole range of products.

Until that happens, we need to recognise that “we don’t know nothing”. There is an increasingly common agreement amongst independent researchers about the range of structural characteristics of gambling products which are most important in determining addictiveness. While we may not have perfect information on the relative importance of different factors, we do know enough to be able to highlight particular products which need to be substantially altered or even withdrawn. We need to take a “precautionary approach” where the requirement should be that a product is “proven safe” before it is allowed to be marketed ... to bring gambling into line with drugs, medical treatments and indeed any product which is sold to the public.

2. Addictive by Design

Gambling has taken place for hundreds, if not thousands of years, whether it has involved games of skill and chance, or betting on the outcome of sporting and other events. It has

always been recognised that gambling can lead to serious problems for some people, though the tended to be conceived as being mainly financial which could have a range of other social or health consequences.

However, over the past 30 years gambling has changed beyond recognition with the development of high speed electronic games and the explosion of online gambling. So that today it is possible to bet at any time on any event around the world or play in one of thousands of online casinos – and all via the mobile phone in your pocket.

It has also been recognised that gambling can have serious impacts of people's mental health. Gambling disorder was classified as an addictive disorder in 2013 alongside drugs and alcohol addiction. Treatment for gambling disorder is now included in the NHS long term plan with 14 dedicated clinics due to open over the next few years.

The development of the modern gambling industry has changed the nature of the relationship between gamblers and gambling operators (who might once have been referred to as "bookmakers") and has also introduced a range of highly toxic products and practices which have been deliberately designed to draw people into gambling and keep them there as long as possible. "Addiction by Design" is the title of Prof. Natasha Dow Schull's ground breaking book [4]; "Vicious Games" is the title of Prof. Rebecca Cassidy's recent book [5]. Both titles are chosen for good reasons.

3. Structural Characteristics

Although industry sources and developers tend avoid the term 'addictive' preferring words like "compelling", "engaging" or "absorbing", a number of product design elements are generally accepted to contribute to the level of addictiveness [6-11]. These include:

- speed of play/event frequency/continuity of play – time gap between each gamble and the time between placing the bet and the result (win/lose)
- stake sizes
- prize structures – number and value of prizes
- probability and frequency of winning
- free or bonus 'spins'
- 'losses disguised as wins' – signalling a win which is less than the amount staked
- skill or pseudo-skill elements – which may or may not be real
- near misses – results which are perceived as "nearly winning" but which are a loss
- physical design features – lights, colours, sounds, ergonomic features

As noted above, it is shocking that there has been so little research, particularly in the UK, to explore the relative importance of each of these features. However, there is substantial agreement that "speed of play/event frequency/continuity of play" are key features in the addictiveness of any gambling product. Certainly considerable effort is devoted by "game" developers to 'tweak' the design of their product to keep the customer playing and to extract as much money as possible.

There are a set of other important elements of the gambling experience and engagements with the gambling industry which are also deemed important when considering the development of continuation of addiction. These include:

- availability and accessibility – how easy is it to access gambling products and opportunities
- type of environment/establishment – online, high street shop, arcade, casino

- marketing and advertising – increasingly marketing is targeted at individuals based on the huge wealth of information that gambling operators hold on individuals
- free spins and bonuses – used to attract new customers or ‘reward’ existing customers to encourage them to bet more
- VIP schemes – where high spending (losing) customers are assigned a ‘manager’ to develop a faux friendly relationship involving invitations to events, gifts and ‘rewards’ to keep the “VIP” betting

All of these can make gambling more dangerous and prolong gambling.

4. Dangerous Products

As noted above “speed of play/event frequency/continuity of play” are highlighted as key features in determining the addictiveness of a gambling product. Therefore, purchasing a National Lottery ticket is generally not regarded as addictive since the customer may have to wait a number of days before getting the result of their gamble. Lottery scratchcards are seen as being more addictive since they are “instant wins” or losses.

a) Electronic Gaming Machines/Fixed Odds Betting Terminals (EGMs/FOBTs)

However, the weight of research generally acknowledges that Electronic Gaming Machines (EGMs), both online and land based, are amongst the most problematic gambling products in terms of addiction and financial harms [7,9,10]. Not only are these products recognised as being addictive, studies have also shown that addiction can set in very quickly [12] and the products themselves are associated with a higher suicide risk [13,14].

In the UK, the most commonly known EGM is the Fixed Odds Betting Terminal (FOBT). The equivalent product in Australia is called a ‘pokie’. Examination of the history of gambling in Australia shows that the growth and widespread availability of ‘pokies’¹ drove the huge increase in gambling and the inevitable problem gambling in that country [15].

In April 2019, the addictiveness and harm caused by FOBTs was eventually acknowledged by the government and as a result the maximum stake was reduced from £100 to £2. That change was symbolically important since it was the first time that a gambling product was recognised as being too dangerous to be readily available on the high street in its current form. However, no change was made to the speed of play and no changes at all were made to identical online products. We will have to wait on future evaluation to assess the impact that this limited change will have on the rates of gambling disorder.

b) In-game Sports Betting (Microbetting)

At one time sports betting was based around predicting the outcome of a horse race, football match or similar. Technological advances in placing and processing bets allowed gambling operators to identify the opportunity to let a customer bet on any aspect of an event in real time – called in-play or in-game betting or microbetting. Therefore, the customer could bet on the next goal, corner or yellow card in a football match or literally on every point in tennis. This allowed them to replicate the addictive features, such as speed and continuity of play, with bets possible every minute, turning a football match into a 90 minute non-stop gambling experience.

¹ ‘Pokies’ are the Australian equivalent of Fixed Odds Betting Terminals and are widely available throughout Australia.

There is already some evidence of how addictive and dangerous this form of gambling can be, with “problem gambling” rates amongst Australian micro-better approaching a staggering 80% [16]. Football has been the huge growth area for in-game betting in the UK. This type of gambling likely to appeal to more people who may have no interest in the casino style games (which make up the majority of games on FOBTs) but love the game of football and also believe that their knowledge of the game makes this more of a ‘game of skill’ rather than the random chance of a casino game. Research shows that this is an incorrect belief. [17].

We believe that in-game sport betting will eventually be shown to be as addictive and dangerous as sports betting and that its impact on addiction rates could be even greater because of the wider appeal that it will be possible to generate. However, national statistics on these new products are not available, so the next section of this note focuses on established addictive products – FOBTs and their online equivalents.

5. The Addictiveness of FOBTs and their Online Equivalents

Table 1 shows the “problem gambling” and “at risk” rates of a number of different gambling products to demonstrate the degree to which particular products are associated with problem gambling. Supporters of the industry may attempt to argue that “problem gamblers” are attracted to particular products rather than the products themselves causing “problem gambling”. However, when we consider the range of features which are associated with addictiveness and the different products, that looks a very thin argument.

It is also the overwhelming experience of Gambling with Lives families that EGMs were the cause of their children’s addictions. Similarly there is widespread agreement amongst experts by experience of gambling addiction that these machines are both highly addictive and dangerous.

Table 1 – “Problem gambling” and “at risk” rates of several gambling products [18]

	“Problem gambling” %	“at risk” %	Total Rate %
Any gambling (excl National Lottery draws only)	1.6	8.5	11.1
Horse racing (not online)	3.3	14.1	17.4
Bingo (not online)	3.9	10.4	14.3
Machines in bookmakers (FOBTs)	13.7	39.2	52.9
Online gambling on slots, casino or bingo games	9.2	35.6	44.8

Addiction rates on FOBTs are well over 10%, and over 50% if the “at risk” population is included. The rates for the equivalent games online (but including bingo) are only slightly lower. The basic analysis in Box 1 below indicates that these products are associated with over half of all problem gambling in the UK. Fortunately, historically only a small proportion of the population have accessed these products, e.g. in 2016 only 3% of the population played on FOBTs and similar figures online [18].

Box 1. Calculation of proportion of all “problem gambling” associated with FOBTs

It is possible to do a couple of simple calculations based on the most recent (2016) gambling behaviour statistics [18]

Proportion of population who play FOBTs – 3%

Proportion of people playing FOBTs classified as “problem gamblers” (PG) – 13.7%

⇒ Proportion of total population who play FOBTs and are PG = $3\% \times 13.7\% = 0.4\%$

Estimated population PG rate is 0.7%, this means that over half of all PG in the UK is accounted for by people who play FOBTs.

Similarly for online slots, casino and bingo

Proportion of population who play online slots, casino and bingo – 3%

Proportion of people playing online slots, casino and bingo classified as “problem gamblers” (PG) – 9.2%

⇒ Proportion of total population who play online slots, casino and bingo and are PG = $3\% \times 9.2\% = 0.3\%$

Clearly there will be an overlap between those who play these products on FOBTs or online, so we cannot just add the figures together. However, it is clear that **FOBTs and their online equivalents account for substantially over half of all problem gambling in the UK, despite being played by less than 5% of the population.**

This indicates that as the accessibility of these products increases with the growth and availability of online gambling, there will be a corresponding increase in the rate of gambling addiction. It is estimated that a 10ppt increase in numbers accessing the very addictive products could lead to a further 1% increase in problem gambling, more than doubling the whole population measure.

Unless action is taken to curb their availability and accessibility or to radically alter their design, the impact on problem gambling rates could be catastrophic. Similar regulation needs to be applied to newer highly addictive products such as sports ‘microbetting’.

Learning Lessons from (In)action on FOBTs

A full account of the story of FOBTs from their introduced into betting shops in 1999 to the implementation of the £2 maximum stake in 2019 is given in a House of Commons Briefing Paper [2]. Almost from the outset concerns were expressed about the association of the machines with “problem gambling”, with GamCare noting in 2003 that there had been an increasing trend in their clients seeking help related to FOBTs. It was even at this early stage that the term “the crack cocaine of gambling” first appeared.

The 20 years before the change was introduced was characterised by a vigorous defence of FOBTs by the Association of British Bookmakers (ABB) calling on a range of (subsequently discredited) ‘research’ reports. Given that the reports were commissioned and paid for by the

ABB, it is not surprising that they found no evidence 'proving' that FOBTs were in any way a cause of problem gambling. This 'evidence' was deployed within the overall 'Reno' model [19], proposed by researchers who undertook substantial research and consultancy work for the industry, which located the issue of "problem gambling" within a small number of individuals who were in some way flawed, but whose "problematic play" could be identified and appropriate interventions or treatments made.

The cause of the ABB was helped immeasurably by an apparent belief in the Department for Culture, Media and Sport, the Gambling Commission and the Responsible Gambling Strategy Board that it would be possible to conduct experiments and provide proof that could quantify the addictiveness and damage done by FOBTs. This was accompanied by silence from the Responsible Gambling Trust (now GambleAware) and GamCare, who chose to take a "neutral stance" in relation to the addictiveness of particular products.

It is beyond the remit of this paper to explore why these different organisations took the attitudes that they did or why none of them commissioned any significant research which might have given a clear view on addictiveness (but see [20]). However, it is notable that the industry was closely involved with all the organisations and wielded huge influence through their direct funding of organisations and research. And of course the industry could point to the billions of pounds paid in tax.

However, also over that time campaigners and independent researchers challenged the power of the industry and questioned the very basis of the 'Reno' model [21]. Over time there came to be a wider acceptance of the scope and level of gambling harms, and increasingly gambling came to be seen as a public health issue. However, it is still noteworthy that the introduction of the £2 maximum limit took the resignation of a highly respected and competent Minister, Tracey Crouch. Unlike the regulators and bureaucrats, she was aware of the damage being done which was attributable to FOBTs because she met people with major gambling problems in her weekly surgeries who identified the link. She had representations from people who worked in bookmakers and who reported the impact that these products had on customers. She spoke directly to "problem gamblers" and others who had suffered major harms because of gambling, including families who had been bereaved by gambling related suicides.

Over the course of the 20 years that it took to get the change to FOBTs, based on international evidence compiled by Gambling with Lives, it is estimated that some 10,000 people will have died in gambling related suicides. For a high proportion of them FOBTs will have been the prime cause of their initial addiction and for their subsequent catastrophic engagement with gambling.

We cannot allow a further mass social experiment and debate to be conducted before we take action on other highly addictive products. We must exercise a "precautionary approach" whereby gambling products must be proven safe before they can be marketed to the public. This would bring gambling into line with other legal products where there is a recognised risk: we would not consider introducing a new drug or car onto the market without it satisfying the most rigorous safety testing.

References

1. Griffiths, M. (1993). *Fruit machine gambling: The importance of structural characteristics*. Journal of Gambling Studies. 9: 101-120
2. Woodhouse, J. (2019). *Fixed odds betting terminals*. House of Commons Briefing Paper No. 06946 <https://commonslibrary.parliament.uk/research-briefings/sn06946/>
3. Cassidy, R. et al. (2013). *Fair game: producing gambling research*. Goldsmiths, University of London. <https://www.gold.ac.uk/gamblingineurope/report/>
4. Schull, N.D. (2012). *Addiction by Design: Machine Gambling in Las Vegas*. Princeton University Press: Princeton and Oxford
5. Cassidy, R. (2020). *Vicious Games: Capitalism and Gambling*. Pluto Press.
6. Parke, J. & Griffiths, M. (2007). *The Role of Structural Characteristics in Gambling*. In G. Smith, D. Hodgins & R. Williams (Eds.), *Research and Measurement Issues in Gambling Studies*. pp.211-243. New York: Elsevier.
7. Livingstone, C. & Woolley, R. (2008). *The Relevance and Role of Gaming Machines and Game Features in the Play of Problem Gamblers: Report for the Independent Gambling Authority South Australia*. <https://www.researchgate.net/publication/277870726>
8. Parke, A. et al. (2016). *Key Issues in Product-Based Harm Minimisation: Examining theory, evidence and policy issues relevant in Gt Britain*. Prepared for the Responsible Gambling Trust (GambleAware) <https://about.gambleaware.org/media/1362/pbhm-final-report-december-2016.pdf>
9. Yucel, M. et al. (2018). *Hooked on gambling: a problem of human or machine design?* The Lancet Psychiatry. 5(1): 20-21
10. Livingston, C. et al (2019). *Identifying effective policy interventions to prevent gambling-related harm*. Victorian Responsible Gambling Foundation. Melbourne
11. Gaskell, M. (2019) *Gambling products and their impact on the individual*. Online blog: MyPov. <https://mypovonline.com/mgaskell12/activity/2449/>
12. Breen, R.B. & Zimmerman, M. (2002) *Rapid onset of pathological gambling in machine gamblers*. Journal of Gambling Studies. 18:31–43.
13. Bischof, A., et al. (2016) *Type of gambling as an independent risk factor for suicidal events in pathological gamblers*. Psychology of Addictive Behaviours, 30(2), 263
14. Challet-Bouju, G., et al. (2016) *Profiles of problem gamblers and non-problem gamblers, depending on their preferred gambling activity*. Addiction Research & Theory, 24(3), 209-222
15. Boyce, J. (2019). *Australia's world-beating gambling addiction and the deception hiding it*. The Monthly, June 2019. <https://www.themonthly.com.au/issue/2019/june/1559397600/james-boyce/lie-responsible-gambling>
16. Russell, A.M.T. et al. (2019) *Who bets on micro events (microbets) in sports?* Journal of Gambling Studies. 35(1): 205-223
17. Newall, P. (2015) *How bookies make your money*. Judgement and Decision Making, 10(3), 225-231
18. NatCen for the Gambling Commission (2018) *Gambling behaviour in Great Britain in 2016: Evidence from England, Scotland and Wales*. Gambling Commission <https://www.gamblingcommission.gov.uk/PDF/survey-data/Gambling-behaviour-in-Great-Britain-2016.pdf>
19. Blaszczynski, A., et al. (2004) *A science based framework for responsible gambling: The Reno model*. Journal of Gambling Studies , 20(3), 301-317

20. Orford, J. (2020). *The Gambling Establishment: Challenging the power of the modern gambling industry and its allies*. Routledge, London & New York
21. Hancock, L. & Smith, G. (2017) *Critiquing the Reno Model I-IV International Influence on Regulators and Governments (2004-2015) – the Distorted Reality of “Responsible Gambling”*. Int Journal of Mental Health Addiction, 15, 1151-1176