

Quarterly Research Briefing 01/16 (April 2016)

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Introduction

1. The purpose of this briefing note is to provide both the Board and all colleagues with a summary of significant research that has either been published recently, or is due to be published in the near future.
2. Copies of the full research documents featured in this briefing, or more detailed summaries, are available on request. Full citations of the studies featured in this briefing are provided in Annex A.
3. The articles in this briefing fall under the follow themes:
 - Gambling Commission research
 - Responsible Gambling Trust research
 - Young people
 - Problem gambling
 - Machines
 - Gambling-related harm and other.
4. Key policy implications are highlighted for all studies.

Gambling Commission Research

Participation in gambling and rates of problem gambling - 2015. **Gambling Commission (2016).**

Aims & Methodology

5. To track adult participation and problem gambling rates across the UK.
6. A quarterly telephone omnibus survey (n= 4,000) and an online tracker survey (n= 8,000).
7. The surveys use a mini screen developed from the 9-item Problem Gambling Severity Index (PGSI). The screen is made up of three questions: Have you bet more than you could really afford to lose? Have people 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?

Key findings

8. Participation in gambling has fallen from 57% in 2012 to 45% in the 12 month reporting period (2015). This can be attributed to National Lottery draw participation dropping from 46% to 32% in the same period and is consistent with what we have seen in previous participation reports.
9. National Lottery draws remain by far the most popular gambling activity followed by other lotteries and scratchcards.
10. At 0.5% of the population rates of problem gambling are static (2015: 0.5%; 2014: 0.4%). Those aged 18-24 are most likely to be problem gamblers (1.1%) and 1% of men were classed as problem gamblers in 2015 compared with 0% of women.
11. 25-34 year olds are most likely to use mobile and tablet devices, bet in-play and gamble outside of the home.
12. Laptops are the preferred devices amongst all age groups for online gambling whilst those aged under 45 are most likely to use mobiles or tablets to gamble in addition to laptops.

Limitations

13. The original ICM omnibus was discontinued and we had to source a separate standalone survey for one of the quarters.
14. Data collection in April 2014 was conducted following the Grand National, and so results including those data are skewed.

Policy implications

15. The National Lottery currently use player tracking to monitor participation. The results from the participation and prevalence annual report are indicative of the trends identified in these reports, although our participation rates are tracking lower than

those of Camelot's. Commission colleagues are in discussions about the discrepancies in both sets of results.

16. A publication from Camelot that reports on participation shows that it has decreased over this period. However, the amount of revenue raised has remained stable.
17. There are concerns about how long Camelot will be able to sustain a strategy of price increase in order to maintain the current revenue stream. From a National Lottery perspective, if the revenue flow is not sustained, a decrease in the returns to good causes will occur. Colleagues working in the National Lottery will continue to monitor Camelot's strategy through the six-monthly Performance Achievement Report.

Responsible Gambling Trust Research

Gambling and social media. Demos (Miller et al.) (2016).

Aims & Methodology

18. To evaluate the impact of increased social media activity upon gambling related behaviour. In particular, an investigation into the research question of whether social media is either promoting or discouraging problematic and harmful gambling behaviours.
19. This study utilises large-scale analytic techniques alongside qualitative research. The researchers used four algorithms to analyse how social media accounts are linked together in a network and the flow of communication within them. Data was derived from Twitter, Facebook and gambling forums.

Key findings

20. There were high volumes of gambling-related data across social media and online forums relating to gambling. Some online communities entrench gambling as a natural part of sports appreciation. The majority of discussions relating to gambling online, particularly around offers, tips and odds, were focused on sport.
21. Around one quarter of Tweets sent from bookmakers and 15% of messages from Facebook tipsters were not about gambling but jokes and updates from different sports.
22. Around 900,000 Twitter accounts evidenced 'intensive' combination of gambling activity or interest. These accounts tended to link with one another to form links and discuss gambling intensively together.
23. It was found that websites providing support to problem gamblers online rarely attracted social media users who were 'pro-gambling'. The researchers recommend that more could be done on the part of problem gambling support websites to actively reach out to problem gamblers to offer to support.

Limitations

24. This study focuses on gambling-related social media use and did not investigate actual gambling behaviour. There is no discussion of how online communication may translate into gambling behaviour.
25. There is no distinction in the research between discussions of online gambling and in person gambling because this was not included in the analysis carried out. Further research using interviewing methodology could address this.

Policy implications

26. The study could provide further evidence to the importance of increased use of social media in relation to gambling participation. The Commission currently monitors social responsibility messages of HIO operators on their Facebook and Twitter profiles.

27. Colleagues working in the area of marketing and advertising may find the findings of this report useful to inform policy discussion.

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

Aims & Methodology

28. To evaluate the impact of the changes to stake and prizes for category B1 gaming machines. Previously the maximum stake had been £2 and the maximum prize £4,000. Under the new regulatory regime, these limits were set at £5 and £10,000 respectively. Also, for the first time, a higher maximum jackpot was permitted where machines were linked (on a premises-only basis) of £20,000.
29. Rank Group plc provided data that was extracted from the machines housed in their group of casinos. Two data sets were analysed: financial data for individual casinos (February 2013 - November 2014) and records from loyalty card holders (n=620,000). Data was collected and analysed for several product types: table games, e-roulette and B1 machines. Additionally, interviews were conducted with representatives from Rank Group plc, Aspers Group Ltd and Caesars Entertainment UK.

Key findings

30. Customers appeared to be migrating from spending on tables to machines in response to higher stake and prize limits on machines. In poorer areas the fall in revenue from other gambling products was offset by an increase of revenue from B1 machines.
31. In terms of frequency, there was no evidence to support the migration of infrequent players becoming frequent players. However, there was an increase of frequent users (from 60% to 65%) who have remained consistent players across the period. This explains the increase in industry revenue from B1 machine and that this group of players were retained by the casino.
32. The results from the modelling suggest a slightly higher increase (approximately 10%) in the weekly amount staked in B1 machines. It seems that casinos have retained (as profit) a somewhat smaller proportion of stakes than previously. A potential explanation is that larger prizes tend to be retained by the player rather than spent on additional play. There was an increase in the amount staked that came from the average stake per spin opposed to the increase in the number of spins.

Limitations

33. For several venues included in the analysis, the 2013 data was missing. Therefore, 23 out of the 36 could be interrogated making the sample size smaller than planned.

Policy implications

34. The authors claim that this study reflects the short term impact of this legislative change. It cannot be ruled out that further changes would occur in the future as consumer behaviour adapts and the industry begin to start taking full advantage of the loosened constraints on stakes and prizes.

Young People

Gender, gambling settings and gambling behaviours among undergraduate poker players. Kairouz et al. (2016).

Aims & Methodology

35. To examine the link between gender and poker gambling behaviour amongst college students.
36. The participants filled out either a paper copy of a questionnaire or completed this online (n=368). There were three outcomes used to measure risky behaviour: severity of gambling problems (PGSI), past-year poker spend and past-year poker debt. The dependent variables were defined as: gambling on poker in private residences, in public locations or on the internet.

Key findings

37. Overall, the occurrence of gambling on poker in public locations and on the internet emerged as significant factors in both the severity of gambling problems and past-year poker spending. Therefore, it could be that gender in itself does not influence poker gambling behaviours but rather the settings where students gamble on poker, given their gender.
38. The activity of gambling on poker was found to be an opportunity for the students to socialise and there was no dominant gender amongst those who gambled in private residences.

Limitations

39. The data used to base this paper on was collected between 2008-2009 and could be considered out of date.
40. The sample used in this study was relatively small and comprised only of students, so there could be some doubts about whether the findings can be generalised to the wider population.
41. In the sample itself, there was a small number of participants who played online. This made it difficult for the researchers to make claims about poker behaviour outside of private residences.

Policy implications

42. Previous Commission surveys have shown poker to be an activity that has comparatively high rates of problem gambling. This study provides more insight into that phenomena.

Investigating possible reciprocal relations between depressive and problem gambling symptoms in merging adults. Chinneck et al. (2016).

Aims & Methodology

43. To assess whether depression and problem gambling co-occur (n= 679).
44. A longitudinal survey was used to track behavioural changes over time. The study analysis four waves of data as part of the Manitoba Longitudinal Study of Young Adults.

Key findings

45. The results showed that depressive symptoms and problem gambling symptoms were positively correlated in three of the four waves.
46. Substance abuse was a common underlying factor to experiences of depression and problem gambling. Neither disorder was found to be a risk factor for the other. Therefore, while depression and problem gambling are related, they should be viewed as co-occurring rather than a risk factor for each other.

Limitations

47. The Commission does not have journal access to obtain a full copy of this paper.

Policy Implications

48. Colleagues in RGSB and social responsibility could use this as a piece of evidence towards the nature of gambling-related harm and mental illness.

"I was that close": investigating players' reactions to losses, wins and near misses on scratch cards. Stange et al. (2016).

Aims & Methodology

49. To understand the physiological and subjective experience of scratch card play, with special emphasis on the effect of near-miss outcomes (i.e. uncovering two out of three "grand prize" symbols needed to win said prize) prevalent in scratch card games.
50. Skin conductance levels (SCLs) and post-reinforcement pauses were recorded and participants. Each participant rated each outcome in terms of its subjective level of arousal, valence, and frustration. Participants were video recorded and display cases used in retailers were used to create an authentic experience.

Key findings

51. The results indicated that players interpreted near misses negatively and the losses created frustration that led to moving onto the next game quicker compared to winning outcomes. Additionally, near-miss outcomes were associated with the largest amount of changes in skin conduction.

Limitations

52. Small sample of problem gamblers (2 of 38) determined by Canadian Problem Gambling Index meant that this concept was not investigated further.

Policy implications

53. The National Lottery are currently considering the introduction of new scratch cards. The study can provide some insight into the player behaviour of young people using this product.

The relationship between gambling attitudes, involvement, and problems in adolescence: Examining the moderating role of coping strategies and parenting styles. Dixon et al. (2016).

Aims & Methodology

54. To investigate the interplay between factors that lead to the development of problem gambling in adolescence (n=612).
55. The data was collected using a survey and the results were analysed using a regression model to assess the significance between the following factors: positive gambling attitudes, higher levels of gambling involvement, ineffective coping strategies and unhelpful parenting practices.

Key findings

56. While the study identified a number of symptoms associated with problem gambling, none of them predicted the probability of displaying problem gambling behaviour. There was a significant relationship between low levels of gambling involvement and parental intervention, showing that adolescents who are at risk of developing a problem with gambling can be supported by their parents to curb their behaviour.

Limitations

57. The parents of the adolescents in the sample were not interviewed, meaning that ineffective parenting practices could not be defined. The variables analysed such as 'coping strategies' are subjective categories that would have been interpreted by each participant differently.

Policy implications

58. This study could feed into RGSB's work on young people and gambling-related harm as it provides evidence of parental support as reducing the risks of young people becoming a problem gambler. In addition, this could act as evidence towards RGSB's work on 'measuring harm'.

Experience with gambling in late childhood and early adolescence: implications for substance experimentation behavior. Gallimberti et al. (2016).

Aims & Methodology

59. To investigate the frequency of gambling experience in childhood and early adolescence and to examine the association between alcohol/cigarette/energy drink consumption and gambling amongst young people.
60. A survey was conducted between 2013-14 at schools in Italy with students aged 11-13 years old (n=1,325). Multilevel analysis was used to establish the association between gambling and risk-taking attitudes.

Key findings

61. Among eighth graders, 45.8% of the boys and 35.4% of the girls reported at least 1 type of gambling. In a fully-adjusted model, having experience of gambling is linked to a higher likelihood of being consumers (at least once a month) of other substances (alcohol, cigarettes, energy drinks, or marijuana).

Limitations

62. The Commission does not have journal access to obtain a full copy of this paper.

Policy implications

63. This study could feed into RGSB's work on young people and gambling-related harm as it provides evidence of the link between other risk-taking behaviours that exist alongside gambling.

Problem Gambling

Validation of the Gambling Perceived Stigma Scale (GPSS) and the Gambling Experienced Stigma Scale (GESS). Donaldson et al. (2015).

Aims & Methodology

64. To explore how stigma operates as a major barrier to treatment seekers, as to date, no validated tool is available to assess the stigma associated with gambling. This is the first study to examine both perceived and experienced stigma.
65. A sample was recruited to be screened using two new survey instruments (n= 1366): the Gambling Perceived Stigma Scales (GPSS) and the Gambling Experienced Stigma Scale (GESS). The two screens were created using existing measures of stigma such as: alcohol and drug abuse, smoking and eating disorders. The methodology used to analyse the findings were internal reliability analysis, factor analysis and multivariate analysis. The model of perceived stigma was devised using two dimensions: contempt and ostracism.

Key findings

66. The findings showed that there is a clear distinction between perceived stigma and experienced stigma. Analysis of the GPSS tool shows that a strong two-factor model of perceived contempt and ostracism had a strong level of validity. The tools were able to differentiate between stigma amongst recreational gamblers and problem gamblers.

Limitations

67. To validate the GESS tool, a larger sample of people who had a high level of involvement in gambling or experience problems with their gambling would be necessary.

Policy implications

68. Improved understanding is needed of potential barriers to treatment seeking and is particularly important as we know a small proportion of PGs actually seek treatment.

Online gambling expansion in Ontario: a report from Ontario psychiatrists.
Ontario Psychiatric Association. (2016).

Aims & Methodology

- 69. The paper analyses statistics on the prevalence of gambling in Ontario, also examines efforts to reduce harm caused by gambling in Ontario and other jurisdictions.
- 70. The authors present various definitions of gambling addiction, supporting by statistical analysis and its negative effects on an individual's wellbeing.

Key findings

- 71. Found there are serious ethical, social, and health implications associated with OLG's (Ontario Lottery and Gaming Corporation) implementation of online gambling.
- 72. Maintains there are steps that OLG and the government of Ontario could take to reduce the harm experience by gamblers and their families.

Limitations

- 73. This gives us an insight into prevalence reporting in the international context.

Policy implications

- 74. The evidence in this paper could be useful for RGSB and RGT in their work on the topic of gambling-related harm; particularly as it focuses on the impact of remote industry's expansion, albeit in Canada. Additionally, colleagues working in the sector and thematic area could use this paper to review international social responsibility methods.

The social side of the pathways model: examining the mediation of social support on the relationship between psychopathology and problem gambling.
Mark van der Maas. (2016).

Aims & Methodology

- 75. To examine the relationship between social support and psychopathologies associated with gambling problems (n= 138,010).
- 76. Secondary data analysis of the 2008 Canadian Community Health Survey.

Key findings

- 77. It was found that social support mediates the relationship between mood disorders and problems that a person experiences as a result of gambling. Low levels of social support were a significant risk factor in the onset of problem gambling.

Limitations

- 78. The survey used in the secondary analysis was published in 2008.

Policy implications

- 79. The evidence in this paper could be used in RGSB & RGT work on researching how to measure gambling-related harm as social support networks are taken into consideration.

Machines

Evaluation of Gaming Machine (Circumstances of Use) (Amendment) Regulations 2015. DCMS. (2016).

Aims & Methodology

80. To assess the impact of the previous Government implementation of the Gaming Machine (Circumstances of Use) (Amendment) regulations 2015. The policy objective of these regulations is to assist people who use sub-category B2 gaming machines to stay in control of their gambling by requiring those staking above £50 to load cash via staff interaction or use account based play.
81. The authors carried out an empirical impact evaluation by using quantitative data to test whether a policy is associated with any significant change in the outcomes of empirical measures. The data used for analysis was supplied by the machine suppliers SG Gaming and Inspired Gaming.

Key findings

82. The analysis of transaction data showed that there has been a relatively low uptake of verified accounts. A verified account contains details of a validated method of contact for the player (email or mobile number). Prior to implementation approximately 4% of stakes were linked to a player loyalty account. These accounts did not require such information and could be operated anonymously. Following implementation the percentage of sessions linked to a verified account has been between 8 and 11%.
83. There has been a fall in the six month period since the regulation was implemented of around £6.2bn in the amount bet in stakes over £50 (2014-15 Q2 & Q3).
84. Additionally, there has been a £5.1bn increase in the total amount staked at the £40-50 range for the six month period since the regulation was implemented. This is an overall decrease of approximately 10.1% in the amount staked over £40 in 2015 Q2 and Q3 compared to 2014. This is said to be a result of more conscious decision making or it could be players wishing to maintain their anonymity. In order to implement the changes, operators have increased in spending in the areas of training, IT and marketing.

Limitations

85. The researchers state that there is still a degree of uncertainty as to the impact of the policy. However, the outputs are broadly what was expected and had the desired impact. Extra data on the number of responsible gambling interactions would be helpful to evaluate the link with £50 stakes. Further qualitative and survey research is required to understand what has driven changes to player behaviour and to observe changes in patterns of play.

Policy implications

86. The intended outcomes of the Gaming Machine (Circumstances of Use) (Amendment) regulations 2015 are visible in this evaluation study. Further research to observe changes in patterns of play and motivations for players to change their behaviour would help support/disprove this evidence.

87. Given the forthcoming Triennial Review, this provides initial evidence on the impact of regulatory change on player behaviour.

Electronic gambling machine gamblers' characteristics vary according to the type of gambling venue: a Canadian study. Sevigny et al. (2016).

Aims & Methodology

88. To understand the connections between problem gambling and environmental settings.
89. The sample (n= 143) was divided into those who gambled in large gambling halls (335 EGMs) and those who gambled in small venues (5-10 EGMs). Structured interviews were carried out with participants to assess: type of venue, socio-demographic characteristics, correlates of gambling problems, self-reported gambling perceptions and venue characteristics.

Key findings

90. The findings showed that small venue gamblers were four times more likely to be problem gamblers compared to large venue gamblers.

Limitations

91. As a result of the high refusal rate (61%) the overall sample was smaller than anticipated. The methodology relied on participants to self-report to a field researcher, which may have influenced how honest the responses were.

Policy implications

92. The authors recommend that venue specific interventions that take into consideration player profiles could inform responsible gambling measures and prevention/treatment programmes.

Gambling-related Harm

Exploring area-based vulnerability to gambling-related harm index. Wardle et al. (2016). Commissioned by Westminster and Manchester City Councils.

Aims & Methodology

93. To consider the types of people who may be at greater risk of harm from gambling and where they might be located. The previous report (Exploring area based-vulnerability to harm: who is vulnerable?) identified various groups that were more likely to experience gambling-related harm. By focusing on these groups, this report aims to create local risk indices, highlighting areas with greater concentrations of people who are more likely to be vulnerable to harm in London and Manchester.
94. Data from two sources were combined into one dataset based on: the characteristics of people who live in a local area and the location of local services which are likely to attract potentially vulnerable people to a specific place.

Key findings

95. In Westminster, four broad areas of greater risk were identified: North West of Westminster, around Victoria and Pimlico, north-central areas of Paddington and the Edgware road, and the West End. The heightened risk in each area is driven by a range of different factors. For example, in Pimlico risk is higher because of a greater number of homelessness shelters and substance abuse treatment providers in the area. In the North West area, risk is driven by rates of unemployment, ethnic group and large numbers of young people.
96. In Manchester, there are many different area of risk which include areas around the city centre and the south of the city. Risk in the city centre is driven primarily by the concentration of payday loan shops, education establishments, young residents and support centres for problem gamblers. The results showed that high levels of unemployment as well as ethnic group as major driving factors in the other locations.
97. Comparisons of the areas identified by the risk models with data on deprivation shows some overlaps but also some differences. The City of Manchester has a relatively low score according to the Index of Multiple Deprivation (IMD) but was identified as higher risk of gambling harm in the models. This is because there are a range of services offered within the city that may draw potentially vulnerable people into the city centre.

Limitations

98. The authors list three caveats for consideration when interpreting the data:
 - The models presented are probabilistic. If an area is highlighted as greater risk, this does not mean that all people in those areas will experience harm.
 - The models are based on current knowledge and data that is available. There were a number of potentially vulnerable groups who were excluded from the models because of the lack of local level data (such as immigrants or those on probation).

- The evidence based used to develop the models provides data on those vulnerable to gambling problems rather than gambling-related harm. The models may be conservative as gambling-related harm is broader than problem gambling.
99. An acknowledged limitation of gambling research generally is the small amounts of evidence available. The authors recommend that the models developed for this project are periodically reviewed and updated to take into account growing knowledge, better data and changes in local areas.

Policy implications

100. On April 6 2016, the Commission will require premise licence holders to conduct a local risk assessment for each of their current premises. This assessment is to provide assurance that a premises has suitable controls and procedures in place that are specific to the level of risk within the particular area. Second of all, local authorities to challenge evidence in the risk assessments when operators fail to evidence how they have considered local risks. The aim of this process is to encourage engagement between local authorities and operators at an early stage to reduce the likelihood of enforcement action at a later date.
101. This study could be useful to colleagues in RGSB and Social Responsibility working on harm minimisation projects.

Type of gambling as an independent risk factor for suicidal events in pathological gamblers. Bischof et al. (2016).

Aims & Methodology

102. To analyse whether the type of gambling is associated with suicidal events¹ in pathological gamblers.
103. The sample recruited (n = 442) all had a lifetime diagnosis of pathological gambling and participated in a clinical interview based on the DSM-V.

Key findings

104. The variables associated with suicidal events were high financial losses, mood disorders and being female.
105. Gambling on electronic gambling machines in gambling halls or bars was associated with increased odds of suicidal events.

Limitations & Policy Implications

106. This study could be relevant to colleagues in RGSB researching gambling-related harm and in particular the association with poor mental health.

¹ Suicidal events were not defined in the abstract available to the Commission.

Other

The effect of research compensation in the form of cheques on gamblers' cash-in behaviour. Cantinotti (2016).

Aims & Methodology

107. To understand the impact of researchers using compensation payments to recruit participants for their studies. The authors tested the hypothesis that problem gamblers (measured using the Canadian Problem Gambling Index) in venues with electronic gambling machines would cash their cheque faster than non-pathological gamblers.
108. The researchers recorded when the compensation, in the form of a cheque, had been mailed to the participants and also when it had been cashed. Significance testing was carried out to discover if there was an explanatory variable.

Key findings

109. The results suggest that financial compensation may play a more significant role for problem gamblers than for recreational gamblers who gambled on electronic gaming machines.

Limitations

110. In the concluding section, the researchers discuss further research into the social factors around location, motives etc. because the data was taken from secondary data sources which serviced as administrative records opposed to research data. These findings may not apply to different forms of gambling outside of EGM play.

Policy implications

111. This study provides evidence that problem gamblers are more likely to take part in incentivised studies compared to recreational gamblers.
112. The Commission does not provide incentives to survey respondents in order to recruit a sample.

Gambling involvement indicative of underlying behavioral and mental health disorders. Okunna et al. (2016).

Aims & Methodology

113. To understand the risk factors associated with recreational gambling.
114. Secondary data analysis of the 2013 Massachusetts Behavioral Risk Factor Surveillance System was carried out (n= 3,988). The annual telephone survey collects data on emerging public health issues, health conditions, risk factors and behaviours. The analysis was carried out on the following factors: gambling frequency and health risk behaviours, such as smoking and obesity.

Key findings

115. Significant differences were found amongst the socio-demographic characteristics of recreational gamblers. For example, high gambling frequency was associated with increased odds of alcohol consumption and tobacco use. In addition, the odds of having 14 days of poor mental health in the last 12 months are strongly linked to recreational gamblers who gamble two or more times per week.

Limitations

116. The data is approximately three years old and there may be difficulties in applying the findings to the present context.

Policy Implications

117. This paper could feed into RGSB's work on harm-minimisation.

Exposure to and engagement with gambling marketing in social media: reported impacts on moderate-risk and problem gamblers. Gainsbury et al. (2016).

Aims & Methodology

118. To investigate exposure to, and reported impact on gamblers of gambling promotions and marketing content on social media. The study focuses on vulnerable users currently experiencing gambling problems.
119. The researchers recruited a sample to respond to an online survey (n= 964).

Key findings

120. Problem gamblers and gamblers at moderate risk were significantly more likely to be impacted by social media promotion. One third reported that viewing promotions on social media had increased their problems.

Limitations

121. This study relies on self-report data only and could not verify how advertisements had specifically affected gambling spend or time gambling.

Policy Implications

122. This research can be viewed in light of the RGT research also featured in this briefing. There is a call for further research into the impact of marketing and advertising through the channel of social media.

Annex A Summary Table

Funded by	Country	Sample size	Qualitative/ Quantitative	Data collection	Peer review? (Y/N)	Relevance to policy	Workstream
Donaldson et al. (2015) Validation of the Gambling Perceived stigma scale (GPSS) and the Gambling Experienced Stigma Scale (GESS). <i>Journal of Gambling Issues.</i>							
Victorian Responsible Gambling Foundation and the Nevada Gaming Industry Research Council	Australia	1366	Quantitative	Survey	Y	Medium/High	EA4.2/ST3.3/EA5.1
Wardle et al. (2016). Exploring area-based vulnerability to gambling-related harm index.							
Westminster & Manchester City Councils	GB	N/A	Mixed methods	Secondary data analysis (Quant)	N	High	EA4.2/EA5.1/S&T
Forrest et al. (2015). Evaluating the impact of the uplift of stakes and prizes on B1 gaming machines in casinos. Funded by RGT.							
Responsible Gambling Trust	GB	620,000+	Mixed methods	Machine data & interviews	N	High	S&T/SR
DCMS (2016). Evaluation of Gaming Machine (Circumstances of Use) (Amendment) Regulations 2015.							
DCMS	GB	N/A	Quantitative	Quantitative	N	High	S&T/EA5.1
Ontario Psychiatric Association (2016). Online Gambling Expansion in Ontario: a report from Ontario psychiatrists.							
Ontario Psychiatric Association	Canada	N/A	Quantitative	unknown	Y	Medium	S&T/EA4.2/EA5.1

Stange (2016). "I was that close": investigating players' reactions to losses, wins and near misses on scratch cards. <i>Journal of Gambling Studies</i>							
Ontario Problem Gambling Research Centre	Canada	38	Quantitative	Survey	Y	Medium	NL/Lotteries/EA4.2/EA5.1/SR
Gambling Commission (2016). Participation in gambling and rates of problem gambling - 2015.							
Gambling Commission	GB	12000	Quantitative	Survey	N	High	All S&T/NL
Van der Maas (2016). The Social Side of the Pathways Model: Examining the Mediation of Social Support on the Relationship between Psychopathology and Problem Gambling. <i>Journal of Gambling Issues</i>.							
not stated	Canada	138010	Quantitative	Survey (secondary analysis)	Y	High	EA5.1/SR
Cantinotti (2016). The Effect of Research Compensation in the Form of Cheques on Gamblers' Cash-in Behaviour. <i>Journal of Gambling Issues</i>.							
Ontario Substance Abuse Bureau	Canada	375	Quantitative	Analysis of financial information	Y	Low	EA4.2/EA5.1
Okunna et al. (2016). Gambling involvement indicative of underlying behavioral and mental health disorders. <i>American Academy of Addiction Psychiatry</i>.							
unknown	USA	3988	Quantitative	Survey (secondary analysis)	Y	Medium	EA4.2/EA5.1

Miller et al. (2016). Gambling and Social Media. Funded by RGT.							
Responsible Gambling Trust	UK	N/A	Mixed methods	Case studies	N	Medium	M&A/SR/EA5.1/E A4.2
Kairouz et al. Gender, gambling settings and gambling behaviours among undergraduate poker players. International Gambling Studies.							
Fonds de recherche du Quebec- Societe et Culture	Canada	368	Quantitative	Survey	Y	Low	S&T/EA4.2/EA5.1
Gainsbury et al. (2016). Exposure to and Engagement With Gambling Marketing in Social Media: Reported Impacts on Moderate-Risk and Problem Gamblers. Psychology of Addictive Behaviors.							
unknown	Australia	964	Quantitative	Survey	Y	Medium	SR/M&A/EA5.1/E A4.2
Sevigny et al. (2016). Electronic gambling machine gamblers' characteristics vary according to the type of gambling venue: a Canadian study. International Gambling Studies.							
Quebec Research Fund on Society & Culture and Quebec Ministry of Health and Social Services	Canada	143	Quantitative	Interviews	Y	Low	EA5.1/EA4.2/CI/ ITP
Dixon et al. (2016). The relationship between gambling attitudes, involvement, and problems in adolescence: Examining the moderating role of coping strategies and parenting styles. Psychology of Addictive Behaviors.							
Not stated	Not stated	442	Quantitative	Interviews	Y	Low	EA5.1/EA4.2

Bischof et al. (2016). Type of Gambling as an Independent Risk Factor for Suicidal Events in Pathological Gamblers. <i>Psychology of Addictive Behaviors</i>.							
Not stated	Not stated	442	Quantitative	Interviews	Y	Low	EA5.1/EA4.2
Chinneck et al. (2016). Investigating possible reciprocal relations between depressive and problem gambling symptoms in merging adults.							
Not stated	Canada	679	Quantitative	Survey	Y	Medium	SR/EA5.1