

Understanding the Gambling Industry and the Impact of Gambling

The UK gambling industry made nearly £14bn profit in 15/16¹ ... but caused untold misery for countless people ... gamblers, their families and friends, and society in general. Government information indicates that in the UK there are over 400,000 addicts² (or “problem gamblers”, as the industry euphemistically calls them) with a further 2 million² “at risk”. Frighteningly, figures in 2017 show that a further 25,000 young people aged 11-16 are also rated as being “problem gamblers”³ with 40,000 “at risk”.

The massive expansion of the industry was heralded by the 2005 Gambling Act, which failed to anticipate the speed and type of growth or the damage that was inevitable. Legislators are belatedly waking up to the need to act, with an initial focus on the 33,500 Fixed Odds Betting Terminals (FOBTs) in bookies which have been described as the “crack cocaine” of gambling: each machine generates over £53,000 profit per year¹. But the next crisis, which is already here, is online gambling which has grown at an unprecedented rate⁴, with profits quintupling to £4.7bn per year¹. Public policy and action is trailing badly in the wake of this massive expansion.

Addictive Products and not Addictive Personalities is the Problem

There is a very common presentation of the problem as being located in individuals which subscribes to an outdated model of addiction⁵ and avoids questioning the advertising and availability of gambling and, crucially, the gambling products which are deliberately designed to be addictive⁶. We believe that normalisation of gambling and labelling of addicts as the problem leads addicts to feel that they are the ones who are immoral, creating mental health issues and adding to their suicide risk.

Too often gambling addicts are portrayed as those with mental health problems, personality disorders, from disadvantaged or unsettled backgrounds or having other addictive disorders. However, it is clear across a range of studies that addicts come from all backgrounds⁷⁻¹² and, particularly for on-line gambling, they tend to be from high education backgrounds and in professional/managerial roles^{10,13}. One study¹⁴ has even identified “cheerfulness” as a characteristic of “problem gamblers”! In many cases, gambling products⁶, accessibility¹⁵ and early gambling experiences¹⁶ cause the problem and can create mental health issues^{17,18}. It really is not possible to predict who might develop gambling problems or worse.

Suicide and Other Hidden Impacts of Gambling

We are hugely concerned that the scale of the impact of the gambling industry is hidden, due to:

- A lack of awareness of the scale: problem gambling rates are higher than alcohol dependency rates (0.7 - 0.9% “problem gambling” vs. 0.4% or 0.1% “moderate or severe alcohol dependency”);¹⁹
- Treatment through the GamCare network of providers is not integrated with NHS services or others likely to be in contact with problem gamblers, so that 90% of cases are self-referrals;²⁰
- The inadequacy of public recording: there are around 6,000 suicides each year in the UK²¹ with a further 3,500 “narrative” verdicts²¹ ... the method of registering these mean that i) these are likely underestimates²² and ii) it is not possible to identify deaths related to gambling;
- One UK study²³ found that 4% of suicides amongst 20-24 year olds were related to gambling; another study in Hong Kong²⁴ found 11.3% of suicide victims would be classified as pathological gamblers; if these figures applied across UK suicides, this would indicate 250-675 suicides a year related to gambling;
- A lack of basic data: partly because gambling is not widely recognised like other addictions^{25,26} and because figures on scale, severity, treatment, success rates, etc., are not publicly available, as all commissioning and provision of treatment services are located outside of the NHS and public sector;
- When data is available, there is a lack of adequate presentation and analysis of statistics, including failure to identify the impact of different types of gambling (e.g., FOBTs are far more dangerous than the National Lottery with an 11.8% addiction rate vs. 1.3%)²⁷, failure to focus on particular subgroups of gamblers.

Neuroscience Research

While financial issues do feature prominently in many suicides due to gambling, it is clear that gambling addiction also leads to feelings of despair, low self-esteem and self-loathing^{17,18,28}. Research is also being undertaken to explore the impact of gambling on the brain and how gamblers’ decision making is affected²⁹⁻³¹. There is common agreement that the ‘excitement’ of a gambling session is caused by the release of massive amounts of dopamine into the brain³², with the corresponding crash in mood when this is removed^{33,34}. However, neuroscience research is also exploring how different types of gambling products affect the neural connections in the brain, both immediately and in the longer term³⁵.

It seems clear that decision making is affected so that decisions are not based on rational thinking and past experience but on magical thinking and a genuine belief in luck³⁶, leading to increased impulsivity^{37,38} and loss chasing^{29,39}. We believe that this could be catastrophic when an individual crashes out of a session to a reality of despair, low self-esteem and self-loathing, and financial problems – but retaining the faulty decision making pathways in the brain, high arousal and impulsivity. And, unlike with alcohol or drug addictions, they remain highly capable of executing a suicide plan.

Some Facts About Gambling

British Gambling Prevalence Survey (BGPS) 2010⁴⁰

- 73% of the adult population (16+) gambled – around 35.5m adults.
- Excluding those who gambled only on the National Lottery, 56% of adults gambled.
- 14% of the adult population used the Internet to gamble.
- DSM-IV* indicated 0.9% (of all adults) as problem gamblers ~ 450,000 adults. PGSI[†] indicated 0.7%.
- PGSI indicated 5.5% low risk problem gamblers and 1.8% moderate risk.
- These are similar to drug dependence (0.9%) and higher than estimates of moderate or severe alcohol dependence (0.4% and 0.1% of all adults, respectively)¹⁹
- Research in 2017 showed that 12% (370,000) of 11-16 year olds had gambled in the previous week, with 0.9% (25,000) defined as problem gamblers and 1.3% (40,000) “at risk”³.

Addiction rates, suicides and mental health

Some gambling products appear more dangerous than others, as shown by the proportion of people taking part in different gambling activities who are “problem gamblers”. Some examples²⁷ are:

- Relatively low rates: National Lottery – 1.3%, Bingo – 2.8%, Horse racing – 3.7%
- High rates: Spread betting – 20%, Betting exchange – 17.6%, FOBTs – 11.8%, On-line – 11.4%

Gambling addicts are 2-3 times more likely to attempt to kill themselves or have major depressive episodes than other types of addicts, with 12-18% of those seeking treatment having attempted suicide⁴¹⁻⁴⁴.

Methods of recording, mean that it is not possible to identify the number of deaths in the UK related to gambling²². There were 5,965 suicides registered in the UK in 2016 with a further 3,529 “narrative verdicts” (an increase from just 111 in 2001)²¹.

One UK study²³ found that 4% of suicides amongst 20-24 year olds were related to gambling; another study in Hong Kong²⁴ found 11.3% of suicide victims would be classified as pathological gamblers.

Gambling addiction can cause mental health problems^{17,45}. One major US study indicated that in 25% of comorbid cases, mental health problems are first reported after a person develops gambling problems⁴⁶.

Treatment and Research

Unlike for drugs and alcohol, there is no national strategy to tackle gambling and there are no specialist NHS services for sufferers. Public Health England currently have a single member of staff on a year long contract, who has been charged with scoping the problem.

The industry contributed just £8m⁴⁷ through a voluntary arrangement last year to fund research, education and treatment. This is barely half of the 0.1% of profits target. Around £5.2m was allocated to the Helpline and treatment, with just 8,800 (2.2% of addicts)²⁰ receiving counselling through the treatment network (commissioned by GamCare), which is entirely outside of the NHS.

The GamCare treatment network is not well known in the NHS or amongst other groups likely to be in contact with problem gamblers, so that 90% of cases are self-referrals²⁰. Because gambling is so far outside of the public health system, it is not possible to access figures on numbers, severity, levels of treatment, success, etc.

Around £1.5m of the industry’s contribution is allocated to gambling research, but there is widespread concern about the influence of the industry on research and the impossibility of truly independent work.⁴⁸

Profits (UK 15/16)

Total Industry Profit £13.8bn¹

Remote Gambling Profit £4.7bn¹ (34% of total)

33,611 FOBTs across 8,531 betting shops ... total profit = £1.8bn ... £53.6K per machine¹

Estimated 14% of profits across the industry from addicts ... £1.932bn⁴⁹

Estimated 25% of FOBT profits from addicts ... £450m⁴⁹

Estimated annual public cost of gambling of up to £1.2bn⁵⁰ (includes only health, welfare and employment, housing and criminal justice costs ... suicides and other social impacts were not included).

FOBTs⁵¹

At stakes of £2 or below, 19% of players were identified as problem gamblers and 49% at risk of harm.

At or above £20, 42% of players were identified as problem gamblers and 44% at risk of harm.

Number of people “self-excluding” from different types of gambling per year¹

Bookies 38,500 (with 18.5K known breaches); On-line 1.148m (with 76.9K known breaches)

*DSM – Diagnostic and Statistical Manual of Mental Disorders; [†]PGSI – Problem Gambling Severity Index are the 2 most commonly used measures of gambling addiction.

References

- 1 Gambling Commission (2017) Industry Statistics: April 2014-March 2017 <http://www.gamblingcommission.gov.uk/news-action-and-statistics/Statistics-and-research/Statistics/Industry-statistics.aspx>
- 2 NatCen for the Gambling Commission (2017) Gambling behaviour in Great Britain in 2015: Evidence from England, Scotland and Wales <http://www.gamblingcommission.gov.uk/PDF/survey-data/Gambling-behaviour-in-Great-Britain-2015.pdf>
- 3 Gambling Commission (2017). Young people and gambling 2017: A research study among 11-16 year olds in Great Britain
- 4 MacKay, T.L. (2012) *Problem gambling risk factors in internet and non-internet gamblers*, University of Calgary.
- 5 Solomon, R. L. & Corbit, J. D. (1973) An opponent-process theory of motivation. *Journal of Abnormal Psychology* **81**, 158-171.
- 6 Schull, N. (2005) Digital gambling: The coincidence of desire and design. *The Annals of the American Academy of Political and Social Science* **597**, 65-81.
- 7 St-Pierre, R. A., Temcheff, C. E., Gupta, R., Derevensky, J. & Paskus, T. S. (2014) Predicting gambling problems from gambling outcome expectancies in college student-athletes. *Journal of gambling studies* **30**, 47-60.
- 8 Edgren, R., Castrén, S., Alho, H. & Salonen, A. H. (2017) Gender comparison of online and land-based gamblers from a nationally representative sample: Does gambling online pose elevated risk? *Computers in Human Behavior* **72**, 46-56.
- 9 Martin, F., Lichtenberg, P. A. & Templin, T. N. (2011) A longitudinal study: Casino gambling attitudes, motivations, and gambling patterns among urban elders. *Journal of Gambling Studies* **27**, 287-297.
- 10 Gainsbury, S., Wood, R., Russell, A., Hing, N. & Blaszczynski, A. (2012) A digital revolution: Comparison of demographic profiles, attitudes and gambling behavior of Internet and non-Internet gamblers. *Computers in Human Behavior* **28**, 1388-1398.
- 11 Svensson, J. & Romild, U. (2011) Incidence of Internet gambling in Sweden: results from the Swedish longitudinal gambling study. *International Gambling Studies* **11**, 357-375.
- 12 Wood, R. T. & Williams, R. J. (2011) A comparative profile of the Internet gambler: Demographic characteristics, game-play patterns, and problem gambling status. *New Media & Society* **13**, 1123-1141.
- 13 Griffiths, M., Wardle, H., Orford, J., Sproston, K. & Erens, B. (2009) Sociodemographic correlates of internet gambling: Findings from the 2007 British Gambling Prevalence Survey. *CyberPsychology & Behavior* **12**, 199-202.
- 14 Gupta, R., Derevensky, J. & Ellenbogen, S. (2006) Personality characteristics and risk-taking tendencies among adolescent gamblers. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement* **38**, 201.
- 15 Shaffer, H. J., Peller, A. J., LaPlante, D. A., Nelson, S. E. & LaBrie, R. A. (2010) Toward a paradigm shift in Internet gambling research: From opinion and self-report to actual behavior. *Addiction Research & Theory* **18**, 270-283.
- 16 Delfabbro, P., King, D. & Griffiths, M. D. (2014) From Adolescent to Adult Gambling: An Analysis of Longitudinal Gambling Patterns in South Australia. *Journal of Gambling Studies* **30**, 547-563.
- 17 Winters, K. C. & Anderson, N. (2000) Gambling involvement and drug use among adolescents. *Journal of Gambling studies* **16**, 175-198.
- 18 Gupta, R. & Derevensky, J. L. (1998) An empirical examination of Jacobs' General Theory of Addictions: Do adolescent gamblers fit the theory? *Journal of gambling studies* **14**, 17-49.
- 19 McManus, S., Meltzer, H., Brugha, T., Bebbington, P. & Jenkins, R. (2009) *Adult psychiatric morbidity in England, 2007: results of a household survey*. (The NHS Information Centre for health and social care, 2009).
- 20 GambleAware. Annual Review 2016/17. <https://about.gambleaware.org/media/1628/gambleaware-annual-review-2016-17.pdf>
- 21 Office for National Statistics (2017) Suicides in Great Britain: 2016. Statistical Bulletin, <https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/suicidesintheunitedkingdomreferencetables/current/update2016suicide.xls>
- 22 Carroll, R., Hawton, K., Kapur, N., Bennewith, O. & Gunnell, D. (2011) Impact of the growing use of narrative verdicts by coroners on geographic variations in suicide: analysis of coroners' inquest data. *Journal of Public Health* **34**, 447-453.
- 23 Appleby, L. *et al.* (2017) Suicide by children and young people. National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH). Manchester: University of Manchester
- 24 Wong, P.W.C. *et al.* (2010) A psychological autopsy study of pathological gamblers who died by suicide. *Journal of Affective Disorders* **120**, 213-216
- 25 Davies & Boseley (2017). Problem gamblers – no one knows how many exist or cost to the state. *The Guardian*, <https://www.theguardian.com/society/2017/dec/05/problem-gamblers-no-one-knows-how-many-exist-or-cost-to-the-state>
- 26 American Psychiatric Association (2013) *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* Arlington, VA: American Psychiatric Publishing.
- 27 Joint Health Surveys Unit of NatCen Social Research and the Research Department of Epidemiology and Public Health at UCL (2016) NHS Health Survey for England, 2015. <http://digital.nhs.uk/catalogue/PUB22610>
- 28 Blaszczynski, A. & Nower, L. (2002) A pathways model of problem and pathological gambling. *Addiction* **97**, 487-499.
- 29 Clark, L., Lawrence, A. J., Astley-Jones, F. & Gray, N. (2009) Gambling near-misses enhance motivation to gamble and recruit win-related brain circuitry. *Neuron* **61**, 481-490.
- 30 Clark, L. *et al.* (2013) Pathological choice: the neuroscience of gambling and gambling addiction. *Journal of Neuroscience* **33**, 17617-17623.
- 31 Qi, S., Ding, C., Song, Y. & Yang, D. (2011) Neural correlates of near-misses effect in gambling. *Neuroscience Letters* **493**, 80-85.
- 32 Boileau, I. *et al.* (2014) In vivo evidence for greater amphetamine-induced dopamine release in pathological gambling: a positron emission tomography study with [¹¹C]-(+)-PHNO. *Molecular psychiatry* **19**, 1305.
- 33 Gee, P., Coventry, K. & Birkenhead, D. (2005) Mood state and gambling: Using mobile telephones to track emotions. *British Journal of Psychology* **96**, 53-66.
- 34 Hills, A., Hill, S., Mamone, N. & Dickerson, M. (2001) Induced mood and persistence at gaming. *Addiction* **96**, 1629-1638.

- 35 Yücel, M. et al. (2017) Neuroscience in gambling policy and treatment: an interdisciplinary perspective. *The Lancet Psychiatry* 4, 501-506.
- 36 Wohl, M. & Enzle, M. (2003) The effects of near wins and near losses on self-perceived personal luck and subsequent gambling behavior. *Journal of experimental social psychology* 39, 184-191.
- 37 Hodgins, D. & Holub, A. (2015) Components of impulsivity in gambling disorder. *International journal of mental health and addiction* 13, 699-711.
- 38 Michalczuk, R., Bowden-Jones, H., Verdejo-Garcia, A. & Clark, L. (2011) Impulsivity and cognitive distortions in pathological gamblers attending the UK National Problem Gambling Clinic: a preliminary report. *Psychological medicine* 41, 2625-2635.
- 39 Nigro, G., Ciccarelli, M. & Cosenza, M. (2018) The illusion of handy wins: Problem gambling, chasing, and affective decision-making. *Journal of affective disorders* 225, 256-259.
- 40 U.K. Government (2011) British Gambling Prevalence Survey <https://www.gov.uk/government/publications/british-gambling-prevalence-survey-2010>
- 41 Petry, N. & Kiluk, B. (2002) Suicidal ideation and suicide attempts in treatment-seeking pathological gamblers. *The Journal of nervous and mental disease* 190, 462.
- 42 National Council on Problem Gambling (2012) How Gambling Can Kill You Faster Than Drug Abuse or Alcoholism, <https://www.alternet.org/how-gambling-can-kill-you-faster-drug-abuse-or-alcoholism>
- 43 Georgia State University. Depression, Suicide and Problem Gambling http://www2.gsu.edu/~psyjge/Fact/suicide_04_10.pdf
- 44 Kausch, O. (2003) Suicide attempts among veterans seeking treatment for pathological gambling. *The Journal of clinical psychiatry*.
- 45 Blaszczyński, A. & Farrell, E. (1998) A case series of 44 completed gambling-related suicides. *Journal of gambling studies* 14, 93-109.
- 46 Reilly, C. (2009) The Prevalence of Gambling Disorders in the United States: Three Decades of Evidence. *Increasing the Odds: A Series Dedicated to Understanding Gambling Disorders* 3.
- 47 GambleAware. Fundraising Section of website. <https://about.gambleaware.org/fundraising/>
- 48 Cassidy, R. et al., (2013) Fair game: producing gambling research. Goldsmiths, University of London
- 49 Orford, J., Wardle, H. & Griffiths, M. (2013) What proportion of gambling is problem gambling? Estimates from the 2010 British Gambling Prevalence Survey. *International Gambling Studies* 13, 4-18.
- 50 IPPR (2016) Cards on the Table: The Cost to Government Associated with People who are Problem Gamblers in Britain <https://www.ippr.org/publications/cards-on-the-table>
- 51 DCMS (2017) Consultation on Proposals for Changes to Gaming Machines and Social Responsibility Measures. <https://www.gov.uk/government/consultations/consultation-on-proposals-for-changes-to-gaming-machines-and-social-responsibility-measures>