


GAMBLING COMMISSION


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Quarterly Research Briefing 02/15 (May 2015)

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Quarterly research briefing 02/15

Executive Summary

1. The purpose of this briefing note is to provide both the Board and all colleagues with a short summary of significant research that has either been published recently, or is due to be published in the near future. We will share this, and future, research briefings with the Responsible Gambling Strategy Board (RGSB).
2. Copies of the full research documents featured in this briefing, or more detailed summaries, are available on request. Full citations of the studies featured in this briefing are provided in the annex.
3. **Gambling participation: activities and mode of access, year to March 2015.**
Gambling Commission (2015)

The following findings are based on a set of questions commissioned by the Gambling Commission in omnibus surveys conducted by ICM Research. These questions ask respondents about their gambling participation in the past four weeks. The data in this report is from the four quarterly surveys conducted in the year to March 2015.

Key findings

Gambling participation in the past four weeks

- An average of 51% of respondents had participated in at least one form of gambling in the previous four weeks. This compares with 56% in the year to March 2014 and 58% in the year to March 2013. This decrease has been predominantly driven by a decrease in participation in National Lottery draws.
- A larger proportion of male than female respondents had participated in gambling in the previous four weeks (55% of males and 48% of females).
- An average of 15% of respondents had participated in at least one form of online gambling in the previous four weeks.
- A larger proportion of male than female respondents had participated in online gambling in the previous four weeks (17% of males and 13% of females).
- If those respondents only playing the National Lottery are excluded, the proportion of respondents who had participated in gambling in the previous four weeks falls to 31%.
- When respondents only playing National Lottery products online are excluded, the proportion of respondents who had participated in online gambling falls to 9%.
- An average of 46% of 18-24 year olds had participated in at least one form of gambling in the previous four weeks. This compares with 49% in the year to March 2014 and 49% in the year to March 2013.

Participation in each activity

- The most popular gambling activity was National Lottery tickets with 36% of respondents having participated in the past four weeks. This compares with 41% in the year to March 2012 and 47% in the year to March 2013.
- This was followed by other lotteries (13%), scratchcards (9%) and betting on horse races (7%).

- No other individual activity was participated in by more than 4% of respondents.

Gambling involvement

- The most common frequency of participation when looking at an aggregate of all activities for past four week gamblers was 'once a week' (39% compared with 43% in the year to March 2014 and 44% in the year to March 2013). However, there has been an overall fall in the overall frequency of participation with 18% of respondents reporting to have participated 'less than once a month', compared with 13% in the year to March 2014 and 12% in the year to March 2013.
- A similar trend is observed for participation on all aggregated betting activities, with the most common frequency being 'less than once a month' (53% compared with 49% in the year to March 2014 and 28% in the year to March 2013). The following findings are based on a set of questions commissioned by the Gambling Commission in omnibus surveys conducted by ICM Research. These questions ask respondents about their gambling participation in the past four weeks. The data in this report is from the four quarterly surveys conducted in the year to March 2014.

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- An average of 15% of respondents had participated in at least one form of online gambling in the previous four weeks.
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4. Online Gambling Addiction: the Relationship Between Internet Gambling and Disordered Gambling. Gainsbury (2015).

- The aim of this paper is to collate what is known in the literature on internet gambling and to identify where further research is needed. A number of participation and problem gambling surveys are quoted that are taken from the UK and Australia.

Findings

- The parallels between gambling problems and substance can be seen in the DSM-5 through the inclusion of 'internet gaming disorder' in section 3. The online global gambling market was valued at €6.1 billion in 2013, with an expected annual growth of 10.1% in 2018.
- The authors aim to assess what features of internet gambling may impact on problem gambling severity. Unique features of internet gambling are identified as: the use of digital money, constant availability, easy access and the ability to bet alone and without interruption. This is said to provide an interactive and immersive internet environment.
- Existing data provided by GamCare indicates that online problem gamblers make up a small but growing proportion of problem gamblers that are seeking formal help. It is suggested that online problem gamblers are underrepresented because they are less likely to seek formal help.
- Existing studies have written about a positive correlation between internet gambling participation and problematic behaviour. However, this relationship is yet to be confirmed. The correlation may be attributed to the prevalence of mixed participation in remote and non-remote gambling amongst problem gamblers.
- Looking to socio-demographic variables, risk factors for internet problem gamblers are identified as being male, young adults and belonging to a minority ethnic group. Further research into the harms associated with internet gambling amongst young adults is required.

¹ The data published in January 2015 showed an overall increase in participation amongst those aged 18-24. This was as a result of one survey in 2014 taking place during a period covering the Grand National, with participation in horse race betting in this quarter especially high amongst those aged 18-24. The increase is not observed in this report due to the shift in the reporting window from calendar years to year to March.

- Higher levels of gambling problems are identified amongst online gamblers who gamble on unregulated sites, use multiple accounts and participate in different online activities. The dataset provided by bwin.party is mentioned here as it shows live action sports betting (in-play betting) as an independent predictor of problem gambling severity, when controlling for gambling involvement. This type of betting allows frequent and repeated bets to be placed during a single sporting event, which may be particularly attractive to people who are highly impulsive.
- The data available to online operators should be used to identify risk markers such as customer account closures. Existing research is lacking in this area and an argument is made that the actions and/or demands of customers can be a predictor of self exclusion.

Conclusions

- The author concludes that internet gambling does not cause gambling problems in and of itself. However, internet gambling is more common amongst highly involved gamblers, and for some internet gamblers, this mode of participation significantly contributes to problematic behaviour.
- Operators are in a strong position to implement responsible gambling tools such as pop-up messages, self-set spend limits, time outs and information in the online gambling environment.
- Future research should focus on the likelihood of people, particularly young males, transitioning to disorder when gambling online.

5. **Contextualising machine gambling characteristics by location - final report A spatial investigation of machines in bookmakers using industry data.** Prepared by Geofutures for The Responsible Gambling Trust (2015).

- The aim of this project, which concludes the series of machines research funded by the Responsible Gambling Trust, is to map machine play in Great Britain. The paper describes the characteristics of locations that have varying levels of gambling machine play through analysing regional and national trends.
- Industry provided data was analysed to make area comparisons of licensed betting offices (LBOs) that house machines. Other data sources, such as the Census (2011) and the Ordnance Survey (OS) were incorporated to draw conclusions about specific areas.

Key findings

- The findings show that half of all betting shops with machines exist in town centres and major retail areas, with the other half in peripheral locations in England and Wales. A strong presence of independent LBOs in the North West was identified.
- It was noted that the number of betting shops with machines has fallen since July 2014. It peaked in December 2013 at 9,500. Since that time the number has decreased to 9,350 in November 2014.
- Overall, areas close to betting shops tended to have higher levels of crime events, deprivation, unemployment and ethnic diversity.
- On a national scale, 8% of loyalty card players live within 400m of a betting shop where they have played a machine, with 23% living within 1km and 46% living within 3km.

- The authors claim that while a small number of players gambled regularly, this does not necessarily mean that problem gambling behaviour was being experienced.
- In the authors' view, future research is required in this area to explore the underlying complexities around local factors that influence machine play.

Problem Gambling

6. Bookmakers and a Duty of Care: Customers' Views in England. Brooks & Sparrow (2015)

- 72 participants recruited from seven bookmakers in one city in England were interviewed to explore the extent to which customers expect bookmakers to take 'reasonable steps' to avoid exploiting customers. The data collected showed a diverse range of opinions on what a duty of care should look like. In particular, differences were seen in the level of bookmakers' and individuals' levels of responsibility in dealing with intoxicated customers, illegal gambling, prevention of excessive and problem gambling and self-exclusion.

7. Determining optimal placement for pop-up messages: evaluation of a live trial of dynamic warning messages for electronic gaming machines. Gainsbury et al. (2015).

- This paper explores warning messages as a harm minimization strategy to prevent or reduce gambling-related problems by assisting machine players to make informed choices about gambling. A sample of 667 regular gamblers responded to a survey to assess their recall of warning messages featured on electronic gaming machines (EGMs) and the impact of these upon thoughts and behaviours. The paper concludes that the findings in this study validate previous laboratory research in this area that suggests dynamic warning messages that appear in the middle of an EGM screen are more likely to be an effective tool for harm minimization, compared with those located on the periphery.

8. Gambling and Problem Gambling in Victoria, Australia: changes over 5 years. Abbott et al. (2015).

- This paper explores data from the Victorian Gambling Study (VGS) that was collected between 2008- 2012 (n = 15,000), along with the 2003 Victorian Longitudinal Attitudes Survey (n = 8,479). The study aimed to explore the rates of gambling and gambling-related harm and how this has fluctuated over time as a result of factors such as availability, adaptation and demographic change. The research process showed that assessing change was difficult due to the influence of variation in methodology.
- The findings showed that when the variation in methodology was accounted for, there were no significant changes in problem, moderate risk and low risk gambling. Findings from the 2003 Victorian Longitudinal Attitudes Survey alone show that young adults and metropolitan residents had the highest rates of problem and moderate risk gambling. A recommendation is made that further research is required to understand why overall rates of harm (measured using the PGSI screen) have been consistent while participation continues to fall.

9. **The influence of sex, temperament, risk-taking and mental health on the emergence of gambling: a longitudinal study of young people.** Yücel et al. (2015).

- This study aims to identify the early risk factors for problem gambling in a bid to move away from the dominance of adult problem gambling in the research area. The authors argue that while early adulthood is a critical stage for the emergence of problem gambling, early risk factors are unknown. To explore the risk factors of adolescent problem gambling the authors examined factors such as: risk-taking behaviours, temperament, symptoms of mental illness, and sex. A sample of 156 early adolescents with no experience of problem gambling was recruited, with an average age of thirteen years old, from Australian schools. The methodology used was a longitudinal study that followed the young people into late adolescence. To measure parental problem gambling, one parent of each participant was asked to complete the South Oaks Gambling Screen (SOGS).
- The findings show that greater involvement in risky behaviours such as alcohol use, can predict greater likelihood of being in the risky gambling group. Also factors around negative emotions such as aggression and frustration were attributed to risky gambling behaviour. Unusually, the study identified higher levels of aggression amongst women as a predictor of risky gambling behaviour but made no mention of it in relation to men. Previous studies have identified aggression amongst men as a predictor of risky gambling behaviour. The authors conclude that the early to mid adolescent period influences the occurrence of gambling later on in life. A recommendation is made that pathways for early intervention should differ for men and women dependent on the behaviour they exhibit.

10. **Do Social Casino Gamers Migrate to Online Gambling? An Assessment of Migration Rate and Potential Predictors.** Wohl et al. (2014).

- This study aimed to assess the extent to which social casino gamers migrate to online gambling, and the potential predictors of migration. Social casino gamers who had never gambled online (n=409) completed a questionnaire and were re-contacted 6 months later to see if they had engaged in online gambling in the intervening time.
- The results showed that roughly one quarter of those who completed the follow up questionnaire (26 out of 99) reported having migrated to online gambling. The paper concludes that engagement in micro-transactions was the only unique predictor of migration from social casino games to online gambling.
- As a result of a weak methodological approach, generalisations are difficult to draw from this study. Further details are available upon request.

11. **Do male and female gamblers have the same burden of adversity over their life course?** Andronicos et al. (2015).

- This study explores the relationship between problem gambling and adverse life experiences ('adversities') by examining life trajectories (n=86). A screening interview based on SOGS was administered to recruit a sample of participants who had experienced problem gambling behaviour in the last five years. The mean age of the sample was 55 years old. The methodology used to inform this research included a Structured Clinical Interview of DSM Disorders (SCID I)

and a life trajectory interview. This enabled researchers to evaluate an individual's mental health disorders while tracking events across the life course. Both positive and negative events were noted, alongside the length and severity of the experience.

- The findings show that women experienced significantly more childhood violence than men in their younger years (aged 0-14 years). Women were also more likely to experience partner or marital violence in their adult years. Amongst male participants, there were higher numbers of adversities reported in the workplace. These adversities tended to occur in early adulthood (aged 20 to 29 years). Participants tended to underestimate their life adversities as minor events were difficult to recall in the life trajectory interview. The methodology employed counterbalanced this weakness through the use of mixed data capture methods and narrative approaches. A recommendation is made that a better knowledge of what triggers problem gambling and mental health disorders is required for health professionals to detect and respond to co-occurring adversities. This can be achieved through better relationships with providers of child welfare and family support services.

12. **A Case of Mistaken Identity? A Comparison of Professional and Amateur Problem Gamblers.** Hing et al. (2015).

- This paper compares gambling behaviour, problem gambling symptoms, related harms, recognition and help-seeking behaviours among professional and amateur gamblers.² A sample of survey respondents was made up of: 57 self-identified professional gamblers, 311 semi-professional gamblers and 4,226 amateur gamblers.
- The findings show that self-identified problem professional gamblers were more likely than problem amateur gamblers to be young, single, male and speak a language other than English and experience higher psychological distress. Problem professional gamblers were also more likely to participate in gambling forms that were skill based. For example, sports betting was a more problematic gambling form identified in the professional problem gambling group, compared to the amateur group. The paper concludes that those who self-identify as semi-professional/professional gamblers tended to chase the losses which in turn had a negative impact on their finances. This category may have been chosen to dispel the stigma of being associated with being a problem amateur gambler.

Gambling & Crime

13. **Problem Gambling Associated with Violent and Criminal Behaviour: A Danish Population-Based Survey and Register Study.** Laursen et al. (2015).

- This study compares the number of criminal charges among problem gamblers (n = 384) and non-problem gamblers including non-gamblers (N = 18,241) and examines whether problem gambling is more strongly associated with income-generating crimes like theft, fraud and forgery than other types of crimes such as violent crimes.
- The findings showed that there was a strong association between problem gambling and being charged with a criminal offence, with the exception of road

² The screen that used to determine gambling status was not given mention to in the abstract that was available.

traffic offences. However, the association was not stronger for economic charges than for violence and drug charges.

14. **Endorsement of Criminal Behavior Amongst Offenders: Implications for DSM-5 Gambling Disorder.** Turner et al. (2015).

- This paper explores the changes made to the DSM-5 that now excludes the illegal acts criterion and lowers the threshold for gambling disorder from five to four criteria. To assess the impact of these changes, a sample of 676 offenders completed a self-report survey.
- The findings reported show that the revised criteria resulted in an increase in the percentage of offenders diagnosed with gambling disorder from 7.4% to 10.2%.
- In conclusion, the evidence presented shows that the change in threshold from five to four reinforces the importance of examining illegal acts when researching the offender population.

Gambling and Public Health

15. **Health on the High Street, Royal Society for Public Health.** Royal Society for Public Health (2015).

- This study used desk-based research, consultation with experts and a public survey (n=2,000) to score the positive or negative impact various businesses have on the public's health. The authors have developed a 'Richter scale' to assess the positive and negative aspects of each venue, giving a score between -2 (most negative impact on health) and +2 (most positive impact on health) in four areas.
- This scoring is then used in conjunction with premises data to map the UK's healthiest and unhealthiest high streets (the score for each area is obtained by calculating a total Richter score and dividing by the total number of businesses). The report attempts to 'capture the detrimental impact' of clustering of various types of premises (including betting shops) by deducting one Richter point for each successive outlet once a certain threshold has been reached.
- The findings showed that the proportion of people who live in the 20% most deprived parts of England. For the towns with the ten unhealthiest high streets this proportion is almost twice the national average (39% compared to 20%). The ten towns and cities with the 'healthiest retail area experience' experience far lower rates of deprivation and better health outcomes.
- As a result of flaws in the methodological approach, there are concerns around how the findings of this study should be interpreted. Further details are available upon request.

16. **Greater involvement and diversity of Internet gambling as a risk factor for problem gambling.** Gainsbury et al. (2015).

- This paper investigates the differences between the behaviour exhibited by single or multiple online gambling account holders. An online survey was completed by 3,178 respondents to assess their gambling behaviour and use of single or multiple online accounts.

- The findings presented show that multiple account holders tended to be more involved gamblers as they gambled on more activities, more frequently and experienced more gambling problems in comparison to single account holders. In addition, multiple account holders tended to select gambling websites based on price, betting options, payout rates and gaming experiences, whereas single account holders prioritised legality and consumer protection features. The authors conclude that the results of this study identify two types of internet gamblers: one motivated to move between sites to optimize experience with a tendency to gamble in a more volatile manner; and a smaller but more stable group less influenced by promotions and experience that sought a safe gambling experience. A recommendation is made that universal responsible gambling strategies should be in place to assist multiple account holders to track and control their expenditure and to reduce risks of harm.

17. **Problem gambling and internalising symptoms: A longitudinal analysis of common and specific social environmental protective factors.** Scholes-Balog et al. (2015).

- This study examines the link between comorbidity and problem gambling. In particular, an investigation into how internalising disorders such as anxiety and depression develop a relationship with problem gambling.
- The results from the survey (n = 2,248) showed that, while there was a positive relationship between problem gambling and internalising symptoms, there was no statistically significant longitudinal relationship present. It was concluded that protective factors could not be predicted using longitudinal methodology. The authors made a recommendation that separate factors to protect against each condition should be investigated in future research.

Other

18. **Slot Machine Payback Percentages: The Devil is in the Moment.** Farrow & Costa (2014).

19. **Dual effects of 'losses disguised as wins' and near-misses in a slot machine game.** Aitken & Clark (2015).

20. **Traumatic event exposure and gambling: associations with clinical, neurocognitive, and personality variables.** Leppink & Grant (2015).

21. **Personality and gambling involvement: A person-centered approach.** Savage et al. (2014).

Forthcoming research

22. **ABB Code of Responsible Gambling and Player Protection: Evaluation of early impact** (NatCen – funded by RGT)

Annex - Full citations

Abbott et al. (2015). Gambling and Problem Gambling in Victoria, Australia: changes over 5 years.

Aitken & Clark (2015). Dual effects of 'losses disguised as wins' and near-misses in a slot machine game. *International Gambling Studies*.

Andronicos et al. (2015). Do male and female gamblers have the same burden of adversity over their life course? *International Gambling Studies*.

Brooks & Sparrow (2015). Bookmakers and a Duty of Care: Customers' Views in England.

Farrow & Costa (2014). Slot Machine Payback Percentages: The Devil is in the Moment.

Gainsbury et al (2015). Greater involvement and diversity of Internet gambling as a risk factor for problem gambling. *European Journal of Public Health*.

Gainsbury et al. (2015). Determining optimal placement for pop-up messages: evaluation of a live trial of dynamic warning messages for electronic gaming machines. *Journal of Gambling Studies*.

Gambling Commission (2014). Gambling participation: activities and mode of access, year to 2014.

Geofutures (2015). Contextualising machine gambling characteristics by location - final report. A spatial investigation of machines in bookmakers using industry data. Prepared by Geofutures for The Responsible Gambling Trust.

Hing et al. (2015). A Case of Mistaken Identity? A Comparison of Professional and Amateur Problem Gamblers. *Journal of Gambling Studies*.

Laursen et al. (2015). Problem Gambling Associated with Violent and Criminal Behaviour: A Danish Population-Based Survey and Register Study. *Journal of Gambling Studies*.

Leppink & Grant (2015). Traumatic event exposure and gambling: associations with clinical, neurocognitive, and personality variables. *Annals of General Psychiatry*.

Royal Society for Public Health (2015). Health on the High Street, Royal Society for Public Health.

Turner et al. (2015). Endorsement of Criminal Behavior Amongst Offenders: Implications for DSM-5 Gambling Disorder. *Journal of Gambling Studies*.

Savage et al. (2014). Personality and gambling involvement: A person-centered approach. *Psychology of addictive behaviors: journal of the Society of Psychologists in Addictive Behaviors*.

Scholes-Balog et al. (2015). Problem gambling and internalising symptoms: A longitudinal analysis of common and specific social environmental protective factors. *Addictive Behaviors*.