



Quarterly Research Briefing 02/16 (October 2016)

| | |
|-----------------------|---|
| For Board approval | |
| For Board briefing | |
| For Board steer | |
| | |
| For Board information |  |

Prepared by:

Date: 19 October 2016

| | |
|----------------------------|---|
| Publish in full | |
| Subject to minor redaction |  |
| No publication | |

Introduction

1. The purpose of this briefing is to summarise significant gambling-related research that has either been published recently or due to be published in the near future.
2. The paper is based on a research index that is populated with articles through newsletter alerts and a scan of relevant academic journals such as: International Gambling Studies, Journal of Gambling Studies and the International Journal of Mental Health and Addiction.
3. The articles in this briefing fall under the following areas of research:
 - Gambling Commission funded research (pp 5-6)
 - Responsible Gambling Trust funded research (pp 6-9)
 - Problem gambling and gambling-related harm (pp 9-12)
 - Machines (p 12-13)
 - Responsible gambling tools (pp 13-14)
 - Marketing and advertising (pp 14-16)
 - Other (including crime, young people and employment) (pp 16-18)
4. The briefing is produced on a quarterly basis with the last publication dated July 2016.
5. The paper is also submitted as an agenda item at the bi-monthly Responsible Gambling Strategy Board (RGSB).
6. Copies of the documents featured in this briefing are available on request. A bibliography with further information on the research studies (including sample sizes and a grading of relevance to Gambling Commission policy making) is provided in Annex A.
7. Where relevant, key policy implications are highlighted within each summary.

Quarterly Research Briefing

October 2016

Executive summary

This quarter's research briefing has been enhanced with the introduction of a thematic Executive Summary and some more developed policy implications input. In addition, the annex provides further detail on the studies, including sample sizes and an assessment of the extent of the relevance of each report for informing Gambling Commission policy. Looking ahead, we are reviewing whether this would be a useful product to share externally.

James Green
Programme Director

1. This quarter's research briefing summarises the findings of 18 reports, spread across the field of Gambling Commission and RGT-funded research, problem gambling, responsible gambling tools, machines, marketing and advertising, and others areas. Four prominent themes across the research are national participation and prevalence data, expenditure on machines, identifying problem gamblers and reducing gambling-related harm, and mental health.

National participation and prevalence data

2. With respect to participation data, the Gambling Commission has published headline findings of participation and

problem gambling rates for Wales and Scotland. Full analysis of this data will take place once the dataset for England is released. At this stage it is interesting to note that whilst participation in Scotland (68%) was more than in Wales (61%), the problem-gambling rate in Wales was significantly higher (1.1%, compared to 0.7%). On the other side of the world, the Australian Capital Territory (ACT) Gambling and Racing Commission has also published its participation and prevalence data, using an approach that combined industry data, self-reported gambling participation with a household survey. This enabled the researchers to attribute gambling expenditure across demographics, activity and problem gambling rates¹; which may be a model we could adopt in the future.

Expenditure on machines

3. Machines remains an ever popular research topic. Two reports featured here – both from the Responsible Gambling Trust – look at machine play in the bingo and casino environments, exploring motivations to gamble in these spaces and to gauge rates of problem gambling. The average loss of a typical machine² player in a casino is one hour of time and £25; compared to bingo players who, on average, 'spent' £24.50 on

¹ Measured by the Problem Gambling Severity Index (PGSI)

² Category B1 machines.

fruit/slot machines³ in 30 minutes. These papers begin to unpick expenditure (time and money) and raise questions around how we approach 'spend' and 'loss'. There is only limited research available that investigates machine play in locations outside of licensed bookmakers, so these pieces are timely in light of the upcoming Gambling Review.

Identifying problem gamblers and reducing gambling-related harm

4. Problem gambling and gambling-related harm also remain a prominent research area, here and internationally. An interesting report evaluates the use of Family Exclusion Orders (FEOs) in Singapore. This is a tool currently unavailable in Great Britain, and adds to the body of evidence that assesses the effectiveness of exclusion orders in reducing gambling-related harm. Elsewhere in this briefing there are a handful of studies that re-iterate why men in particular have been identified as an at-risk group of problem gambling and gambling-related harm. Peer pressure, alcohol and mobile technologies are reconfirmed as contributors to increased gambling participation amongst men.
5. This quarter, two key pieces⁴ examine mental health conditions that are co-morbid with problem gambling. These are attention deficit hyperactivity disorder (ADHD), depression and panic disorder. High numbers of problem gamblers in these samples had experienced thoughts/acts of self-harm⁵ and participants were found to have low levels of coping strategies. The authors of these papers recommend tailored interventions for problem gamblers experiencing these forms of psychological distress.

6. Finally, we have reviewed a new study from the Responsible Gambling Trust which has evaluated the introduction of the Player Awareness System. Covering 80% of betting shops in the Great Britain, the study draws on data from 2 million loyalty cards and 169,424 active customers. A significant study it makes a robust contribution to understanding the dynamics of machines-related player harm.

³ Category C and B3 machines.

⁴ One of which was co-funded by the Responsible Gambling Trust (Lloyd et al. 2016).

⁵ 0.4% of the population in 2015 reported acts of self-harm (<https://www.mentalhealth.org.uk/a-to-z/s/self-harm>). The results in this study showed that 2% of the sample had self-harmed as a result of their gambling (Lloyd et al. 2016).

Gambling Commission

Participation in gambling and rates of problem gambling – Wales 2015. Gambling Commission (2016).

Aims and methodology

7. To track the participation and prevalence of gambling in the Welsh population.
8. A telephone survey (n = 4,048) was conducted by Populus to gain insight into levels of participation across activities and rates of problem gambling.
9. This survey was funded by the Commission as a standalone survey. The dataset will be combined with the Health Survey for England and Scottish Health Survey (in Spring 2017).

Key findings

10. Based on past 12 month participation, the overall gambling participation rates was 61%. Participation in any activity excluding the National Lottery draw was 44%.
11. The problem gambling rate measured by either problem gambling screen (PGSI or DSM-IV) was 1.1%, higher than comparable datasets (BGPS, Health Survey for England)
12. 3.8% of all respondents were identified as low or moderate risk gamblers.
13. The National Lottery is the most popular form of gambling (47%), with increases in scratchcard participation in Wales from 23% to 27% (British Gambling Prevalence Survey (2010).

Limitations

14. The dataset has not yet been combined with the results of the Scottish Health Survey (2015) and the Health Survey for England (2015). This summary gives a top level analysis of the results specific to the population of Wales.
15. The workstream responsible for reporting on participation and prevalence have engaged with Welsh government to highlight the

importance of research in this area as no funding was offered to support the survey. Further engagement has been planned as the results indicate that Wales have the highest problem gambling rate. The combined report that will be published in Spring 2017 aims to understand these regional differences.

Participation in gambling and rates of problem gambling – Scotland 2015. Gambling Commission (2016).

Aims and methodology

16. To track the participation and prevalence of the Scottish population through the Scottish Health Survey (2015). The previous survey was conducted in 2012 alongside the Health Survey for England.
17. The aim of this survey is to report on the health and lifestyles of the population in Scotland, in order to inform funding into health and social care services.
18. The findings of the Scottish Health Survey (2015) will be combined datasets for the Health Survey for England and Welsh problem gambling survey.

Key findings

19. Overall gambling participation in Scotland has increased from 65% to 68% from the one year period of 2014 – 2015. However, problem gambling rates overall have decreased to 0.7%.
20. Low or moderate risk gamblers attributed to 4% of the sample, similar rates found in the Wales survey.
21. In terms of activity, increases to participation across online slots, casino or bingo and other lotteries were seen.
22. Similar to the data on England and Wales, the National Lottery draw remains most popular (53%) but with declining participation rates since 2014.

Limitations

23. At present, there has been no analysis of the combined Scottish Health Survey, Health Survey for England and Wales problem gambling survey.⁶

Policy implications

24. To continue to engage with Scottish government to inform initiatives around problem gambling.
-

Responsible Gambling Trust

Evaluation on the Player Awareness System implementation. PwC (2016).

Aims and methodology

25. This project conducted by PwC is an evaluation of the Player Awareness System (PAS) introduced in December 2015. The overarching aim was to understand the different systems to identify positive developments to be built upon moving forward.
26. Datasets were provided by ABB members (including Coral, Ladbrokes, Paddy Power and William Hill) and machine suppliers Scientific Games and Inspired Gaming, relating to the period of December 2015 – March 2016. The findings of this project can be viewed as robust as the data set covered 80% of betting shops in Great Britain.
27. The project was informed by the markers of problematic play identified by NatCen's research in 2014. From the 15 markers identified, 7 featured in the PAS system. In order to trigger an intervention, 3 markers of harm must be fulfilled.
28. The aim was to evaluate the effectiveness of player messaging and interaction through PAS. However, it was agreed that Phase 2 of

the project, intended to be a process of validation of the system initially would instead include sample testing to make some observations about the progress being made. This paper outlines those initial findings.

Key findings

29. Data from over 2 million loyalty cards and 169,424 active customers was collated.
30. The time taken to identify harmful play varied by operators.
31. The design of the PAS system was still a work-in-progress as the system is usually manual and undocumented. Also, the system itself is not always in line with the designed approach that has been set out.
32. There have been issues with implementation – such as ensuring messages were being sent, documentation of the actions taken and restricting marketing. The restriction of marketing, for example had to be done manually by someone in the marketing team.
33. Staff working in these betting shops were unaware of this specific initiative and considered the implementation of the system part of their everyday duties relating to the promotion of responsible gambling.
34. Only one operator was able to link machine play data with other platforms such as online betting to help support interventions (this operator was not named in the paper).
35. There is little data on the impact of interactions and messages (this speaks more widely of existing research on this topic).
36. The group of operators are still working to define a set of KPIs to support the reporting of PAS interventions to the chief executive officer.

⁶ The combined report that will be published in Spring 2017 and aims to understand these regional differences.

Limitations

37. It is too early to identify what best practice in terms of PAS looks like and if the scheme is minimising harm. There is little data held on the impact of interventions/messaging, and this speaks of the wider research on this topic. The ABB have committed to conducting a 12 month review of the scheme which should provide greater insight.
38. One limitation is that it is unknown whether the loyalty cards were shared with other machine players or were used consistently in every machine play session.
39. The key recommendation under next steps is to conduct follow up research into the discrepancies applied when using different algorithms, scoring mechanism and categorisation.

Policy implications

40. This paper is a positive step forward in embedding a culture of evaluation across the industry. The Commission welcomes the evaluation that was carried out and that the results were published.
41. The paper has highlighted areas of inconsistency across the operators using PAS and we look forward to hearing from the betting sector how it intends to understand and address these inconsistencies as it develops best practice for identifying players at harm.
42. The use of this technology to trigger interventions should be considered by other sectors who operate account based play within the industry.
43. An evaluation of alternative player protection initiatives could help build on best practice across sectors.

Bingo research: problem gambling in licensed bingo premises. Wardle et al. (2016).

Aims and methodology

44. To provide an insight into problem gambling and gambling-related harm in the bingo sector in order to inform education, prevention and player protection initiatives.
45. A sample of 1,448 people who regularly played bingo were recruited through those who attended 20 licensed bingo clubs.
46. In order to make the sample representative, regular attendees were invited to participate (regular attendance being defined as at least one visit per month). The questionnaire asked open ended questions about gamblers motivations to participate in bingo and also used the PGSI screen to score problem gambling prevalence.

Key findings

47. While there are a number of different gambling activities on offer at bingo clubs, playing bingo with paper tickets is the most popular (83%).
48. **Participation:** Playing cash bingo games⁷ during session intervals (not using an electronic terminal/touchpad) was the second most popular activity in bingo premises (72%). Of this group, men and younger people (aged 18–24) were more likely to spent money on machines, and also the electronic terminals/touchpads.
49. Those who attended the bingo hall and played machines, did so at least once a week. The average spend on machines was £24.50 per session, with each session lasting usually less than 30 minutes. However, 2% of machine players played for over three hours.

⁷ These are mechanical games, usually built into the tables where traditional bingo is played.

50. **Problem Gambling:** The findings showed that problem gambling rates were highest among those who played fruit/slot machines and bingo (4.2%) . 1 in 4 problem and risky gamblers were more likely to take part in a larger range of gambling activities outside of bingo clubs.
51. **Motivations:** The main motivations to visit the bingo halls were: for fun (96%), exciting (79%), socialising (85%). For older patrons and those with disabilities, bingo offers chance to be around other people (69%) and somewhere to feel safe even if they are visiting alone (76%).

Limitations

52. Machines are referred to as fruit/slot machines and does not define the categories such as Category C or Category B3. This would be helpful to place the research in context of existing literature on B3 content.

Policy implications

53. This could contribute evidence to the upcoming Gambling Review as the findings show the link between problem gambling rates and fruit/slot machines and bingo participation. This piece becomes significant because as research into B3 machine play in bingo premises is limited.

Tracked play on B1 gaming machines in British Casinos. Forrest & McHale (2016).

Aims and methodology

54. To analyse player data to identify patterns of play associated with problem gambling, such as regular heavy play or chasing the losses.
55. This is links with a previous study published by Forrest in relation to the uplift in stakes and prizes on B1 machines⁸.
56. This was split into two stages: 1.) to examine data across players to learn about typical and

atypical patterns of play (for example using lengths of visits and amounts lost), 2.) To study and model player-level behaviour, answering questions such as: how do players react to experiencing wins and losses? If they lose more than usual, do they stay away from the casino for a longer period of time or return sooner than they would typically? Do behavioural characteristics of individual players vary over time? For example, one player may exhibit risky behaviour only on a small number of visits to a casino, whilst for the majority of his or her visits, will behave more conservatively.

57. Machine data supplied by the Rank group showed machine transactions from 85,000 customers⁹ over a six year period. There is only one other study similar to this that uses individual-level data at land-venue casinos.

Key findings

58. Typical players tended to play to a modest scale with visits lasting for around one hour and incurring a loss of around £25. When exhibiting these signs of typical behaviour, gamblers will be unconstrained by the regulatory rules on stakes and pace of play.
59. The previous publication (Forrest 2015) evaluated the uplift of stakes and prizes on B1 machines, showed that the median stake was below £1 when the maximum permitted stake is £5.
60. Most harm is experienced by those whose play is 'atypical'. Atypical play is described as frequent visitors that had some sessions that showed extreme expenditure of time and money. This was evidenced by the sharp increase in mean spend per visits when the sample was reduced to those who had 50 observed visits over a period.
61. While some players can play heavily and not experience harm, levels of expenditure of money and time suggest that it is plausible

8 Forrest et al. (2015). Evaluating the impact of the uplift of stakes and prizes on B1 gaming machines in casinos.

9 Loyalty card holders.

that an individuals' financial wellbeing is impacted, as well as their other activities. Further research into using technology to identify potentially at-risk players must be conducted but the approach can be confirmed to have worthwhile pay-offs.

Limitations

62. The authors state that a limitation of the study is that it focuses on the visit as the primary unit of observation. Further analysis of table game play could be introduced to show patterns of play across all products offered in casinos.

Policy implications

63. The authors conclude that regulation on B1 casino machines is barely impinged, if at all on typical players and regulators should not be concerned with this subsection of machine gamblers. The findings from this paper can be fed into the upcoming Gambling Review as an example of a policy change in relation to stakes and prizes that is yet to show a change in machine play behaviour.

Thoughts and acts of self-harm, and suicidal ideation, in online gamblers. Lloyd et al. (2016).

Aims and methodology

64. To understand the relationship between self-harm and gambling amongst online gamblers in the United Kingdom.
65. The participants (n=4,125) completed an online survey to collect data on gambling participation, mental health and self-harm history.

Key findings

66. The results showed that 7.3% of the sample had experienced thoughts of self-harm as a result of their gambling and of this group, 28% had gone on to self-harm (2% of sample).
67. Both thoughts, and acts of self-harm amongst gamblers were significantly

associated with exhibiting signs of problem gambling, depression and panic disorder.

68. In the group that had who self-harmed as a result of gambling, drug use was found to be present. In both groups, alcohol consumption was not a significant factor.
69. Again, those who had thought about self-harming and those who had self-harmed as a result of their gambling were associated with the same factors: mood enhancement, parental problem gambling and monetary motivations. A consistent factor when analysing gambling and self-harm was the association with unemployment, no significance was found amongst age, gender or marital status.

Limitations

70. The authors acknowledge that there are limitations when using self-report data submitted by respondents online.
71. The lack of a clinical interview with a medical professional to quality assure responses can encourage bias. The sample focuses solely on online gamblers.
72. One third of the sample were from outside of Great Britain as the advertisement to take part in the survey was posted on various online gambling sites.

Policy implications

73. This study could contribute to the discussion of vulnerable groups to gambling-related harm.

Problem gambling and gambling-related harm

"I can sit on the beach and punt through my mobile phone". The influence of physical and online environments on the gambling risk behaviours of young men. Deans et al. (2016).

Aims and methodology

74. To explore how factors within different gambling environments (both online and land-based) may influence the gambling behaviour of young men aged 20–37 years who gambled on sport.
75. The aim was to discover if online or land-based environments encouraged risk-taking behaviour relating to gambling.
76. Semi-structured interviews were carried out with Australian men (n = 50).

Key findings

77. The authors identified a number of situational and structural factors that promoted risky gambling environments for young men.
78. In the case of the online environment, gambling products have become exceedingly easy to access through mobile technologies, with young men subscribing to multiple accounts to exploit promotional offers.
79. In land-based environments, the social behaviours associated with peer group gambling influence risk-taking. The presence of both gambling and alcohol in pub environments led men to gamble more than they usually would and on products that they would not usually gamble on.

Policy implications

80. This contributes to our understanding of young men as an at-risk group of gambling-related harm. The social context that surrounds this social group can explain the motivations to engage in risky gambling behaviour. As identified in the Health Surveys (2014) men are a group who are at high risk of experiencing problems with their gambling.

Practical treatments considering the role of sociocultural factors on problem gambling. Richard et al. (2016).

Aims and methodology

81. To understand the role of cultural influence on problem gambling through a review of existing literature. The authors draw upon existing research from a variety of jurisdictions.
82. The focus of the research was on the following themes: prevalence rates, risk factors and cultural belief systems.

Key findings

83. Many studies suggest that problem gambling is significantly higher for cultural minorities than for White groups, however others do not demonstrate this. Therefore, prevalence rates should not be considered in isolation but in the context of data on social, cultural and economic factors.
84. A large section of the research suggests that prevalence rates of problem gambling are correlate with risk factors such as socioeconomic status, alcohol-drug use, psychiatric disorders, age and gender. Ethnic group alone has not been found to be a strong predictor of problem gambling behaviour internationally. Belief systems however, play a significant role in problem gambling behaviour.
85. In some Asian populations, gambling is seen as a socially accepted activity that is often used to celebrate special events such as birthdays and weddings. In some cases, those seeking treatment for problem gambling may be stigmatised by their family and this may act as a deterrent to do so.

Limitations

86. The authors acknowledge that there is a lack of literature available on this topic and there are inconsistencies in what does exist. For example, many studies lack representation of entire ethnic groups.

Policy implications

87. As identified in Heather Wardle's gambling-related harm index, ethnic group was

flagged as an indicator of increased harm (in the case of both the Westminster and Manchester boroughs). The Responsible Gambling Trust (RGT) continue to fund projects that aim to measure gambling-related harm in line with the National Responsible Gambling Strategy (April 2016).

Disordered gamblers with and without ADHD: the role of coping in elevated psychological distress. Peter et al. (2016).

Aims and methodology

88. To explore the differences between the experience of psychological distress in a treatment centre for problem gamblers.
89. The participants (n = 99) completed self-report measures of coping (Coping Inventory for Stressful Situations), psychological distress (Beck Depression Inventory II) and ADHD (Brown Attention-Deficit Disorder Scales - Adult Form).

Key findings

90. From the population of treatment seeking problem gamblers, 15-23% have attention deficit disorder (ADHD).
91. This group exhibited lower levels of coping strategies than those who did not.

Limitations

92. The sample used in this study is relatively small and can only be applied to a small population in the American context where gambling participation is significantly lower due to a gambling ban in most states.

Policy implications

93. This study could contribute to our understanding of what conditions are comorbid with problem gambling.

Pathways and transitions of gamblers over two years. Luce et al. (2016).

Aims and methodology

94. To use a follow up study (3 waves) to track problem gambling behaviour over a two year period in Canada (n = 179).
95. Problem gambling behaviour was scored using the Problem Gambling Severity Index (PGSI).

Key findings

96. The authors found that PGSI scores had decreased over the period. Over three waves, one-third of moderate-risk gamblers improved, one-third remained stable and one-third became problem gamblers.
97. Problem gamblers remain vulnerable over time, being at risk of experiencing severe problems.

Limitations

98. The size of subgroups was small which meant the statistical analysis was limited.
99. Generalisability was limited to the population of Quebec. The sample was recruited through those who agreed to do the survey over a landline telephone.

Policy implications

100. This study could contribute to the discussion of vulnerable groups to gambling-related harm. It also presents the advantages of using longitudinal studies in tracking the behaviour of the same group of problem gamblers over time.

Gambling expenditure in the ACT (2014) by level of problem gambling, type of activity and socioeconomic and demographic characteristics. Davidson et al. (2016).

Aims and methodology

101. This is a follow-up report to the 2009 ACT (Australian Capital Territories) Survey on Gambling, Health and Wellbeing in Australia.

102. Three datasets were combined for analysis (n = 7,068) taken from industry data, self-report surveys and household surveys. The overarching aim was to report on gambling expenditure, types of activities, gambling modes socio-economic groups and demographics.

Key findings

103. **Problem Gambling:** gamblers with PGSI scores of 3 or higher (moderate risk and problem gamblers) reported 21% of losses. However, this group represented 2% of the whole population.
104. Between 2013 – 2014, \$21 billion (approx. £12bn) was lost by Australian gamblers. 6% of gamblers who scored one or more on the PGSI screen generated 44% of gambling revenue. A PGSI score of one or above indicates some experience of problematic gambling.
105. Problem gambling rates were higher amongst those who engaged with sports betting, electronic gaming machines and races.
106. **Expenditure:** disproportionately high losses were found amongst men and those with low levels of education. Compared with those who held degrees, people who left school with no qualifications, had an expenditure three times higher. A significant change witnessed since the 2009 survey was that the oldest adults accounted for the greatest proportion of losses. The data showed that as people age, their gambling behaviour becomes more constant.
107. **Gambling mode:** 15% of gambling expenditure was lost over the internet. Similar to offline gambling, a disproportionate amount was lost from moderate risk and problem gamblers who reflected 3% of the sample.

Limitations

108. The authors used a statistical technique called compensation strategy because there was underreporting of industry data.

However, the key findings of the report did not change significantly when these adjustments were made.

Policy implications

109. This study highlights the possibilities of combining industry and participation data to build a profile of those potentially experiencing harm to help target policy decisions. The data on the proportion of losses attributable to moderate risk and problem gamblers, could also be used to provide a comparator for our Annual Assurance Statement work with licensees, to understand what proportion of their GGY is derived from problem gambling.

Machines

An empirical real-world study of losses disguised as wins in electronic gaming machines. Leino et al. (2016).

110. To examine the relationship between within-session outcomes and gambling persistence.
111. The researchers analysed data taken from loss disguised as win games over a randomly selected day from the main machine supplier in Norway.

Key findings

112. Losses disguised as wins were likely to encourage continued play more than losses do, however not as much as wins. This was calculated on the number of bets placed.
113. The analysis showed that the odds of continuing betting in a game session were positively associated with the outcome of the previous bet.
114. Losses disguised as wins may encourage problematic play on machines and increase the risk of problem gambling over time.

Limitations

115. The dataset was unable to show changes over time as it was taken from one specific

day. There was no way to link the session data to actual players. For example, there was no way to differentiate between a problem gamblers or recreational gamblers.

116. The results cannot show the relationship between game preference and gambling behaviour. Also, as the paper is based on the Norwegian case, it can be assumed that their machines differ from those on offer in Great Britain. The article does not specify machine types or categories.

Responsible gambling tools

Internet Gaming in New Jersey. Nower et al. (2016).

Aims and methodology

117. To report on player behaviour, including problem gambling alongside the use of responsible gaming features in New Jersey, USA.
118. This is a follow up study to a recent nationwide prevalence survey carried out in the state.

Key findings

119. The online gamblers in New Jersey tended to be younger than traditional land-based gamblers and were more likely to be male. These findings have been supported by the New Jersey prevalence survey.
120. One in five people gambled across all three activities: casino, poker and tournaments. However, the sample was dominated by casino gamblers (50%).
121. A notable proportion of online gamblers were found to gamble at work (between the hours of 9am and 3pm). Across all age ranges, online gamblers placed the largest number of bets between 9pm and midnight.
122. This study did not use a problem gambling screen and instead cut the "Top 10%" of the

sample who were the highest frequency, expenditure, bet size and number of bets. Of this group, the average age was slightly older and the prevalence of women was higher (almost 50%). In terms of responsible gambling tools, self-exclusion was used the most. Women tended to choose self-exclusion as a tool compared with deposit limits, time limits, cool-off periods and loss limits. Men tended to use a combination of the responsible gambling tools. The average self-excluder bet around \$45,000, with one player who bet over \$11.5 million.

Limitations

123. The betting patterns of the "Top 10%" group could not be evaluated. For example, game type could not be identified. Further analysis was needed to determine who bet large amounts of money in "binge" patterns or wage lower amounts at a faster pace compared to the average gambler.

Policy implications

124. Similar to the findings of the Commission participation and prevalence surveys, there is a lack of data on how women are experiencing gambling-related harm. Currently, this group is understudied. The authors recommend the use of limit setting at the registration stage in limiting expenditure. The Commission currently requires operators under the most recent publication of the Remote Technical Standards to offer such responsible gambling tools.

The family exclusion order as a harm-minimisation measure for casino gambling: the case of Singapore. Ong et al. (2016).

Aims and methodology

125. To measure the effectiveness of third party exclusion called a Family Exclusion Order (FEO) that were introduced to Singapore in 2009. This was introduced to allow family members to apply for FEOs to prevent

gamblers from entering casinos to reduce harm caused by their gambling.

126. The authors used data from a sample of people who had submitted FEOs. Interviews were arranged to ask participants about the effectiveness of the exclusion order using a 4 point scale (Likert scale).

Key findings

127. The findings from the interviews were divided into financial non-financial forms of gambling-related harm.
128. In the case of financial harm, this was said to impact on an entire household, particularly if the person directly experiencing the harm earned the main income. For older adults in the sample, there were pressures to draw on life savings and borrow money from family members.
129. Non-financial harm was linked with domestic violence and increased tension and conflict within the families (in particular marital conflict). The mental and physical effects of monetary troubles were apparent. For example, the harassment experienced from loan sharks impacted on problem gambler's health.
130. In both divisions of gambling-related harm, the overarching theme is that family networks are significantly impacted as a result of problematic gambling. The positive effects associated with FEOs were split into the following themes: sense of relief, improved family relationships, improved financial state.

Limitations

131. The main limitation for this study is the lack of data gathered from the person directly experiencing gambling-related harm.

Policy implications

132. Family Exclusion Orders (FEOs) are not currently used in Great Britain. The current system offered by operators is operator specific or multi-operator self-exclusion

(non-remote premises). The Commission is currently working with external stakeholders to develop the remote multi-operator self-exclusion scheme. In addition, this information could feed into RGSB's work on defining and measuring gambling-related harm.

Marketing and Advertising

The Online Bingo Boom in the UK: a qualitative examination of its appeal. Stead et al. (2016).

Aims and methodology

133. To understand the growth of bingo online in recent years by exploring its appeal.
134. This study uses a mixed method approach of content analysis and in-depth interviews to explore the motivations for online bingo play. The content analysis was made up of 230 webpages of operators such as 32Red Bingo, Foxy Bingo and Gala Bingo.

Key findings

135. Three themes were identified in the thematic analysis:
- **Drawing in the first time user:** the sites present the prospect of an exciting and easily accessible experience. The use of messages such as 'join now', 'play now', 'win now' all create a busy virtual environment. The prospect of easy wins and rewards are presented through phrases such as 'life changing wins', '£5 million won very week' and 'major millions'.
 - **Creating belonging:** the websites portray an inviting and inclusive environment, where players are asked to join its 'community' and 'meet long-life friends'. The chat and community sections of the websites are a major feature that can be used during or between games.

- **Stepping up involvement:** the operators used a number of strategies to encourage continuing and deeper involvement. The main way this is done is through offering a variety of play to suit time and budget expenditure. Bingo players are encouraged to integrate bingo into their daily routines by offering promotions that are available '24 hrs a day', with another stating that games start every 15 seconds. Some sites emphasise that players could miss out if they chose not to play at that time.

136. Additional themes identified in the qualitative interviews that there was an initiation into playing bingo whereby a family or friend, introduced them to the activity. There are rewards for existing players to 'recruit' friends which encourages a relationship with a site and also increases their customer base as a result. While the sociability of traditional bingo halls is absent, the websites make effort to replicate this atmosphere in the virtual space.

Limitations

137. The samples used in both the interviews and content analysis were relatively small with 12 participants and 10 bingo sites.

Policy implications

138. The researchers found that the sites were easy to access with minimal age-verification procedures. It was possible to play and win for 'free' before entering credit card details. The bingo sites were able to position online bingo as benign, child-like, homely, women-friendly and socialable activity. This is a contrast to other studies that depict online gambling sites that use adult-oriented imagery (McMullan & Kervin, online poker study). Colleagues working on the development of age verification policies have confirmed that operators are expected to complete the age verification process within 72 hours of the customer registering to gamble and before this time, new customers will not be able to withdraw funds.

139. From a marketing and advertising perspective, operators are currently required

to adhere to the rules and regulations owned by us, CAP/BCAP and Competitions and Markets Authority. Usually reactive compliance work is sparked by rulings made by the Advertising Standards Authority. The current state of play indicates that remote bingo marketing is less of a concern in comparison to remote gaming marketing as they tend to be less misleading.

Initiation, influence, and impact: adolescents and parents discuss the marketing of gambling products during Australian sporting matches. Pitt et al. (2016).

Aims and methodology

140. To understand the perspective held by adolescents and their parents of the marketing and advertising of sports betting during sporting events.

141. A series of qualitative interviews were carried out with 59 families consisting of one adolescent and one parent from the same family. The adolescents were aged 14–18 years old.

Key findings

142. The findings showed that adolescents perceived sporting events to be a platform to promote betting. The techniques described were embedded advertisements, the use of athletes and the use of sporting teams within advertisements.

143. In addition, gambling was portrayed through advertisements as easily accessible and an integral part of the sporting experience. Thirdly, parents had noticed how adolescents when discussing sports altogether, had often referred to 'odds'.

Limitations

144. The main limitation in this study is that the sample of young people were not old enough to gamble. Similar to other studies investigating the impact of marketing and advertising upon gambling behaviour, the

link between the portrayals of gambling and how this translates to behaviour is conceptually difficult to prove. However, in this study the adolescents had registered strong key messages through marketing and advertising and shaped their conversations around sporting events as a result.

Policy implications

145. Members of the marketing and advertising and underage workstream within social responsibility could use this research as evidence of how young people (below the age of 18) are perceiving sports betting through the consumption of mainstream advertising during sporting events. This body of evidence, supplied mainly from Australia, is beginning to grow.
146. Before gambling advertisements air on the television, the content must be authorised by an organisation called Clear Cast. Colleagues within the Commission currently engage with Clear Cast, the Advertising Standards Authority (ASA).

Other

Gambling-related embezzlement in the workplace: a qualitative study. Binde (2016).

Aims and methodology

147. To investigate gambling-related harm embezzlement in the workplace. This aspect of problem gambling can severely harm the gambler, significant others and employers.
148. The paper is based on 18 in-depth interviews, a review of literature on white collar crime and problem gambling and newspaper articles. The sample of interviewees was made up of people working in the following sectors: work-based security, drug-use prevention, psychologists specialising in problem gambling treatment

and recovering problem gamblers who had embezzled.

Key findings

149. It was found that little attention have been paid to the criminal ways in which individuals with severe gambling problems obtain money to gamble.
150. The theory of the 'fraud triangle' is used to demonstrate the atypical path that gambling-related embezzlement takes. This is describes a combination of the following factors: opportunity (the employee is aware of a weakness in banking systems), need/pressure (excessive gambling can create a need for money and there is pressure to avoid detection and as a result, shame) and rationalization (the person views their actions as 'borrowing' until they can fix their current situation).
151. The most common characteristic to this form of gambling-related harm that is cyclical, as gamblers repeatedly chase losses.

Limitations

152. This study is specific to the Swedish context and of the small sample available of those who had embezzlement money to gamble (n=5).

Policy implications

153. This paper provides an example of gambling-related harm specific to the employment sector.

Adolescents' perceptions of parental influences on commercial and simulated gambling activities. King et al. (2016).

Aims and methodology

154. To examine the influence of parental oversight of their children's gambling activity. In addition, the types of activities and expressions of problem gambling are explored.

155. A sample of adolescents (n = 824) taken from three secondary schools in Australia were interviewed. The authors used the following tools to make up the questionnaire: gambling activity (23 questions), parental influences on online media (11 questions), and problem gambling screen* (5 questions). The sample included an age range of 12–17 years.

Key findings

156. The results showed a gambling activity to be rare and infrequent. However, the sample was made up of young people who mostly were not old enough to gamble or earn money.

157. The analysis showed that there was no statistical significance between youth perceptions of their parents influence upon their online media consumption, including parents' attempt to limit, restrict or oversee activities. Also, parental influence was no found to be significantly associated with problem gambling symptoms.

Limitations

158. This study uses a sample of adolescents to measure parental influence, without involved of their parents. To build upon this study, further research should assess the role of conscious parental interventions in their child's gambling.

Policy implications

159. Although an Australian study, the authors give mention to the Commissions' stance on simulated games. They refer to the Commission's position that the data available suggests that the vast majority of users spend modest amounts of money and this does not warrant regulatory intervention at this stage.

Do Crime-Prone areas attract gambling shops? A case of London Boroughs. Kumar & Yoshimoto (2016).

Aims and methodology

160. To investigate the causal effect of crime on the number of betting shops using annual data from London boroughs (2007–2015).

161. The authors use an econometric model called the instrumental variable strategy. The data sources used are the Metropolitan Police Service's record system. Other variables were formulated by using survey findings from: the Official Labour Market Statistics, the Land Registry, Consumer Price Index and the Round Demographic Project.

Key findings & Limitations

162. A 1% increase in crime rate causes a 1.2% increase in the number of betting shops (per capita). Therefore, a new betting shop opens in a borough for every 1.4% increase in local crime.

163. When constructing the econometric model, the authors isolated the causal effect to account for demand and supply drivers by adding control variables for unemployment, housing price, average age and gender distribution. This process was carried out under the assumption that 'criminals travel across boroughs, while gamblers do not'. This is said to be a result of gamblers' reluctance to spend money travelling and the clustering of betting shops removes the need to do so. Once again, this claim is not based on evidence derived from either the field of crime or gambling literature that exists.

164. The authors assume that gamblers are more likely to live in economically deprived areas and cannot afford to gamble and participate in other leisure activities. For those who are not constrained by budget, the authors claim that the 'demand for excitement may be fulfilled by other entertainment avenues' and has less incentives to visit a betting shop.

165. There is a dedicated section related to policy implications. One policy implication is said to be that the results of the study are 'not in compliance with the objective of the Gambling Act (2005)'. The authors suggest

that betting operators are targeting areas with high crime rates to profit from funds derived from criminal activity.

laundering controls across the industry using thematic assessments in the wake of the Fourth EU Anti-Money Laundering Directive introduced in February 2016.

166. The authors claim that these findings are transferrable to other cities in the UK. However, as we know from the RGT research, the diversity of cities across the UK vary and exploring the link between deprivation and gambling-related harm is complex.
167. Comparisons are drawn with crime within the casino sector in the USA. However, the studies that are cited use data from the period of 1977–1996. Similarly, statistics from Gambler Anonymous from a study in 1987 are quoted. One of the figures (p5) shows a decrease in crimes per capita by Borough between 2011 and 2015. This finding is not discussed in the paper and at no point are the consequences of the decline in reported crimes linked to the number of betting shops in London Boroughs. A key finding of the paper is that if the number of crimes in a borough increases, there is an increase in the population who could also have a demand for gambling. In terms of participation, the authors make an assumption that younger people are more familiar with the internet and therefore are betting online more. However, from the Commission's annual participation and prevalence report we know that the age ranges spanning 34–55 years participate in online gambling the most.

Policy implications

168. The authors of this paper claim that betting operators are targeting areas with high crime rates in order to attract funds derived from criminal activity. The Commission is responsible for various compliance activity that aim to protect the third licensing objective: to keep crime out of gambling.
169. One strand of work that began in April 2016 now requires each local authority to conduct a local assessment for each of their current premises, as well as operators who apply for a licence variation or new licence. Secondly, there is an emphasis on testing anti-money

Additional titles¹⁰

Factor structure of the Gambling Symptom Assessment Scale among treatment-seeking adults in Singapore. Ong et al. (2016).

Gender differences in self-conscious emotions and motivation to quit gambling. Kushnir et al. (2016).

Attitudes Towards Gambling, Gambling Problems, and Treatment Among Hispanics in Imperial County, CA. Campos et al. (2016).

The temporal stability and predictive ability of the Gambling Outcome Expectancies Scale (GOES): a prospective study. Flack & Morris (2016).

Intergenerational Childhood Maltreatment in Persons with DSM-IV Pathological Gambling and Their First-Degree Relatives. Shultz et al (2016).

Cognitive and Performance Enhancing Medication Use to Improve Performance in Poker. Caballero et al. (2016).

Mixed Emotions to Near-Miss Outcomes: A Psychophysiological Study with Facial Electromyography. Sharman & Clark (2016).

Sense of Coherence and Gambling: Exploring the Relationship Between Sense of Coherence, Gambling Behaviour and Gambling-Related Harm. Langham et al. (2016).

Licensing Authority Statistics (1 April 2011 – 31 March 2016)

Also this quarter, the Gambling Commission has published its annual Licensing Authority Statistics. This report provides the latest information pertaining to the permits issued, temporary use notices issued, occasional use notices issued and the number of premises inspections conducted. It is available on our [website](#).

¹⁰ These are papers that were found to be of less relevance in comparison to the other summaries presented.

Annex A

This is exempt under section 36 of the Freedom of Information Act.