HELPING UK CASINO PLAYERS GAMBLE RESPONSIBLY:

March 31, 2021

Evaluating the Impact of Safer Gambling Customer Interactions (November 2018 - February 2020)

Highlight Report

Overview

The current study used data gathered during the 2019 UK Casino Trial of the ALeRT BETTOR Protection System from November 2018 to February 2020 to assess the impact of safer gambling interactions by UK casino staff in reducing behaviours associated with customer risk for gambling problems.

The results indicate UK casino staff were effective in using the system to identify and prioritise assistance for those customers most likely to benefit from additional safer gambling interactions with significant reductions in risky play patterns found for at-risk players of interest who received two or more staff contacts during the trial period. Six months after receiving an interaction these at-risk players exhibited significant changes in how they were gambling (within-session gambling behaviour), as well as how often they gambled (between-session behaviours) leading to reductions in the amount of time and money spent when compared to baseline results for at-risk players without an interaction.

Following safer gambling interactions there were significant reductions in the customer's speed of play (-5.1%), number of monthly play sessions (-9.1%), monthly turnover (-11.7%), session length (-15.1%), betting/turnover rates per session (-15.9%) and monthly play hours (-19.8%) especially when in a losing session (-22.0%). As a result, at-risk customers played less often, were less likely to be chasing losses, and reduced losses (-31.9%) under-scoring the potential value of casino customer service interventions in reducing risk.

The analysis indicates the effectiveness of the system in helping staff identify customers for harm reduction and prevention purposes and the importance of sustained engagement with customers to encourage healthy attitudes and lower risk behaviours when gambling. Several strategies were identified and discussed for helping casino staff and customers in achieving improved outcomes and in addressing specific risky behaviours.

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Background

Gambling is a popular recreational activity in the UK with about half of all adults typically making at least one wager each month and about 5% visiting one of 156 casinos in Britain prior to the impact of COVID-19 pandemic and casino closures. [1]

For a minority of adults gambling can lead to harm that has wider consequences for them, their families, and the community.[2] Among regular gamblers the risk is higher.[3] [4] [5] Few of those experiencing difficulties with their gambling seek formal assistance with less than 3% in the UK accessing such services.[6] Stigma, privacy concerns, isolation, poor treatment outcomes are all identified as barriers with most delaying action until impacts are severe and at a crisis point.[7] [8] [9] This makes it challenging to assist people experiencing gambling problems. Customer service staff are in a unique position to interrupt the escalation of risky play habits that contribute to gambling problems. The use of technology to help operators proactively identify and reach out to at-risk gamblers offers a significant opportunity for reducing and preventing harm especially when identification is linked to meaningful customer interactions, relevant resources, and referrals as part of a stepped customer care program. Evaluative research is a critical component of this process to monitor operator action for intended and unintended impacts and to improve the effectiveness of such actions in reducing risk and making gambling safer for customers.

UK Casino Project

To facilitate player safety, from 2014 to 2019, five of the largest UK casino operators - Aspers, Caesars, Genting, Grosvenor, and the Hippodrome - were part of a multi-staged international collaborative research project with Focal Research.

UK operators were seeking assistance to introduce a coordinated program across UK's land-based casino properties supporting regulatory compliance for player protection. The resulting ALeRT™ *BETTOR* Protection System was purpose-built to provide UK operators with a complete evidence-based solution for meeting current and future licensing priorities for action as outlined in the UK Gambling Commission's National Gambling Strategy, including the ability of licensees to 'identify' at-risk players of interest (POIs), 'interact' to assess and assist such customers, and 'evaluate' success in reducing and preventing risk and harm[10].

Over the course of the project Focal Research developed, and tested a set of sophisticated practical responsible gambling (RG) tools for UK casino operators including:

1. Algorithms to identify customers exhibiting high-risk gambling patterns associated with gambling problems as well as low-risk responsible gambling patterns.

2. Software for tracking player risk profiles, managing customer interactions and monitoring outcomes.

3. Staff tutorials, resources, and training for using the ALeRT algorithms and software to improve player safety.

4. The ALeRT *BETTOR* Customer Care training program to assist casino staff in delivering effective customer interactions and support.

5. A framework for setting baselines and creating pre-post benchmarks for evaluating the impact of safer gambling interactions with customers.

A live trial of the ALeRT system was conducted from November 1, 2018 to December 31, 2019 at 16 casino venues to test the technology and assess the efficacy of customer interactions in producing improved outcomes for casino slots customers.

Impact Evaluation

The purpose of impact evaluation is to obtain reliable information about the causal effects of a particular action, whether positive or negative, so this information can be used to produce better decisions, policies, and outcomes for a specific target group.[11]

Impacts can be intended or unintended but to assess how an intervention affects outcomes requires an understanding of what the results would have been in the absence of such an intervention, [12] or, in the current project, outcomes that occur without an interaction. The gold standard for impact evaluation centers on the use of randomised controlled trials (RCT). However, the use of RCT is often impractical for in-situ social science applications.[13] An alternative to RCT is to conduct a baseline assessment to produce a reference point for comparing outcomes before and after an intervention.[14] By establishing baseline results prior to an at-risk customer receiving a safer gambling interaction, a proxy is created for determining what can be expected to occur if such an interaction did not take place (pre-post outcomes for customers triggering as at-risk who do not receive an interaction).[15]

Research Design

To obtain conclusive outcomes there were several design issues to address in generating reliable baseline measures as well as appropriate pre and post benchmarks for isolating the impacts of operator action for player outcomes.

Regression Effect[16] - There is a tendency for extreme values to decline or increase naturally with repeated measure. This is due to regression to the mean such that, on average, the mean value for a group will stay stable overtime but for individuals within that group there may be movement up or down that occurs unrelated to any intervening action. To control for regression effect at-risk players of interest identified in the year before the trial were

used to set the baseline values based on their play behaviours during the three months before they were first identified as at-risk players of interest by the model (i.e., point of most extreme behaviour) and for 6 months following identification to determine the baseline rate of change (i.e., what happens to at-risk players of interest without interaction).

Impact of Single versus Multiple Interactions[17] - Research with interventions targeting other types of behaviour (e.g., smoking cessation, weight loss, alcohol use) suggest multiple interactions are more effective in helping individuals achieve and maintain positive changes in behaviour and, therefore, should be incorporated into the design to identify differences that may be masked when examined at a total level (e.g., single interaction group versus multiple interactions group for comparison to baseline).

Immediate versus Intermediate & Long-term Impacts - Ten months of data was used to assess impacts for players receiving at least one interaction (3 months before the first interaction, month of interaction, 6 months post interaction). The post comparison period was set for 4 to 6 months following the interaction to assess the longevity of the impacts for a customer's play patterns and best methods for supporting more permanent positive change (i.e., persistent rather than temporary change).

Seasonal Effects - To minimize the effects of seasonality on play activity the sample included interactions that occurred over the continuous trial period including play behaviour that occurred during the three months before the first interactions (starting in August 2018) and up to 6 months after the last interactions (ending in February 2020).

Restricted to Active Players - For evaluation purposes, only those players who continued to gamble at least once in the specified pre benchmark period (3 months before interaction) and also played in the post follow-up period (4 to 6 months after interaction) were included in the evaluation. Those who self-excluded or stopped play after interaction were tracked separately. Otherwise, the data for those who did not play during the post period will be entered as 'zeros' and bring down mean values for key indicators.

Selecting the Play Indicators

To assess the impact of customer interactions ten play indicators were selected to capture key behaviours usually targeted for improvement; typically, reductions in these key behaviors and outcomes are a primary goal for reducing risk and harm, hence the suitability of these items as indicators.[18]

Frequency, expenditure, and intensity on their own are not strong predictors of risk yet these same items can be reasonable indicators for evaluating interaction impacts.[19]

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The absolute amount of time or money spent by each at-risk player of interest will vary yet, universally, problems with gambling are associated with affordability and over-consumption (i.e., spending beyond affordable limits) that lead to negative consequences for the player.[20] Most interactions to assist at-risk customers, including those conducted by UK casino staff, focus on helping customers manage how often they gamble, how much time or money is spent, and in reducing risky behaviours such as gambling intensity, speed of play and chasing losses.[21]

Table 1: Evaluation Key Indicators

Indicator Category	Primary Evaluation Indicators for All Betting
Session Behaviours	1. **Average wagers/bets per hour (Speed of Play)**
	2. **Average turnover per wager/bet (Bet Rate)**
	3. **Average hours per session (Session Length)**
	4. Total monthly play hours in loss sessions (Loss Session Length)
Session Outcomes	5. Average turnover per play hour (Bet Rate per Hour)
	6. Average turnover per session (Bet Rate per Session)
Play Frequency	7. **Total monthly sessions** (Frequency of Play)
	8. Total monthly play hours (Hours Played)
Spend Outcomes	9. Total monthly turnover (Total Wagers)
	10. Total monthly wins and losses (Total Spend)

Four of the behaviour indicators are under the control of the gambler (highlighted in Table 1 above) and influence the outcomes for the other indicators:

1. How often a player visits the casino (Monthly Sessions),
2. How long a player gambles when at the casino (Session Length),
3. How quickly a player gambles - speed of wagering (Wagers/Bets per Hour),
4. How much a player wagers - risk level per wager (Turnover per Wager/Bet).

Modulating these behaviours leads to lower turnover per session, and lower turnover per play hour which, in turn, leads to lower average monthly hours of play, lower monthly turnover, and on average, lower spending.

It is well established that chasing losses is a high-risk factor contributing to over-consumption among gamblers.[22] [23] [24] Accordingly, one of the goals of an interaction is to offer strategies encouraging players to minimize or reduce losses. As players are less likely to stop when they are ahead and in a winning position, we would expect interactions to have the most effect on the length of play in loss sessions. To examine this possibility, the indicator, 'length of play in a loss session' was also included.

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Methods

From November 1, 2018 to December 31, 2019 a live trial of the ALeRT BETTOR Protection System was undertaken at 16 casino test sites throughout Britain.

During the trial, UK casino staff logged 2,151 customer interactions in the ALeRT system for 1708 at-risk customers. For most of these interactions (n=2058) staff also completed a detailed survey in ALeRT answering 16 questions about the characteristics of the interaction as well as filling in observation checklists for visual cues of high-risk gambling.

In December 2019, Focal Research released an interim report examining the role of customer interactions in leading to change in risky play behaviours by slot machine gamblers.[25] Early findings for interactions from November 2018 to March 2019 were promising especially among those receiving multiple interactions with reductions observed in the amount wagered (-18%), session length (-20%), and frequency of play (-7%).

The current study expands the research to assess eligible interactions that took place from November 2018 to August 2019 to ensure changes in play patterns four to six months after the interaction, occurred prior to the start of the COVID-19 pandemic and casino closures. Focal Research developed pre-post benchmarks for evaluating changes in ten key play indicators for eligible players in each of three conditions: 1) At-risk players receiving a single interaction (n=233); 2) At-risk players receiving multiple interactions (n=581); 3) At-risk players receiving no interaction (Baseline; n=812).

Analyses

Two primary analyses were conducted to assess the impact of the interactions and identify the factors contributing to successful outcomes.

Part A examines the impact of customer interactions by UK casino staff for changes in key play indicators; do slots players continue to gamble after a safer gambling interaction by casino staff and, if so, what affect did the customer interaction have on their gambling behaviour? Learning which player behaviours are positively influenced by customer interactions confirms the value of customer service interventions in mitigating risk and helps operators understand how to support staff and players in achieving improved outcomes. Part B reveals which characteristics of the interactions proved more helpful to the player. Learning more about how staff interactions influence play outcomes helps to inform planning and supports evidence-based best practices.

Results

Part A - Evaluation of the Impact of Customer Interactions.

Welch's F-test was performed to compare the changes in indicator play behaviours, first for the single interactions compared to the baseline interactions, secondly for the multiple interactions and the baseline. Additional analysis was undertaken to confirm that the results for multiple interactions were not influenced by regression effect.

Compared to baseline, for those receiving two or more safer gambling customer interactions there were significant reductions observed for eight of the ten play indicators including speed of play (-5.1%, p = .085), number of monthly sessions (-9.1%, p = .001), monthly turnover (-11.7%, p = .001), session length (-15.1%, p < .000), average turnover per session (-15.9%, p = .01) and monthly play hours (-19.8%, p < .000) especially when in a losing session (-22.0%, p < .000). As a result, at-risk customers reduced their frequency of play, were less likely to be chasing losses, and had a one-third reduction in out-of-pocket losses (-31.9%, p = .11) underscoring the potential value of UK casino customer service interventions in reducing risk.

Part B – Evaluation of the Impact of Interaction Characteristics.

Casino staff completed detailed surveys in ALeRT for each interaction. This data was used to create 36 characteristic variables which were then correlated with the pre-post behavior changes for the multiple interaction sample as identified in Part A (n=581).

The analysis explored how different characteristics influenced the effectiveness of the interaction for each key play behaviour, something that would not be possible without staff inputting this information into ALeRT. Many interaction factors were found to influence play outcomes especially the number and type of interactions, length of the interaction, the position of the person conducting the interaction (i.e., seniority), whether staff saw other confirmatory cues signalling risk, staff referrals for manager follow-up and manager alerts. Several strategies are discussed for improving interaction effectiveness with the results emphasising the importance of social responsibility interactions staged as a normal part of the customer journey.

Key Findings

Stopping Behavior after Interactions

- In the current study safer gambling interactions by UK casino staff did not discourage patrons from visiting the venue although it did lead to significant changes in high-risk gambling patterns especially among those receiving more than one interaction.

- Player churn was similar among all player groups; about 29% stopped playing at follow-up whether they had received a single interaction, multiple interactions, or no interaction.

- While interactions did not cause at-risk customers to stop playing there was evidence that those customers who received more than one interaction and subsequently stopped playing were more like to have self-excluded (19.2% versus 12.5%, p = .07).

Impacts of Single Customer Interactions

- Customers receiving only a single interaction during the trial showed little change in their behaviour at follow-up, yet these initial contacts were important in helping staff assess player risk and prioritise action that led to positive impacts for other customers.

- Following the first interaction, casino staff were more likely to direct future resources to those at-risk customers displaying other signs of risk. For example, compared to those at-risk customers that received two or more safer gambling interactions, single interaction customers played less frequently (p = .02), had lower turnover (p < .000) and lower losses (p = .02) suggesting staff effectively focused on customers requiring more urgent attention.

- It is noteworthy that within-session gambling behaviours such as session length, speed of play (i.e., number of wagers per hour) and betting rates (e.g., average turnover per wager, per session, and per hour) did not differ significantly between at-risk gamblers receiving multiple interactions versus single interactions.

- If these at-risk 'players of interest' increase their frequency of play or are playing at other locations, the cumulative impact of their gambling would be similar to that observed for those at-risk customers receiving multiple interactions.

- Therefore, there appears to be an opportunity, especially from a preventative position, for casinos to develop support strategies focusing on within-session gambling strategies to help staff in assisting lower-frequency at-risk players identified for interactions.

Impact of Multiple Customer Interactions

- For at-risk players experiencing multiple interactions from casino staff, there were significant reductions observed for almost all high-risk behaviours up to six months following a safer gambling interaction when compared to baseline results for those without an interaction.

- Compared to baseline, these customers identified as at-risk 'players of interest' by the ALeRT system reduced their monthly play hours (-19.8%, p < .000) by playing less often (-9.1%, p = .000) and for shorter periods (-15.1%, p < .000) of time after receiving two or more interactions from UK casino staff.

- Most importantly, these customers greatly reduced the hours played in loss sessions each month (-22.0%, p < .000) which accounted for 81% of the reduction in monthly time played.

- The findings suggest many players acted on staff advice to stop chasing losses, to set and honour play limits, and to end losing sessions before they overspend.

- While turnover per play hour was unchanged, at-risk customers receiving interactions slowed their betting speed making fewer wagers per hour of play (-5.1%, p = .08).

- However, compared to baseline results for those who did not receive an interaction turnover per wager went up (6.0%, p = .03), suggesting some players may be compensating for shorter less frequent sessions by increasing their bet rate.

- Increasing bet rates could signal an increase in betting intensity in response to cutting back their frequency of play. Alternatively, increases in turnover per hour may also reflect the impact of an increase in a player's wagering rate when they were in a winning position. A player may not even be aware they are making risky wagers when in this situation as this behaviour is less obvious than other risk markers such as increasing losses or time spent gambling. Safer gambling staff should be aware of this possibility so they can help prepare customers to counter this response when players are cutting back their play.

- Aside from increased bet rate, there were significant reductions in monthly play hours, turnover per session and monthly turnover all contributing to a decline in monthly losses of ≈£157.04 (-31.9%, p = .11), which is largely attributable to a reduction in hours played in loss sessions.

- Thus, it can be concluded that UK casino staff interacting two or more times with customers identified by the ALeRT system over the course of the trial helped these at-risk players moderate their gambling up to six months following the interaction.

Key Interaction Characteristics Impacting Outcomes

- The findings indicate the interaction outcomes were more effective under certain conditions that can be influenced by casino policies and practices.

- Longer, more intensive interactions were associated with stronger impacts especially when the interaction was delivered by a senior staff member such as a Gaming Manager or PML (Personal Management Licensee).

- Staff were effective in escalating action with, 'manager alert' and flags suggesting the right people were being referred for additional attention and outcomes improved when the referrals were acted upon by management.

- Interactions had the strongest effect in situations where staff noted the player was exhibiting several visible cues associated with gambling risk highlighting the value in training staff to recognize cues to help identify and confirm a player's risk status.

- Several other strategies were identified and discussed for helping casino staff and customers in addressing specific risky behaviour.

For additional information refer to the Final Technical Report March 31, 2021

[1] Source Statistica 2021 https://www.statista.com/statistics/469650/number-of-operating-casino-premises-in-great-britain-uk/

[2] https://www.gamblingcommission.gov.uk/PDF/survey-data/Participation-in-gambling-and-rates-of-problem-gambling-Wales-headline-report.pdf

[3] Schellinck, T. , & Schrans, T. (1998). The 1998 Nova Scotia video lottery survey. Focal Research Consultants Ltd. – Halifax, Canada: Nova Scotia Department of Health. http://www.focalresearch.com/sites/default/files/publications/VL_players_survey_9798_0.pdf

[4] Currie SR, Hodgins DC, Wang J, el-Guebaly N, Wynne H, Chen S. (2006). Risk of harm among gamblers in the general population as a function of level of participation in gambling activities. Addiction. 2006 April 101(4):570-80.

[5] Schellinck, T. , & Schrans, T. (2007). Assessment of the Behavioral Impact of Responsible Gaming Device (RGD) Features: Analysis of Nova Scotia Player-card Data - WINDSOR TRIAL. Final Report Nova Scotia Gaming Corporation. https://www.focalresearch.com/sites/default/files/publications/Focal%20RGD%20Analysis%20Final%20Report%20Feb%20%202007.pdf

[6] Annual Statistics from the National Gambling Treatment Service (Great Britain) 1st April 2019 to 31st March 2020 https://www.begambleaware.org/media/2289/annual-stats-2019-20.pdf

[7] Kaufman A., Jones-Nielsen, J., & Bowden-Jones. Barriers to Treatment for Female Problem Gamblers: A UK Perspective Journal of Gambling Studies. 2017 33(3): 975-991https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5579153/

[8] Dowling N, Cosic S. Client engagement characteristics associated with problem gambling treatment outcomes. International Journal of Mental Health and Addiction. 2011;9: 656–671. doi: 10.1007/s11469-010-9298

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[9] Gainsbury S, Hing N, Suhonen N. (2014) Professional help-seeking for gambling problems: Awareness, barriers and motivators for treatment. Journal of Gambling Studies. 2014; 30:503–519. doi: 10.1007/s10899-013-9373

[10] https://www.gamblingcommission.gov.uk/PDF/Customer-Interaction-Formal-Guidance-Non-Remote-July-2019.pdf

[11] Thomas V., Chindarkar N. (2019) The Spectrum of Impact Evaluations. In: Economic Evaluation of Sustainable Development. Palgrave Macmillan, Singapore. https://doi.org/10.1007/978-981-13-6389-4_2

[12] DAC Evaluation Network report, Evaluation Feedback for Effective Learning and Accountability Report No 5, OECD Evaluation and Effectiveness Series, OECD (2001)

[13] For discussion see 'Should the Randomistas (Continue to) Rule?' Martin Ravallion Department of Economics, Georgetown. Center for Global Development 2055 L Street NW Washington, DC 20036Working Paper Universityhttps://www.cgdev.org/sites/default/files/should-randomistas-continue-rule.pdf

[14] For an excellent overview of designing and conducting impact evaluations see Impact Evaluation in Practice, Second Edition, Editors: Paul J. Gertler, Sebastian Martinez, Patrick Premand, Laura B. Rawlings, Christel M. J. Vermeersch, Published September 2016 ISBN: 978-1-4648-0779-4 e-ISBN: 978-1-4648-0780-0 © World Bank. http://elibrary.worldbank.org/content/book/9780821389553 License: Creative Commons Attribution CC BY 3.0 IGO

[15] White, Howard & Sinha, Shampa & Flanagan, Ann. (2006). A Review of the State of Impact Evaluation.

https://www.researchgate.net/publication/265223461_A_Review_of_the_State_of_Impact_Evaluation

[16] See Adrian G Barnett, Jolieke C van der Pols, Annette J Dobson, Regression to the mean: what it is and how to deal with it, International Journal of Epidemiology, Volume 34, Issue 1, February 2005, Pages 215–220, https://doi.org/10.1093/ije/dyh299

[17] Hendershot, C.S., Witkiewitz, K., George, W.H. et al. Relapse prevention for addictive behaviors. Subst Abuse Treat Prev Policy 6, 17 (2011). https://doi.org/10.1186/1747-597X-6-17

[18] Schellinck, T., Schrans & Focal Research. 2019 NCF-ALeRT Casino Trial: Identify. Interact. Evaluate. Final Summary Report January 2020. https://www.focalresearch.com/sites/default/files/publications/Focal-ALeRT%202019UKCasinoTrial%20Report_12_0.pdf

[19] Adami, N., Benini, S., Boschetti, A., Canini, L., Maione, F., & Temporin, M. (2013). Markers of unsustainable gambling for early detection of at-risk online gamblers. International Gambling Studies, 13(2), 188-204.

[20] LaBrie, R., & Shaffer, H. J. (2011). Identifying behavioral markers of disordered Internet sports gambling. Addiction Research & Theory, 19(1), 56-65.

[21] See https://responsiblegambling.UK casinos.com/ accessed September 23, 2020.

[22] Breen, R. B., & Zuckerman, M. (1999). Chasing in gambling behavior: Personality and cognitive determinants. Personality and Individual Differences, 92, 1097–1111

[23] Corless, T., & Dickerson, M. (1989). Gamblers' self-perceptions of the determinants of impaired control. British Journal of Addiction, 84, 1527–1537

[24] Blaszczynski, A. (2013). A critical examination of the link between gaming machines and gambling related harm. Journal of Gambling Business and Economics, 7(3), 55–76. doi:10.5750/jgbe.v7i3.818.

[25] https://www.focalresearch.com/sites/default/files/publications/Focal-ALeRT%202019UKCasinoTrial%20Report_12_0.pdf