

Impact case study (REF3)

Institution: University of Lincoln		
Unit of Assessment: 04 - Psychology, Psychiatry and Neuroscience		
Title of case study: Harm Minimisation in Digital Gambling		
Period when the underpinning research was undertaken: 2014 - 2019		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
PARKE Adrian ROBERTS Amanda	Senior Lecturer Associate Professor	11 Sep 06 – 26 Apr 19 1 Sep 14 to date
Period when the claimed impact occurred: 2015 to date		
Is this case study continued from a case study submitted in 2014? No		
1. Summary of the impact (indicative maximum 100 words)		
<p>University of Lincoln research into problem gambling has influenced the introduction of gambling harm minimisation measures, including the introduction of an amendment to gaming machine legislation to limit fixed odds betting terminal stake size. Researchers developed close partnerships with gambling support charities and independent industry research organisations to identify recent trends in gambling behaviour and risk factors for problem gambling and associated pathologies. Laboratory based research on the effects of gambling stake size on decision making was influential in the run up to legislative change, being cited in Parliamentary briefing papers, formal advice papers from the gambling commission and all-party working group reports.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>The University of Lincoln has led a programme of psychology research in conjunction with key industry stakeholder organisations, charities, national and international research collaborators, addressing risk factors and associated pathologies in problem gambling. The research programme combined questionnaires, interviews and case study analysis with experimental studies of simulated gambling tasks and cognition, producing original insights into problem gambling and new approaches to intervention.</p> <p>Parke led a study funded by the Responsible Gambling Trust (RGT) which examined within session loss-chasing and the effect of stake size on cognitive function and decision making [3.1]. Participants completed a roulette gambling task alongside an “information sampling task” which required the judgement of the number of different coloured marbles in a bag based upon a limited number of “picks” from the bag. When stakes were high in the roulette task, participants tended to make riskier decisions in the sampling task, choosing to make fewer test picks from the bag of marbles before a decision. This indicated that cognitive processes underlying decision making are negatively affected by higher stake amounts. Roberts was also a collaborator on a laboratory-based study which compared decision making in gamblers who primarily used slot machines within betting shops called fixed odds betting terminals (FOBTs) compared to those that used other gambling forms [3.2]. Consistent with Parke’s work, this showed that the FOBTs group had impaired decision making in an information sampling task relative to non-FOBTs gamblers, even when they weren’t concurrently engaged in a betting task.</p> <p>Roberts and colleagues surveyed case files for 768 gamblers seeking residential treatment to exam recent trends in problem gambling types and behaviour in conjunction with the Gordon Moody Association (GMA) gambling support charity [3.3]. The data showed that whilst the overall level of gambling has remained constant, FOBTs, sports betting, poker and online gambling have become more common whereas horse and dog racing, and the National Lottery</p>		

have become less popular. Gamblers were also more likely to have attempted suicide, to report a co-occurring mental health disorder, and to start treatment having already been prescribed medication over the 5-year period. Other research by Roberts examined a cross-sectional UK sample of 3025 men aged 18-64 and found that pathological gambling was associated with increased odds of trauma in childhood and life stressors in adulthood including homelessness even when adjusting for alcohol and drug dependence [3.4]. Problem gambling was also found to have a strong association with incidence of violence including intimate partner violence [3.5].

Lincoln research has also devised and evaluated new interventions for problem and pathological gambling. A further laboratory study examined the efficacy of in game “pop-up” messages for ameliorating harm by encouraging people to reflect on their gambling e.g. “Do you know how long you have been playing? Do you need to think about a break? Results showed that such messages had a positive effect on reducing bet frequency in a computerised coin tossing task [3.6].

3. References to the research (indicative maximum of six references)

- 3.1 Parke, Adrian. Harris, Andrew, Parke, Johnathan. & Goddard, Paul. (2016) Understanding within-session loss-chasing: an experimental investigation of the impact of stake size on cognitive control. *Journal of Gambling Studies*, 32 (2). pp. 721-735. ISSN: 1050-5350.
<http://dx.doi.org/10.1007/s10899-015-9570-x>
<http://eprints.lincoln.ac.uk/18614/1/JOGS%20Proof.pdf>
- 3.2 Sharman, Stephen and Clark, Luke and Roberts, Amanda and Michalczuk, Rosanna and Cocks, Rachel and Bowden-Jones, Henrietta (2019) Heterogeneity in disordered gambling: decision-making and impulsivity in gamblers grouped by preferred form. *Frontiers in Psychiatry: section Addictive Disorders*. ISSN 1664-0640.
<http://doi.org/10.3389/fpsy.2019.00588>
<http://eprints.lincoln.ac.uk/36566/3/fpsy-10-00588.pdf>
- 3.3 Sharman, Stephen, Murphy, Raegan, Turner, John and Roberts, Amanda (2019) Trends and patterns in UK treatment seeking gamblers: 2000–2015. *Addictive Behaviors*, 89. pp. 51-56. ISSN 0306-4603.
<https://doi.org/10.1016/j.addbeh.2018.09.009>
- 3.4 Roberts, Amanda and Sharman, Stephen and Coid, Jeremy and Murphy, Raegan and Bowden-Jones, Henrietta and Cowlshaw, Sean and Landon, Jason (2017) Gambling and negative life events in a nationally representative sample of UK men. *Addictive Behaviors*, 75. pp. 95-102. ISSN 0306-4603.
<https://doi.org/10.1016/j.addbeh.2017.07.002>
- 3.5 Roberts, Amanda and Landon, Jason and Sharman, Stephen and Hakes, Jahn and Suomi, Aino and Cowlshaw, Sean (2018) *Gambling and physical intimate partner violence: results from the national epidemiologic survey on alcohol and related conditions (NESARC)*. *The American Journal on Addictions*, 27 (1). pp. 7-14. ISSN 1055-0496.
<https://doi.org/10.1111/ajad.12656>
- 3.6 Harris, Andrew and Parke, Adrian (2016) *The interaction of gambling outcome and gambling harm-minimisation strategies for electronic gambling: the efficacy of computer generated self-appraisal messaging*. *International Journal of Mental Health and Addiction*, 14 (4). pp. 597-617. ISSN 1557-1874.
<http://dx.doi.org/10.1007/s11469-015-9581-y>

4. Details of the impact (indicative maximum 750 words)

Parke's research showing an effect of stake size on decision making was highlighted in a 2017 briefing document on FOBTs stake size produced by the independent think tank Centre for Social Justice [5.1]. The research was also cited in a House of Commons Briefing note on FOBTs from the Secretary of State for Culture, Media and Sport and in detailed advice from the Gambling Commission to the Secretary of State in 2015 [5.2] as well as in a position statement from the Parliamentary All Party Betting and Gaming Group in 2017 [5.3]. Also in 2017, Roberts co-authored a report submitted to the Department for Culture, Media and Sport consultation on proposals for changes to Gaming Machines and Social Responsibility Measures, highlighting the rise in use of FOBTs as an area for concern that should be considered in future policy making [5.4]. In a review to the DCMS, the Gambling Commission drew on Lincoln's research (together with insights from health and gambling participation surveys and problem gambling support charities) to provide evidence that FOBTs in bookmakers were associated with more harm relative to other gambling forms and endorse a minimum £2 stake [5.5]. Subsequent legislation to reduce the minimum stake size for FOBTs to £2 came into force in April 2019 via the *Gaming Machine (Miscellaneous Amendments and Revocation) Regulations* which was approved by both Houses on 18 December 2018 [5.6]. According to the Gambling Commission's annual gambling participation survey [5.7], in the year following introduction of the legislation (prior to the onset of Covid-19 restrictions) the proportion of respondents reporting playing gaming machines in bookmakers fell to 0.8% from an average of 1.8% over the preceding 3 years indicating the legislation had been effective in reducing this form of problem gambling.

Parke co-authored several technical reports for independent industry bodies Gamble Aware (formerly the RGT) and the Gambling Commission during the impact assessment period [5.8]. These summarised current knowledge and understanding regarding harm minimisation in gambling and included a series of recommendations for changes in practice to reduce player harm. These measures were aimed at facilitating *player awareness* (increased provision of responsible gambling information in environment); increase *player control* (voluntary pre-setting of time and expenditure limits by players; ATM and debit card withdrawal limits); Measures to *restrict access* (e.g. via self-exclusion schemes); and limits on types and content of gambling *marketing*. Roberts further co-authored a report [5.9] which was submitted to the Gambling Related Harm All Party Parliamentary Group summarizing her research on gambling related harm with the GMA (with whom Lincoln is acknowledged as a key partner [5.10]). Parke's reports were cited in the Gambling Commission's and RGT's formal advice submitted to the Department of Culture, Media and Sport on gaming machine controls and social responsibility measures [5.5]. These included recommendations on setting stake and playing time limits and ensuring operators adequately monitor potentially problematic play and gambling by vulnerable individuals in betting shops.

5. Sources to corroborate the impact (indicative maximum of 10 references)

- 5.1 *Lowering the stake on Fixed Odds Betting Terminals*. Centre for Social Justice report, August 2017, reference 28 https://www.centreforsocialjustice.org.uk/core/wp-content/uploads/2017/08/FOBT_Publication.pdf
- 5.2 *Fixed Odds Betting Terminals* House of Commons Briefing Report August 2015 (reference 127 and detailed advice from the Gambling Commission to Sajid Javid March 2015 reference 6).
- 5.3 Position Statement from Parliamentary All-Party Betting and Gaming Group September 2017.
- 5.4 *Report submitted to the Department for Culture, Media and Sport (DCMS) review into proposals for changes to Gaming Machines and Social Responsibility Measures*. Sharman, Turner, Roberts January 2017.
- 5.5 a) *Gambling Commission and Responsible Gambling Strategy Board Advice to DCMS:*

Review of gaming machines and social responsibility measures – formal advice, C, October 2017 <http://www.gamblingcommission.gov.uk/PDF/Review-of-gaming-machines-and-social-responsibility-measures-%E2%80%93-formal-advice.pdf>

- b) *Advice in relation to the DCMS review of gaming machines and social responsibility measures*. Responsible Gambling Strategy Board report January 2017. <https://www.rgsb.org.uk/PDF/Advice-in-relation-to-the-DCMS-review-of-gaming-machines-and-social-responsibility-measures.pdf>

5.6 *The Gaming Machine (Miscellaneous Amendments and Revocation) Regulations 2018* <http://www.legislation.gov.uk/ukdsi/2018/9780111174753>

5.7 *Gambling Commission Research Library: Gambling Participation Survey to April 2020*. <https://www.gamblingcommission.gov.uk/news-action-and-statistics/Statistics-and-research/Levels-of-participation-and-problem-gambling/Research-library.aspx>

5.8 *Industry reports:*

- a) *Key issues in product-based harm minimisation: examining theory, evidence and policy issues relevant in Great Britain*. Parke, J, Parke, Adrian and Blaszczynski, Alex. Technical Report. Responsible Gambling Trust, 2016.

- b) *Operator-based approaches to harm minimisation in gambling: summary, review and future directions*. Blaszczynski A, Parke A, Parke J and Rigbye, J. Technical Report. Responsible Gambling Trust, 2014.

5.9 *Report Submitted to the Gambling Related Harm All Party Parliamentary Group*. Sharman, Turner, Roberts. March 2019.

5.10 *Letter from Chief Executive of Gordon Moody Association Feb 2020 and Gordon Moody Association Annual Impact Report 2019*.