



## Quarterly Research Briefing 01/17 (May 2017)

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## 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 research (pp 4)
  - GambleAware research (pp 5-8)
  - Problem Gambling (pp 8-12)
  - Gambling-related harm (pp 12-14)
  - Remote (pp 14)
  - Responsible Gambling Tools (pp 15-16)
  - Young People (pp 16-17)
  - Regulation (pp 17-19)
4. The briefing is produced on a quarterly basis with the last publication dated January 2017.
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 and more detailed summaries are available on request.
7. 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 B.
8. Where relevant, key policy implications are highlighted within each summary.

# Quarterly Research Briefing

## May 2017

### Executive summary

#### Problem gambling and gambling-related harm

1. Problem gambling and gambling-related harm have dominated the publications this quarter. The key recommendations emerging from this field of research are the need for the introduction of problem gambling screening tools in government agencies that can support problem gamblers. The need for a joined-up approach between departments can effectively deliver early identification of harm, and therefore the appropriate interventions.
2. Another strand of this debate is that problem gambling screens are not able to measure the harm experienced by the problem gambler, and their affected others (Li et al. 2017). The need for gambling-related harm to be put onto the public health agenda is echoed throughout the recommendations set out by a number of academics this quarter.

#### Harm reduction and prevention

3. An evaluation of the multi-operator self-exclusion scheme (MOSES) in the betting sector has been released. Overall, the short-term impact of the scheme has been judged as largely positive. It is now the task of all relevant stakeholders to monitor and sustain this effectiveness in order to protect consumers wanting to self-exclude. Through the lens of the problem gambling and gambling-related harm literature, we can comprehend the importance of robust

interventions to protect problem gamblers, and as a result their network of affected others.

4. Keen et al. (2017) have called for an increase in the evaluation of education programmes that raise awareness of the harms associated with gambling. The Responsible Gambling Strategy Board (RGSB) research programme sets out to evaluate preventative education given to young people.

#### At-risk groups

5. The research builds on our knowledge of groups that are more at-risk of becoming problem gamblers. These are: men, young people and those on a low income or unemployed. The data published in the Health Surveys later on this year will provide us the most up to date and robust prevalence rates of problem gambling in Great Britain.

#### Machines

6. The harms associated with machines continues to be debated in the research area internationally. This is timely as the call for evidence has recently closed for the Gambling Review. Forrest and McHale (2017) have analysed further the impact of the £50 regulations introduced in April 2015 that requires account-based play on category B2 machines for stakes over this amount. The first six months of the policy saw a significant drop in stakes over £50. However, there was a period of adaption whereby machine players began staking lower

dominations more often. As a result, session length and frequency of play have increased.

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## Gambling Commission

### Gambling participation in 2016: behaviour, awareness and attitudes. Gambling Commission (2016).

#### Aims and methodology

7. To track the participation and prevalence of gambling in Great Britain in 2016.
8. The combined sample of online surveys (n=8,000) and telephone interviews (n=4,000) were recruited in 2016.
9. The Commission has a contract with Populus who carry out the research on our behalf. The question areas are: participation in the past four weeks, demographics and consumer perceptions.

#### Key findings

##### 10. Participation:

- 48% of people have participated in any form of gambling in the past four weeks (45% year to December 2015). Excluding National Lottery participation:
- 33% of people participated in gambling in the past four weeks (27% in year to December 2015).
- 17% of people had gambled online in the past four weeks.
- 97% of online gamblers had gambled at home and 43% of this group had gambled using a mobile phone or tablet device.
- 26% of online gamblers have bet-in play.

##### 11. Perceptions:

- 34% of people think that gambling is fair and can be trusted. 39% of gamblers think that

gambling is associated with crime. The top three policy issues that consumers are most aware of are: the number of gambling premises on the high street, the content of gambling advertising and the controls in place to ensure children and young people are not exposed to gambling.

- 78% of people think that there are too many opportunities to participate in gambling.
- 69% believe that gambling is dangerous for public life.
- 56% of gamblers had not read terms and conditions even though they were aware they existed, with 21% of people were not aware of terms and conditions.
- The awareness of self-exclusion schemes has increased from 29% in 2015 to 37% in 2016. 6% of the same had ever self-excluded.

##### 12. Problem gambling:

- 0.7% of people identified as problem gamblers and 5.5% of people were at low or moderate risk gamblers<sup>1</sup>. A three item PGSI mini screen was used to measure problem gambling rates. The following questions were asked: Have you bet more than you could really afford to lose? Have people ever criticised your betting or told you that you have a gambling problem? Have you felt guilty about the way you gamble or what happens when you gamble? Due to the small base sizes from the telephone survey, changes across problem gambling and at-risk of problem gambling rates were not significant<sup>2</sup>.
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<sup>1</sup>At the 95% confidence interval.

## GambleAware research

**Evaluation of the Multi-operator self-exclusion Scheme (MOSES).** Chrysalis research (2017).

### Aims & methodology

13. To evaluate the effectiveness of the multi-operator self-exclusion scheme (MOSES) in retail bookmakers. This included determining the ease of registering to MOSES and whether those excluded using MOSES also excluded from other operators. In addition, the researchers wanted to determine if there were any barriers to prevent those registering.
14. The researchers carried out two surveys. The first was conducted with people registered to the MOSES scheme (n = 196) and the second was conducted online with managers (n = 627) of licensed betting offices (LBOs).
15. Contact was also made with the MOSES central team to understand the scheme and explore how they perceived the scheme to be working.

### Key findings

16. **Those registered to MOSES:**
  - Most registrants found the system easy to use, usually from one phone call. In addition the map tool helped them identify the shops that they could access and therefore wanted to exclude from.
  - 83% agreed that the scheme had been effective in reducing or stopping their gambling activity.
  - 71% said they had not attempted to use LBOs since joining.
  - Some customers showed a 'stronger addiction' that meant other forms of gambling were used as a substitute.
  - Some excluders felt that shop staff could do more to keep them out.

- 40% of MOSES registrants were aged 25–34 years.
- 54% had excluded from online betting sites in addition to registering to MOSES; 23% had excluded from a casino.
- 86% understood that it was their responsibility to stay away from betting shops.

### 17. Operators

- During customer interactions, staff tended to offer their own self-exclusion scheme as this was quicker to enact. Staff tended to tailor the suggestion dependent on individual cases.
- Almost two-thirds found out about MOSES in an LBO.
- Staff in LBOs found the system easy to use as it mirrored the self-exclusion system that was already in place.
- More information is needed for staff in LBOs regarding: time taken to process a MOSES registration (approx. 3 weeks) in order to advise customers.
- Concerns around identifying MOSES registrants when they enter premises centred on staff turnover and the growth of the scheme.

### Limitations

18. The sample for those registered to the MOSES scheme represented only 6.8% of all registrants.

### Policy implications

19. **[This is exempt under section 36 of the Freedom of Information Act.]**

20. **Follow-up study of loyalty card customer: changes in gambling behaviour over time.** Wardle et al. (2016).

#### **Aims and methodology**

21. This is a follow-up study to a 2014 project<sup>3</sup> that tracked the behaviour of machine players in bookmakers.
22. The revised study had three overarching aims: explore changing patterns of gambling behaviour over time, examine changes in problem gambling behaviour, and identify who is more likely to change problem gambling status.
23. The participants from the original study were contacted by telephone to participate in the follow-up study. The response rate from the original sample was 42% (n = 1,552). Interviewing took place between May and August 2016.

#### **Key findings**

##### **24. Participation**

- 39% of participants had increased the number of activities that they gambled on between the two studies, with 42% of the sample decreasing their participation.
- Older participants had more stable patterns of gambling participation, although change across all age brackets was the norm.
- Past four week participation on machines in bookmakers was stable for the majority.
- One third of those who had not gambled on machines previously had started to do so in the past four weeks. Equally, around one quarter of previous players stopped gambling on the machines.

##### **25. Demographics**

- Those who were unemployed or who lived in the most deprived areas of Great Britain were more likely to start gambling on machines in bookmakers than others. Likewise, the unemployed, those living in the most deprived areas and those from non-white ethnic groups were more likely to increase their frequency of gambling on the machines. This is of particular importance as these groups are most vulnerable to problem gambling.
- 60% of participants who start gambling on machines in bookmakers in the past four weeks also tended to increase participation in other activities. Similarly, those who stopped gambling on machines in bookmakers also tended to reduce their participation in other forms of gambling. This suggests that it is unlikely that machines gambling is being substituted for other forms, or vice versa.

##### **26. Problem gambling**

- The stability in problem gambling prevalence rates over time masks a great deal of variation in the problem gambling status of individuals. Results related to problem gambling status (measured by PGSI) showed that nearly half of participants had changed their PGSI in the follow-up study.
- The breakdown was as follows: 6% non-problem/low-risk or moderate risk gamblers, 9% had moved from being problem gamblers to a lower risk category. However, a majority (54%) of people maintained the same PGSI status.
- One third of low risk gamblers had increased their PGSI score, with 1% of this group becoming problem gamblers. 41% had decreased their PGSI score so they

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<sup>3</sup> Gambling machines research programme. Report2: Identifying problem gambling – findings from a survey of loyalty card customer's

bookmakers amongst those who held loyalty cards.

were not classed as problem gamblers anymore. 7% of problem gamblers who were non-problem gamblers at follow-up.

- Women aged between 44–65 years were the group more likely to be classed as problem gamblers in this study compared to the original results.
- Predictors of problem gambling were identified as: age, ethnicity and income were associated with the increased odds of becoming a problem gambler. Compared with younger age groups, those aged 25–34 years and those aged 45–64 years had increased odds of being a problem gambler.
- Additionally, increased odds of becoming a problem gambler were found amongst black/black British groups (compared to those of white/white British ethnicity).
- There was no relationship between the number of activities undertaken at least once a week at baseline and the odds of becoming a problem gambler. There was a relationship between playing machines in bookmakers once a week and increased risk of becoming a problem gambler.

### Limitations

27. Only half of the sample who participated in the original study participated in the follow-up study. The main reason for non-response was that a large proportion of contact details changed or telephone calls were not answered.

### Policy implications

28. This publication contributes to the evidence base
29. The upcoming results from the Health Surveys for England and Scotland will give the most reliable participation and problem gambling estimates representative of the population.

### FOBTs in British betting shops: further analysis of machine data to examine the

### impact of the £50 regulations. Forrest & McHale (2017).

#### Aims & methodology

30. To analyse industry data supplied by Inspired Gaming and Scientific Games to shed light on the impact of the £50 regulations that were introduced in April 2015.
31. This intervention was put into place as an example of 'nudge policy' to subtly modify behaviour by putting an obstacle in the way of risk-taking decisions.
32. The £50 regulations were introduced to address concerns around B2 stakes. The policy intervention saw players now having to load stakes that were £50 or above using a verified account.
33. The authors conducted an analysis of session data across the period of February 2014 – October 2016.

#### Key findings

34. The policy had an immediate and substantial impact on players who had previously placed bets above £50. The weekly number of plays with a stake of more than £50 and the total monetary value of stakes spent both declined significantly at the point of the policy intervention. However during 2016, staking above £50 began to increase as players began to use verified accounts. This can be referred to as a period of adaption. Even so, in October 2016, the weekly amount wagered on stakes above £50 was still less than half of what it had been prior to the introduction of the £50 regulations.
35. What the research cannot tell us is where the money previously used on B2 stakes went. For example, that excess money could have been used to gamble online or by switching to B3 slot games (available on the same terminals, where a greater speed of play is permitted and higher volatility could pose new risks).
36. Following the period of adaption, the fall in stakes above £50 was almost offset by an

increase in overall stakes from bets near to £50. It can be inferred that players preferred not to opt into account based play and decided to spend similar amounts across lower-denomination stakes.

37. It is possible for 'nudges' to be counter-productive, while high stakes play has been diverted to slightly lower stakes play, there is a risk that players are adopting a riskier strategy in their B2 roulette games. For example, a £50 spin might not be as exciting as a £100 spin, therefore a series of lower stake spins could be placed to maintain suspense.
38. While an increase or decrease in harm could not be concluded upon as markers of harm were not used, an increase in session duration and greater frequency of high-loss sessions are findings that indicate that greater harm is being experienced. It is inferred that relatively little play can be tracked via account-based data as not everyone is registered.

### Limitations

39. The authors were unable to link session data to individuals which meant that it was difficult to infer if the same players were experiencing big losses repeatedly or whether a large number of players were experiencing the occasional high loss session. The authors had access to the 'atomic' data on the machine which related to the amount staked, won and lost. However, the sub-bets made within the spin (for example, £50 on red and £50 on an even number are stored under the 'game cycle' datasets that was not analysed.

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## Problem gambling

**Problem Gambling in Leeds: research project for Leeds City Council.** Kenyon et al. (2017).

### Aims & methodology

40. The four-month study aimed to provide an in-depth understanding of problem gambling in the city so that the Council could be in an informed position of the issue prior to the new large casino by Global Gaming Ventures (GGV) opening in late 2016. The research was also expected to be used to guide future funding of projects to mitigate the harmful effects of problem gambling. This report draws together the findings of the different strands of the research.
41. The research was divided into: a review and assessment of available demographic, licensing and other scoping data including implications for the approach to harnessing the British Gambling Prevalence Survey 2010 (BGPS 2010) and Health Survey England (HSE 2012). This study also included interviews and a literature review.

### Key findings

42. **Identification:** all of the stakeholders that took part in the study talked of the difficulties of identifying problem gambling among their mainstream client groupings. This was due:
  - Low levels of self-reporting because of avoidance or shame about the causes of problematic gambling behaviour such as debt and/or relationship breakdown.
  - A lack of assessment or screening tools to objectively assess problem gambling behaviour, including those at risk.
  - Those that were self-declared problem gamblers tended to talk of how a related issue presented itself first, such as debt, health issues or family breakdown.
43. **Treatment:** overall the dedicated support for problem and at risk gamblers in Leeds was seen to be behind compared to other services in the city that tackled addiction, poverty and homelessness. Stakeholders reported that:
  - They thought that in order to support problem gamblers adequately, they required the relevant screening tools and



better collaboration across other agencies to refer those who are experiencing harm.

44. When asked about improvements in treatment for problem gambling, the participants mentioned the following things: more accessible responsible gambling information both in venues and online; material in different languages, 24 hour free helplines, a heightened awareness of the harms that can arise from gambling, better support for those post-treatment such as the option for follow up counselling sessions.
45. **Experiences of problem gambling:** a small sample of problem gamblers in post-treatment stage were interviewed (n=11). The findings from this subset of interviews showed that:
  - Three out of four gamblers started gambling early, often being socialised into gambling environments by family members.
  - Some participants had gambled by spending their own money whilst under the legal age limit.
  - The diversity of gambling activities was not an indicator of level of harm experienced.
  - Motivations to gamble were highly varied, however the most cited were: socialising, other interests such as sports events and escaping boredom.
  - Those who were in debt from their gambling used overdrafts, family loans and informal borrowing to fund their activity. Problematic gambling behaviour often affected relationships with friends and family and for some this was seen to explain family breakdown in some cases. In addition, the impact of health and wellbeing, along with depression, inability to cope, anxiety and shame.

#### **Limitations**

46. The research team recognised the substantial challenges of providing timely evidence to meet these needs. Insight from

existing national surveys, provided little local level understanding into gambling behaviour. New data through a large scale city-wide survey was beyond the scope of the planned study and also presented insurmountable challenges within the time frame.

#### **Policy implications**

47. **[This is exempt under section 36 of the Freedom of Information Act.]**

### **Gambling problems among patients in primary care: a cross-sectional study of general practices. Cowlshaw et al. (2017).**

#### **Aims & methodology**

48. To measure the prevalence of problem gambling amongst patients waiting at general practices (GPs) and to investigate the relationship between gambling and public health (n = 1,058).

#### **Key findings**

49. 0.9% of patients exhibited signs of problem gambling (PGSI score of 5 or above). It is worth noting here that the Commission's survey tools (BGPS and Health Surveys) that measure problem gambling rates use PGSI scores of 8 and above to identify problem gamblers.
50. 4.3% reporting problems that were scored low to moderate in severity (PGSI score 1–4).
51. Around 7% of patients reported gambling problems among their family members. Rates of any gambling problems (PGSI score 1 or above) were higher among males and young adults. Patients exhibiting drug use, risky alcohol use and depression had higher PGSI scores.
52. In particular, those who are at-risk of problem gambling such a young men and people with depression would benefit from this.

53. This study showed that the rates of depression were at 56% showing also the need for joined up working between services.

#### Limitations

54. This study uses a population of those visiting eleven GP surgeries in the Bristol area. This study could be a starting point for further research into GP surgeries as a point of intervention.

55. The response rates were not recorded. These figures could have shed light on the refusal rate and levels of stigma attached to problem gambling. To reduce the weaknesses in the small sample size, the researchers included a single-item measure relating to the breadth of gambling-related harm, namely problem gambling amongst family members.

56. There were some missing data fields from the surveys that would have been indicative of rates of depression, alcohol consumption and number of gambling activities.

#### Policy implications

57. **[This is exempt under section 36 of the Freedom of Information Act.]**

**Early risk and protective factors for problem gambling: A systematic review and meta-analysis of longitudinal studies.** Dowling et al. (2017).

#### Aims & methodology

58. The purpose of this study was to identify risk factors of becoming a problem gambler. Also, protective factors were explored in the study.

59. The authors conducted a systematic review of existing literature spanning 1990 –2015, inclusive of all international peer-reviewed publications and grey literature. The research was published in the United States of America, Canada and Australia.

#### Key findings

60. **Individual risk factors:** alcohol use frequency, anti-social behaviours,

depression, male gender, cannabis use, illicit drug use, impulsivity, number of gambling activities, problem gambling severity, sensation seeking, tobacco use, violence, under controlled temperament.

61. **Relationship risk factors:** peer anti-social behaviours, one community risk factor: poor academic performance

62. **Protective factors:**

- One individual protective factor was identified: socio-economic status.
- Two relationship protective factors: parent supervision and absence of social problems.

#### Limitations

63. The literature published in Great Britain was not included in the systematic review. However, we can still take learning from this study.

#### Policy implications

64. **[This is exempt under section 36 of the Freedom of Information Act.]**

**Life events and problem gambling severity: A prospective study of adult gamblers.** Luce et al. (2017).

#### Aims & methodology

65. The purpose of this article is to prospectively examine associations between life events and problem gambling severity in a cohort of gamblers.

66. Occurrence of life events and gambling problem severity were assessed 3 times over a period of 2 years in a cohort of non-problem and problem gamblers (n = 179) drawn from a representative sample derived from a population survey.

#### Key findings

67. The analyses revealed that cumulative number of life events were associated with an increase in severity of problem gambling twelve months later.

68. Regression analyses showed that significant life events in several domains, for example, “change in sleeping habits,” “accidental injury or illness” or “retirement,” are likely to be associated over time to the increase or the continuation of risky gambling habits.

#### **Policy implications**

69. **[This is exempt under section 36 of the Freedom of Information Act.]**

**Considering Gambling Involvement in the Understanding of Problem Gambling: A Large Cross-Sectional Study of an Australian Population.** Yeung & Wraith (2017).

#### **Aims & methodology**

70. There are two primary research questions guiding the analysis: 1.) Does gambling involvement change the association between the frequency of participation in a particular gambling activity and the risk of problem gambling? 2.) Do the two different measurements of gambling involvement (number of different gambling activities participated and total frequency of participation in other gambling activities) result in differences in the magnitude of this association?
71. The hypothesis is that different measures of gambling involvement have differing strengths of association with problem gambling. The current study aims to extend the investigation of gambling involvement to a representative sample of an Australian population.
72. This paper reports findings from a secondary data analysis investigating the cross sectional association between a particular gambling activity, gambling involvement and problem gambling based on the Victorian adult population.

#### **Key findings**

73. This study finds that the measurement of gambling involvement is important with different measurements resulting in differing

strengths of association with the risk of problem gambling. It finds that gamblers 18–24 years of age are an important risk factor for problem gambling.

74. Gambling involvement reflected the levels of gambling activities available to an individual. Therefore, such as in other addiction studies such as substance abuse, various channels of supply should be considered when studying problem gambling.
75. The association between some gambling activities and problem gambling, although reduced, remained significant after adjusting for gambling involvement.
76. In particular when machine gambling activity was focus on, this activity was identified as an important risk factor for problem gambling in Victoria, Australia.

#### **Limitations**

77. The data are self-reported and are subject to respondents’ own perception of their gambling behaviour.
78. The target sampling was based on the assumption that gamblers with a higher risk of problem gambling could be captured in higher EGM expenditure regions. This may result in capturing a higher proportion of problem gambling related to EGMs.
79. Gambling frequency may be confounded by binge gambling. Thus, information about the duration for each gambling episode may provide a better measurement of the exposure to gambling activities (See discussion in Howard J Shaffer and Martin (2011)).
80. The data analysed was collected in 2008, which was the same year that the first iPhone was released in Australia. Since then, the use of the smart phone has made gambling more accessibility of gambling opportunities and the study results may not reflect the current gambling environment today.

#### **Policy implications**

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

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## Gambling-related harm

**Breaking Bad: Comparing Gambling Harms Among Gamblers and Affected Others.** Li et al. (2017).

### Aims & methodology

82. This article examines gambling harms from both gamblers and affected others' perspectives. It provides critical evidence that similar harms can occur to both gamblers and people close to them, presenting detailed profiles of evolving harms as problem gambling severity increases, and identifies the type of harms that most effectively discriminate between different levels of gambling problems.
83. The authors conducted a qualitative research, identifying a taxonomy of specific harms based on extant literature, focus groups, interviews, and online forum posts.
84. These harms were developed into a set of personal statements. This process resulted in a set of 73 specific potential harms arising from gambling, organised within six domains:
- Financial
  - work/study
  - Health
  - Emotional/psychological
  - Relationships
  - Other harms (including cultural and criminal).
85. These were applied through a checklist approach, surveying the participants with the aim of understanding the prevalence of harmful outcomes, relative to different levels of gambling problems.

86. In conducting the survey, the authors adopted the use of a PGSI modified slightly to suit retrospective responding, which greatly increased the amount of useful data obtained.

### Key findings

87. Harms in all domains tended to accumulate more quickly to gamblers than to affected others as gambling problems increased.
88. Among all examined financial harms, bankruptcy was found to be the most severe one for both gamblers and affected others. Within work/study harms, being excluded from study, losing one's job, and conflict at work were the most severe harms.
89. Attempted suicide, requiring emergency treatment, overeating, and self-harm were the most severe indicators of health-related harms among both gamblers and affected others. Within emotional/psychological harms, feelings of failure, worthlessness, escaping, extreme distress and vulnerability were the most extreme harms.
90. Among both gamblers and affected others, experiencing greater relationship conflict was the most reliable discriminator and predictor of relationship harms. The most notable difference between the two groups appears to be in quantity, rather than quality of experienced harms.
91. The results also provided evidence that the results from PGSI screens do not always reflect the harms experienced by the problem gambler and the affected others.

### Limitations

92. Given the complexity of the findings and the small sample size of certain subgroups, the authors did not analyse the types of relationships the affected others had with the gamblers (such as work colleague, family member, partner etc).
93. The analysis excluded the extent of harms occurring to affected others, as well as their

willingness to support the person who gambles.

#### Policy implications

94. **[This is exempt under section 36 of the Freedom of Information Act.]**

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## Remote

**Virtual addictions: an examination of problematic social casino game use among at-risk gamblers.** Gainsbury et al. (2017).

#### Aims & methodology

96. To examine whether similarities in problematic social casino gaming and problem gambling might be identified by assessing symptom profiles. The three areas of investigation are as follows: whether social casino games are used problematically by player who also experience problem gambling, the characteristics of individuals who experience problems with both activities and the most common symptoms of problematic social casino games among problem and at-risk gamblers.

97. It was hypothesised that greater involvement in social casino games in terms of frequency of use, extent of game play, financial expenditure, as well as greater psychological distress would be related to greater endorsement of symptoms of problematic play.

98. The sample was recruited from a larger online survey sample (n=1,554) that was investigating online behaviour more widely. The respondents were chosen based on a PGSI score of 3 or above which indicated moderate risk of problem gambling and problem gambling.

#### Key findings

99. Only a small number of problem gamblers (10%) of the sample reported problematic social casino gaming.

100. Social casino gaming problems were higher amongst young players, those with lower levels of education and non-English speakers.

101. Problematic social casino gaming was associated with: more frequent sessions, higher and more frequent expenditure and expenditure on different game types was related to greater problematic gambling behaviour. The most commonly cited reason for playing social casino games was to escape from personal problems or relieve a negative mood (50%).

102. It is possible that the gamblers in this study used social casino games to cope at times when: gambling was not an available option, to cope with distressed or mental health issues. Majority of players had paid for social casino game sessions. This has implications because of the aspect of real money in the form of virtual goods or currency. However, spend is only one metric to measure involvement in these activities. Therefore, harm screening can be used as a tool to measure problem gambling rates.

#### Limitations

103. This study uses a small subset of people who are at-risk of gambling problems. In part this reflects the scale of problems associated with technological addictions. Future research in this area should consider players who have a lack of insight, denial or reattribution of problems. The study does not allow for conclusions about causality to be drawn up.

104. The screening tool used to measure problematic play amongst social casino game players was designed especially for this project. Therefore, the tool may not have been tested and validated.

#### Policy implications

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

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## Responsible gambling tools

**Measuring responsible gambling amongst players: development of the positive play scale.** Wood et al. (2017).

### Aims & methodology

106. The central aim was to develop and validate a positive play scale (PPS) by testing the tool with regular players in Canada (n = 1,551) in order to understand the extent to which consumers had positive beliefs about gambling, and if they gambled in a positive manner.
107. In Study 1, literature was reviewed and 30 players as well as 10 RG experts were consulted to help generate a definition of RG beliefs and behaviour that helped guide item generation. In Study 2, regular players (N = 1,551) of a Canadian provincial gambling operator completed a positive play survey. Four components in the analysis were used: Honesty and Control, Pre-commitment, Personal Responsibility, and Gambling Literacy. The PPS subscales were either not associated with gambling frequency or had small-to-moderate negative relationships with frequency of play for games most often associated with disordered gambling (e.g., electronic games). In Study 3 (N = 413), the factor structure of the PPS was confirmed and refined in a new sample of players.

### Key findings

108. A follow-up session after one month demonstrated that the PPS has high retest reliability.
109. The main four components that emerged from the validation of the tool were: honesty and control, pre-commitment, personal responsibility and gambling literacy.
110. Most players in the sample scored fairly high on each subscale. This is to be expected as

most players of gambling type games will not have, or be at risk for, developing a gambling problem.

111. The PPS subscales were moderately and negatively associated with disordered gambling severity and erroneous gambling beliefs.
112. The results of Study 3 replicated the overall structure of the PPS for seven of the nine behaviour items and seven of the nine belief items.

### Limitations

113. The external validity of the findings, as the sample was from a single gambling jurisdiction (British Columbia), and therefore applicability of the PPS may be geographically limited.
114. Another possible limitation is that the PPS is based on self-reported behaviours and beliefs. There is always a risk that what people report and what they do are not always the same. Also, the sensitivity of the PPS for measuring changes over time is yet to be tested.

### Policy implications

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

**Principles for Developing Benchmark Criteria for Staff Training in Responsible Gambling.** Oehler et al. (2017).

### Aims & methodology

116. The primary goal of the present study was to assess suitable benchmark criteria for the training of gambling employees at casinos and lottery retailers in Austria (n = 21).
117. The study utilised the Delphi Method, a survey with one qualitative, and two quantitative phases.

### Key findings

118. Results indicated that benchmarking should be conducted every 1–2 years regularly and

that one institution should be clearly defined and primarily responsible for benchmarking.

119. Experts agreed that 'placement of awareness toward pathological gambling and its consequences' as critically important for staff training. The criterion 'competencies in intervention and taking care of problem gamblers' was rated very important.
120. Another criterion for 'Modelling' that was rated by over 90% of the experts as very important was 'reflection opportunity for participants'.

#### Limitations

121. This is a relatively small sample that was recruited from Austria. However, this area of research is rather limited and this study provides new insight into the effectiveness of certain areas of staff training on social responsibility.

#### Policy implications

122. **[This is exempt under section 36 of the Freedom of Information Act.]**

### Young People

**Exposure to Gambling Advertisements and Gambling Behavior in Young People.** Clemens et al. (2017).

#### Aims & methodology

123. This cross-sectional study carried out in Germany, intends to test the hypothesis that exposure to gambling advertisements is positively associated to a variety of gambling outcomes, including gambling frequency and problematic gambling (n = 4,617).

#### Key findings

124. There was a strong and consistent association between the exposure to gambling ads and several gambling behaviours, including a more probable pathological behaviour pattern.
125. A secondary finding of the study was that even if there are higher restrictions on

gambling advertising in Germany than for most other products (including alcohol), there was substantial exposure in this sample of adolescents and young adults.

126. 30% of gambling advertisements had been viewed before by participants and some of the respondents were also highly familiar with the brands and products advertised.

#### Limitations

127. Firstly, cross-sectional data do not inform about the temporal sequence of events, and it would be one important indication of a causal relationship.
128. The implemented method did not use a representative sample of all gambling ads and used masked material, not allowing an accurate estimation of the total amount of gambling ad exposure of German young people nor the advertising market shares of specific brands.
129. Pathological gambling had a low prevalence which can bias the estimates. Additionally, the results may be biased by an unmeasured risk or protective factor could alter the estimates reported for the association between gambling advertising and gambling behaviour.
130. The use of a non-clinical sample does not allow valid conclusions about pathology. Finally, it should be pointed out that the data was obtained by students' self-reports.

#### Policy implications

131. **[This is exempt under section 36 of the Freedom of Information Act.]**

**Systematic Review of Empirically Evaluated School-Based Gambling Education Programs.** Keen et al. (2017).

#### Aims & methodology

132. This review aimed at reporting the outcome of studies empirically evaluating gambling education programmes across international jurisdictions.

133. The authors conducted a systematic review of published research and government initiatives on gambling education programmes.

#### Key findings

134. Few gambling education programmes for adolescents have been evaluated, given the prevalence of gambling among this group. There is a discord between current practice, and evidence-based practice.
135. The strength of the programmes remains unclear due to notable methodological flaws including measurement of issues, small numbers of problem gamblers, and brief follow-up assessments. Improvements could be made to the content and design of programmes so that they have a greater likelihood of producing behavioural outcomes.
136. Strong theoretical conceptualisation in designing programmes is essential to boost intervention effects and meet the objective of reducing or preventing gambling problems among adolescents.

#### Limitations

137. Limitations were found in the lack of meta-analyses. Due to the variation in outcome measures, samples and analyses, it was not feasible to calculate comparable measures of effect size.
138. There was a genuine risk of publication bias in the reviewed studies. Given the large number of programmes currently available in schools, it is likely that others have been evaluated and not published due to non-significant findings.
139. Two studies were excluded despite meeting all other eligibility criteria as they were not available in English, and no funding was available for a translator.

#### Policy implications

140. **[This is exempt under section 36 of the Freedom of Information Act.]**

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## Regulation

### Analysis of EGM licensing decisions by the gambling regulator in Victoria, Australia.

Francis et al. (2017).

#### Aims & methodology

141. This research demonstrates the difficulty of balancing apparently quantifiable benefits against less readily measurable gambling-related harms in regulatory decision-making.
142. This study analyses the Victorian gambling regulator's decision-making process and practices for Electronic Gaming Machine licensing, including premises such as clubs or hotels.
143. More broadly, this article seeks to highlight an imbalance around the framing of the 'cost-benefit' approach that has been adopted and the results can be used across similar jurisdictions.

#### Key findings

144. The study found that the harms associated with EGMs were poorly conceived and understood inadequately and supportive factors frequently overstated.
145. This process may lead to unnecessarily high levels of community harm, contradicting the purposes of the relevant legislation.
146. The process of trading-off substantial harms against relatively minor benefits is not transparent, and rarely discussed by the organisation.

#### Limitations

147. The reviewed decisions do not capture all aspects of the discussions and submissions at a hearing.

#### Policy implications

148. **[This is exempt under section 36 of the Freedom of Information Act.]**



**Gambling is not a capitalist conspiracy: a critical commentary of literature on the 'industry state gambling complex'.** Delfabbro & King (2017).

#### **Aims & methodology**

149. This article argues that the field of gambling studies is strengthened when generalisations about the role of industry are always supported by tangible examples and evidence at each stage of the critique.
150. In the first part of this article, an overview is provided on the important contributions made to public debates and the gambling field. The evidence in support of the principal suppositions of this area will be summarised.
151. A second part of the article then provides a more critical examination of this work, both in terms of its scholastic merits and the extent to which the arguments presented are supported by factual evidence.

#### **Key findings**

152. The role of government in the growth of the gambling industry has been highlighted by research into the political economy of gambling, arising particularly from the fields of sociology and geography.
153. This research further shows that larger gambling industry groups, when provoked to action, can mobilize considerable resources to campaign against reforms to their practices; however, these observations can become obscured when framed in the context of the Marxist–Leftist framework which describe market forces and business operations as a form of class warfare.

#### **Limitations**

154. This publication is a discussion piece that applies theoretical thinking to the gambling industry, no primary research is presented.

#### **Policy implications**

155. **[This is exempt under section 36 of the Freedom of Information Act.]**

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## **Other**

**The role of peer influences on the normalisation of sports wagering: a qualitative study of Australian men.** Deans et al. (2017).

#### **Aims & methodology**

156. To understand the motivations for men to participate in sports betting that takes place online and in person.
157. This study is part of a larger study carried out in Australia to investigate the role of social norms in sports betting in order to develop targeted and effective regulatory interventions to prevent gambling-related harm.
158. Semi-structure interviews were carried out with young men in Australia (n=50) who gambled on sport.

#### **Key findings**

159. The following themes emerged from the analysis of the interviews: young men perceived sports wagering as 'normal' and a socially accepted activity and as a natural 'add on' to sports.
160. There were clear indicators that sports wagering was becoming embedded within existing peer based sporting rituals, with the emergence of gambling clubs and online forums.
161. The men tended to shape their gambling/sport discussions to create a sense of identity and engage in conversation with their peers.
162. Some participants spoke of the social pressure to gamble to 'fit in' with their friends.

#### **Limitations**

163. This study used a small sample and therefore generalisations may not be drawn across the population of young men in Australia who

gamble on sports. This group was skewed towards those with middle to high socio-economic backgrounds with some form of tertiary education. However, the sample does represent individuals with a wide range of sports wagering behaviours.

### Policy implications

164. **[This is exempt under section 36 of the Freedom of Information Act.]**

**Breaks in play: empowering gamblers through in-game harm minimization features for electronic gaming machines.** Gainsbury & Blaszczynski (2017).

### Aims & methodology

165. To make recommendations using the available evidence on electronic gaming machine (EGM) design and player experience to draw conclusions on responsible gambling.

166. The authors conduct a systematic review of published research and government initiatives on harm minimisation and machines internationally.

### Key findings

167. It is acknowledged in the literature on gambling that potentially all forms of gambling can be harmful. However, machines in their various forms are mostly commonly associated with problem gambling. This has been attributed to the type of play involved with machines: rapid, continuous betting, an immersive experience that can create disassociation for some. The increasingly sophisticated technology to enhance the machine play experience, can also be used to facilitate responsible gambling features such as warning and personal appraisal messages, the ability to set aside winnings, breaks in play and limits on stake size.

168. These features are split into two key concepts:

- Demand reduction (modifying game design to minimise harm using pre-commitment tools) and supply reduction (breaks in play, limits on bet size).
- Breaks in play: while some evidence shows that a short break in play can minimise the impact of disassociation and enable gamblers to become aware of the amount of time and money spent. However, these breaks can be counterproductive as they can increase the urge to play. From a public health perspective, some breaks in play encourage other cravings such as smoking. Therefore, the optimal responsible gambling strategy should include both breaks in play with concurrent displays of dynamic messages.

### Limitations

169. There is limited evidence on the evaluation of harm minimisation strategies used on EGMs. In general there is a lack of evidence on the impact of responsible gambling strategies using real world gamblers.

### Additional titles<sup>4</sup>

**Gender by Preferred Gambling Activity in Treatment Seeking Problem Gamblers: A Comparison of Subgroup Characteristics and Treatment Outcomes.** Khanbhai et al. (2017).

**Can an Accelerated Gambling Simulation Reduce Persistence on a Gambling Task?** Broussard & Wulfert (2017).

**Screening Tools for Technological Addictions: A Proposal for the Strategy of Mental Health.** Chóliz et al (2017).

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<sup>4</sup> These are papers that were found to be of less relevance in comparison to the other summaries presented.

**Facilitators and Barriers to Family Involvement in Problem Gambling Treatment.** Kourgiantakis (2017).

**Impact of alcohol consumption on clinical aspects of gambling disorder.** Pino-Gutierrez (2017).

**Psychometric Properties of a German Version of the Young Diagnostic Questionnaire (YDQ) in two Independent Samples of Adolescents.** Wartberg (2017).

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

**The psychosocial impact of professional gambling, professional video gaming and esports.** Griffiths (2017).

**No risk, no fun: implications for positioning of online casinos.** Konietzny (2017).

**Use of online crowdsourcing platforms for gambling research.** Mishra & Carleton (2017).

**Differences in the Gambling Behavior of Online and Non-online Student Gamblers in a Controlled Laboratory Environment.** Montes and Weatherly (2017).

**A Critical Review of the Harm-Minimisation Tools Available for Electronic Gambling.** Griffiths & Harris (2017).

## **Annex B**

### **Bibliography and further information**

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