UNLV | UNIVERSITY LIBRARIES

UNLV Gaming Research & Review Journal

Volume 29 | Issue 1 Article 8

9-19-2025

Financial inducements in gambling marketing: An information disclosure proposal to inform gamblers of their true economic value

Philip Newall
University of Bristol

Dominic Cortis
Independent Researcher

Jamie Torrance
Swansea University

Recommended Citation

Newall, P., Cortis, D., & Torrance, J. (2025). Financial inducements in gambling marketing: An information disclosure proposal to inform gamblers of their true economic value. *UNLV Gaming Research & Review Journal, 29*(1). Retrieved from https://oasis.library.unlv.edu/grrj/vol29/iss1/8

DOI: https://doi.org/10.9741/2327-8455.1511

Financial Inducements in Gambling Marketing: An Information Disclosure Proposal to Inform Gamblers of Their True Economic Value

Philip Newall
Dominic Cortis
Jamie Torrance

Abstract

Financial inducements such as free bets are frequently-used gambling marketing offers which temporarily improve a gambler's usual pattern of risk and potential return. Previous research has shown that there are up to 15 distinct types of financial inducements in common use, and that gamblers frequently misunderstand inducements' play-through requirements and other complex terms and conditions. The Australian government has therefore recently banned play-through requirements for inducements shown to new customers, and the Great British regulator the Gambling Commission has recently announced a maximum play-through requirement of 10 times. The present work describes an alternative and yet potentially complementary approach based on disclosing financial inducements' true economic value to gamblers. This approach can be motivated by the fact that financial inducements are not intrinsically harmful, and an understanding of their value has been exploited for profit by some gamblers via techniques called "bonus hunting" and "matched betting". Disclosure-based approaches can be designed to reflect the average losses implied by any play-through requirements, as well as any other terms and conditions which affect their economic value. Disclosure-based approaches for protecting consumers from the potential harms of financial inducements should be subject to further research and policy consideration.

Keywords: gambling advertising, financial incentives, betting, betting advertising, education

Philip Newall
University of Bristol
philip.newall@bristol.ac.uk
Dominic Cortis
Independent Researcher
dominic.cortis@gmail.com
Jamie Torrance
Swansea University
jamie.torrance@swansea.ac.uk

Introduction

In September 2006 the online casino Mansion made an offer that many gamblers could not refuse: A $1,100 free bet on the Pittsburgh Steelers, who had won the previous season's NFL Super Bowl, to beat the Miami Dolphins (Farrell, 2006). If the Steelers were to lose, then gamblers would be refunded their full bet, while they would earn a $1,000 profit if the Steelers were to win. In either case, gamblers would be able to withdraw all their money with no questions asked. The Steelers ended up winning by 28-17, meaning that Mansion paid out $5,000,000 in profit to winning gamblers (Farrell, 2006). This is an example of a "financial inducement", a common and also varied type of gambling marketing offer (Hing et al., 2022), which are shown often in TV advertising during live sports (Lopez-Gonzalez et al., 2018; Newall, Ferreira, et al., 2022; Sharman et al., 2023). While this financial inducement had clear economic value, the worth of other financial inducements is not always so clear to see.

Financial inducements can be defined as any temporary improvement to a gambler's usual pattern of risk and potential return (Newall et al., 2019). It is therefore perhaps unsurprising that financial inducements have been shown to modify rates of gambling activity in studies using various dependent measures: incentivized (Rockloff et al., 2019), retrospective (Browne et al., 2019; Hing et al., 2019), hypothetical (Di Censo et al., 2023; Hing et al., 2018), and naturalistic (Balem et al., 2021). Financial inducements can also be varied in nature, with one study detailing 15 distinct types, including sign-up offers, winnings paid-out for near-misses, boosted odds on winning, as well as free bets like the Pittsburgh Steelers inducement (Hing et al., 2016). This varied nature of financial inducements is one factor which makes it hard for gamblers to evaluate their true economic value.

The Pittsburgh Steelers bet was rare not only because of its size but also because gamblers were free to withdraw their money without condition. Financial inducements tend to come with terms and conditions which also make it harder to evaluate their true economic value, and which may only be described as, "terms and conditions apply" (Hing et al., 2016). For example, unlike conventional bets, many free bets do not include the return of the original stake, so that a successful free bet of $100 at fractional odds of 2-to-1 (decimal odds of 3; Cortis, 2015) would return only $200, instead of the $300 (including $100 stake) that this bet would normally return (Hing et al., 2018). Free bets also typically have "play-through requirements", where a $1,000 bonus might require $5,000 in later bets in order to be withdrawable (Hing et al., 2018)—a play-through multiplier of 5. Previous research on sports betting inducements found a range of play-through multipliers ranging from one to 16 (Hing et al., 2016), while casino game play-through multipliers have been observed in the past to be as high as 50 (Gambling Commission, 2023). Experimental research has shown that clearer explanations of play-through requirements reduce the perceived attractiveness of financial inducements, even though most participants still underestimate the total amount bet required to withdraw the inducement (Hing et al., 2018). Because play-through requirements require time to be spent gambling to be redeemed, they are clearly less immediately rewarding than the Pittsburgh Steelers bet.

The Australian government has now banned play-through requirements on financial inducements advertising toward new customers, although they may still be used on direct marketing offers provided to existing customers (Department of Local Government, Sport and Cultural Industries, 2023). The Great British regulator the Gambling Commission has taken an alternative approach, by recently deciding to limit the play-through requirement to a factor of ten (Gambling Commission, 2025). That means that for a bonus of $100, that the maximum play-through requirement is $1,000. These two approaches highlight how financial inducements can be regulated in different ways.

The present work proposes an alternative and yet potentially complementary approach to regulating financial inducements, by requiring operators to calculate and disclose their true economic value. These calculations would reflect the impact of any play-through requirement, as well as other terms and conditions such as the non-return of the original stake. This approach would also enable informed comparisons of the economic value of

different financial inducements, such as boosted-odds promotions and winnings paid-out for near-misses. An explanation of this approach first requires an explanation of the "house edge" in gambling.

The House Edge

The house edge, otherwise known as the house advantage or the house margin, is the statistical reality underlying the profitability of the gambling industry (Auer et al., 2012; Eggert, 2004; Newall, Walasek, Hassanniakalager, et al., 2020; Turner, 2011; Woolley et al., 2013). Roulette is a relatively simple gambling game to demonstrate how the house edge means that gamblers can expect to lose money over time. Roulette wheels are split into numbered segments, with the number 1-36 shown alternatively in red or black. A bet on either black or red will pay-off $100 in profit for every $100 bet if the roulette wheel ends in a segment of that color. However, a European roulette wheel also has the number zero shown in green, meaning that both bet on red or black will lose on zero, so these bets have a slightly less than even chance of doubling the gambler's wager. The zero's presence means that on average each $100 bet will only return $97.30, which is commonly expressed as a house edge of 2.7% (Newall, Walasek, Hassanniakalager, et al., 2020).

American roulette has a slightly higher house edge of 5.3%, which makes this version more profitable for gambling operators, which occurs because American roulette wheels have another segment shown in green, called the "double zero" (Turner & Shi, 2015). Slots-based products can have a broader range of house edges depending on the programming of each game (Harrigan & Dixon, 2010), but which average at around 10% (Woolley et al., 2013). Commercial gambling products have some sort of mechanic which makes the average gambler lose in some way (Newall & Andrade, 2022), such as the asymmetric rules between the player and dealer in blackjack (Spanier, 1987), the implied margin in sports betting odds (Hassanniakalager & Newall, 2019; Whelan & Hegarty, 2023), or the "rake" taken from every pot in poker (Lantz & Isaksson, 2016).

The house edge is also the main economic reason why financial inducements usually have play-through requirements, as a certain required amount of gambling will create losses for gamblers on average, which offset the gains from the financial inducement. However, the house edge means that the average loss from a given playthrough requirement (say ten times) will vary depending on whether the gambler is playing European or American roulette, say. This is a factor that information disclosures can be designed to account for, as will be explained more after the next section.

Bonus Hunting and Matched Betting

Although many gamblers underestimate the amount of gambling needed to redeem financial inducements (Hing et al., 2018), this is not always the case. Some gamblers are known for profiting from financial inducements, by only selecting the inducements where the payment is greater than the expected cost of redeeming the inducement via the play-through requirement.

"Bonus hunting" is one term for this activity which dates to the early days of online gambling in the late 1990s (Pierce, 2008). Play-through requirements were often as low as one then, and restrictions were also minimal on the types of bets allowed. A $100 bonus could therefore be redeemed by putting just under half of the money on a roulette wheel on red, an identical amount on black, and then the remainder on zero. These bets on different outcomes create a "hedge" which eliminates the risk of the individual gambles (Newall & Cortis, 2019), meaning that this $100 bonus could be cleared instantly for a return of just over $97 given the house edge of European roulette (Pierce, 2008). This example is extreme, and online operators' terms and conditions would usually require gamblers to take bets posing genuine risk, or require that certain low house edge products could not be used to clear a bonus. Therefore a $100 bonus with an expected loss of $50 implied by the play-through requirement would have an expected economic value of $50, while a gambler

might end up with more or less than that once the inducement was redeemed and all money withdrawn from the operators. Play-through requirements have now increased from these low early levels, which reduces the economic value of an inducement of any given size, meaning that bonus hunting has become a much less profitable activity (Pierce, 2008).

"Matched betting" is a related activity with the same intent as bonus hunting. Matched betting primarily relates to sports betting, where an operator might for example offer a free $25 bet on a specific team to win an upcoming match, much like Mansion's Pittsburgh Steelers bet. Matched betting would then involve using person-to-person betting markets to make a matching bet with an identical potential payoff on the Pittsburgh Steelers to not win, which like the roulette example above would therefore provide a sure profit of just under $25 for the bettor (Axén & Cortis, 2020). Betting markets are generally used in matched betting, due to their low commissions (their equivalent of the house edge) and the varied types of bets that they enable (Franck et al., 2010). Although very little academic literature exists on matched betting (Lloyd et al., 2021), it is often mentioned in online blogs as a method that people can use to earn small sums of money (Burek, 2023).

Bonus hunting and matched betting are therefore similar, and show that financial inducements are not intrinsically harmful. Financial inducements with fair terms and conditions can be taken advantage of by gamblers who want to make a genuine if limited profit, and this is the information that disclosures could make accessible to broader groups of gamblers.

An Information Disclosure Proposal for Financial Inducements

The following information disclosure is therefore proposed for financial inducements, which would calculate and display the true economic value of inducements, much in the same way that this value is calculated by bonus hunters and matched bettors:

> True economic value = average rewards of inducement − average cost of play-through requirement

The Pittsburgh Steelers bet can be used to explain the first term on the right-hand-side of this equation: average rewards of inducement. The Steelers bet ended up providing a $1,000 profit to bettors, but this is only because a random event that was not knowable in advance happened—the Steelers won. This potential reward therefore would need to be weighted by its probability of happening to calculate the amount that bettors would receive on average, which is often also frequently referred to as the expected reward/value (Chen & Ankenman, 2006; Sklansky, 1999). The Steelers bet was like most NFL bets in including an adjustment for the skill differential between the two teams, which is intended to create two bets with equal chances of paying-off (Paul & Weinbach, 2012). This means that bettors could expect to earn that $1,000 profit exactly half the time, providing an average reward of $500. Furthermore, since the free bet had no play-through requirement, $500 was also the true economic value, and this is essentially the amount that bettors who hedged their risk by placing a matched bet on the Miami Dolphins yielded.

All gambling opportunities have some sort of probability that can be used to calculate their average reward. Probabilities for all sorts of potential events can be calculated in casino games such as roulette, or looked up in pay-tables for slots games (Harrigan & Dixon, 2009). In betting markets, such as on professional sports or when similar bets are made on for example political elections, implied probabilities can be derived from the current odds (Koning & Zijm, 2023). This shows that the potential reward from any financial inducement can be converted into its average reward, despite inducements' varied nature (Hing et al., 2016). Although this is an average calculation, gamblers can due to luck end up with significantly more or less than this.

A number of other economic value calculations will now be demonstrated within the domain of sports betting, and their values summarized in Table 1 for each of comparison. Take for instance a free £10 bet on Manchester United to beat Manchester City in the

English Premier League, which will happen to win £30 if successful (decimal odds of 3; fractional odds 2-to-1; American odds of +200). Since the odds imply that Manchester United will win one third of the time, the economic value of this bet is the same as the size of the bet: £10 (scenario 2a in Table 1). Now suppose the free bet contains the condition that the bet will, unlike a conventional bet, not include the return of the original stake, which is a common condition in financial inducements (Hing et al., 2018). Since now only £20 will be won, and will happen again on average a third of the time, the bet is only worth £6.67 (scenario 3a). Now suppose the inducement requires the bettor to place their own £10 on this same soccer match, but the bookmaker will stay pay-out on the bet as if it won if a "near-miss" outcome occurs, that is if Manchester United just fail to win, by the two teams drawing. If the bookmaker sets decimal odds on the draw of 5, then this implies that this near-miss outcome would happen with probability = 0.2 (Cortis, 2015). Therefore, the average reward of this inducement = $0.2 * £30 = £6$ (scenario 4a). These three financial inducements on the same team in a given soccer match are worth anywhere between £10 and £6, which is something that an information disclosure can reveal.

Table 1
Worked examples of economic value calculations

Scenario	Play-through	House Edge	Amount	Average Reward	Playthrough Cost	Economic Value (average reward − play-through) cost)
1. Steelers to beat Dolphins: Refund if lose	0	n/a	$1,000	$500	n/a	$500.00
2a. Man Utd vs Man City: Free bet	0	n/a	£30	£10	n/a	£10
2b.	1	5%	£30	£10	£0.50	£9.50
2c.	1	50%	£30	£10	£5	£5
2d.	10	5%	£30	£10	£4.01	£5.98
3a. Man Utd vs Man City: Free bet but without return of original stake	0	n/a	£20	£6.67	n/a	£6.67
3b.	1	5%	£20	£6.67	£0.33	£6.34
3c.	1	50%	£20	£6.67	£3.33	£3.34
3d.	10	5%	£20	£6.67	£2.68	£3.99
4a. Man Utd vs Man City: Bet still wins if draw	0	n/a	£30	£6	n/a	£6
4b.	1	5%	£30	£6	£0.30	£5.70
4c.	1	50%	£30	£6	£3	£3
4d.	10	5%	£30	£6	£2.41	£3.59

These examples thus far have not involved any play-through requirements, which are represented by the second term on the right-hand-side of this equation, and which will be considered now. is the average cost of any play-through requirement, which can be decomposed as the total amount that needs to be bet, multiplied by the relevant house edge. As policymakers have tended to focus on the play-through requirement side of inducements (Department of Local Government, Sport and Cultural Industries, 2023; Gambling Commission, 2023), we add to each of scenarios 2-4 a play-through requirement of one, either with a house edge of 5% (scenarios 2b-4b) or with a house edge of 50% (scenario 2c-4c);

or a play through requirement of ten with a house edge of 5%. The house edge of 5% reduces the economic value of the inducement without a play-through requirement by 5% (e.g., £10 in scenario 2a vs. £9.50 in scenario 2b), while the reductions are 50% with the house edge of 50% (e.g., £6 in scenario 4a vs. £3 in scenario 4c). Even greater reductions would occur if higher house edges were combined with play-through requirements greater than one. For example a play-through requirement of 10 with a house-edge of 5% would be equivalent to a play-through requirement of 1 with a house-edge of 40% (Cortis, 2019).

This discussion highlights that while policymakers in Australia and Great Britain are aware of the relevance of play-through multipliers to financial inducements (Department of Local Government, Sport and Cultural Industries, 2023; Gambling Commission, 2023), that the house edge is relevant too. However, like any consumer protection measure, this information disclosure proposal could be manipulated to make offers appear better than they really are. If operators were able to pick their *minimum* house edge product (for example via a low-edge game that is extremely hard to find on their app), then the value of any inducement could be overstated. This risk could be mitigated by requiring operators to disclose two economic value calculations: the value based on the *average* cost of the play-through requirement, and the value based on the *maximum* cost of the play-through requirement. If say an inducement could be redeemed by only playing online slots, the average calculation would take the average house edge of these slot games, while the maximum calculation would use the highest house edge slot game. These two calculations could yield quite different value calculations, as there can be significant variation in the house edge between slots products (Woolley et al., 2013). Any differences between these two numbers may cause people to reflect on the differences between the long-term cost of different gambles, and potentially become a savvier gambler as a consequence (Newall, Walasek, Hassanniakalager, et al., 2020).

There can also be significant variation in the house edge across for example different types of sports bets (Buhagiar et al., 2018; Newall, Walasek, Vázquez Kiesel, et al., 2020), which gamblers may be unaware of, and which the disclosure could be made to reflect via these average and maximum calculations. In general, sports bets with longer odds tend to correspond to a higher house edge than sports bets with shorter odds (Hassanniakalager & Newall, 2019). Therefore, different costs of the play-through requirement could be calculated, for example, based on bets with decimal odds of two or below (short-odds bets), on bets with decimal odds between two and five (intermediate-odds bets), and on bets with decimal odds greater than five (long-odds bets). In each case, these calculations could be based on a sample of historical data, as the empirical finding that longer-odds bets are more costly is an established one (Griffith, 1949; Newall & Cortis, 2021). The highest of these numbers could then be displayed as the maximum cost of the play-through requirement, alongside the average cost. Again, any differences could promote reflection and a greater appreciation of the long-term cost of different gambles.

Comparisons with Play-Through Requirement Restrictions and Other Potential Consumer Protection Measures

The proposed information disclosure requirement can be compared with other ways of improving consumer protection for financial inducements, such as play-through requirement restrictions. Disclosure-based approaches do not restrict the market in any way, so maintain the freedoms of the industry to generate new marketing opportunities and the freedoms of gamblers. From an industry perspective, a disclosure-based approach is less restrictive than either a ban on financial inducements or a limit on their play-through requirements. Furthermore, by increasing the transparency regarding inducements' true economic value, disclosure-based approaches will reward operators who place an emphasis on price competition among their marketing mix. This should benefit these operators from being able to attract more customers. Overall, this could be one small step to help gambling markets to behave like conventional competitive economic marketplaces (Blaszczynski et al., 2004).

The proposed disclosure also reflects the full economic reality of any given financial inducement, which involves the play-through multiplier, the house edge of any required bets, as well as other potential terms and conditions such as the potential lack of return of stake on free bets (Hing et al., 2018). This provides an element of future-proofing, as while the gambling industry has up until now largely used high play-through multipliers to reduce the true economic value of financial inducements, other complex terms and conditions could be developed in the future as a way to, for example, counteract the Gambling Commission's new maximum play-through requirement of ten times (Gambling Commission, 2025). The proposed information disclosure could still provide useful information to gamblers even if play-through requirements were fully banned in a jurisdiction, since they enable informed comparisons across the many different types of inducement (Hing et al., 2016), as was demonstrated earlier in Section 4.

Disclosure-based approaches also have potential downsides compared to other consumer protection measures. For disclosure to be effective, gamblers must be able to understand and use that information, which some gamblers—who may be particularly vulnerable—may be unable to do. Optimal disclosure would likely require an investment into research on how best to communicate that information to gamblers (Newall, Walasek, Hassaniakalager, et al., 2020), which would also take time and research resources. Disclosure would also create costs for operators to comply with the standards, and operators could also exploit any flexibility within the disclosure requirements to weaken their effectiveness, as has been observed previously with other Gambling Commission requirements (Newall, Walasek, et al., 2022). Other potential downsides exist if disclosure-based approaches increase the appeal of matched betting. While matched betting is not illegal, it violates most operators' terms and conditions, and might encourage identity fraud, since matched betting generally requires a number of new accounts to be made to be scaled. This factor, and also the fact that matched betting might lead to more people taking up gambling, are potential risks that are poorly understood, especially since so little research has been conducted on matched betting (Lloyd et al., 2021).

Finally, hybrid approaches could also be considered. The proposed information disclosure requirement takes a more holistic approach to the economic value of financial inducements than play-through requirement restrictions, which a different restriction-based approach could reflect. For example, instead of banning play-through requirements, the regulator could ban financial inducements that have a true economic value of zero or less, ensuring that any marketed inducement would have the possibility to benefit gamblers instead of harming them. This ban could then still be combined with required information disclosures, to help gamblers to make informed decisions about the inducements that are marketed to them. This hybrid approach would combine the attractive features of both restriction- and information-based approaches.

Conclusion

Financial inducements are frequently-used gambling marketing offers which temporarily improve a gambler's usual pattern of risk and potential return (Hing et al., 2016; Newall et al., 2019). Consumer protection around these offers is important, as financial inducements can have complex terms and conditions that gamblers frequently misunderstand (Hing et al., 2018), and the Australian government has banned play-through requirements for new customers (Department of Local Government, Sport and Cultural Industries, 2023), and Great Britain's regulator the Gambling Commission has recently deciding to limit the play-through requirement to a factor of ten (Gambling Commission, 2025. Here we proposed an alternative and yet potentially complementary disclosure-based approach, which weighs up the inducement's average rewards against the average maximum potential cost of redeeming the inducement. Disclosure can enable gamblers to make informed comparisons across the many different types of inducements (Hing et al., 2016), and would also account for the average cost of play-through requirements and any other potential terms

and conditions. Disclosure-based approaches for financial inducements should therefore be given further consideration by the research and policy communities.

Disclosures

The authors declare that no funding was received for the preparation, authorship, or publication of this paper. Philip Newall is a member of the Advisory Board for Safer Gambling—an advisory group of the Gambling Commission in Great Britain. In the last three years, Philip Newall has contributed to research projects funded by the Academic Forum for the Study of Gambling, Alberta Gambling Research Institute, BA/Leverhulme, Canadian Institute for Health Research, Clean Up Gambling, Gambling Research Australia, and the Victorian Responsible Gambling Foundation. Philip Newall has received honoraria for reviewing from the Academic Forum for the Study of Gambling and the Belgium Ministry of Justice, travel and accommodation funding from the Alberta Gambling Research Institute and the Economic and Social Research Institute, and open access fee funding from the Academic Forum for the Study of Gambling and Greo Evidence Insights. Dominic Cortis declares no conflicts of interest. Jamie Torrance has received, in the last three years: (1) Open access publication funding from Gambling Research Exchange Ontario (GREO), (2) Conference travel and accommodation funding from the Academic Forum for the Study of Gambling (AFSG), (3) A minor exploratory research grant from the ASFG and GREO.

References

Auer, M., Schneeberger, A., & Griffiths, M. D. (2012). Theoretical loss and gambling intensity: A simulation study. *Gaming Law Review and Economics*, *16*(5), 269–273. https://doi.org/10.1089/glre.2012.1655

Axén, G., & Cortis, D. (2020). Hedging on betting markets. *Risks*, *8*(88). https://doi.org/10.3390/risks8030088

Balem, M., Perrot, B., Hardouin, J. B., Thiabaud, E., Saillard, A., Grall-Bronnec, M., & Challet-Bouju, G. (2021). Impact of wagering inducements on the gambling behaviors of on-line gamblers: A longitudinal study based on gambling tracking data. *Addiction*. https://doi.org/10.1111/add.15665

Blaszczynski, A., Ladouceur, R., & Shaffer, H. J. (2004). A science-based framework for responsible gambling: The Reno model. *Journal of Gambling Studies*, *20*, 301–317. https://doi.org/10.1023/b:jogs.0000040281.49444.e2

Browne, M., Hing, N., Russell, A. M. T., Thomas, A., & Jenkinson, R. (2019). The impact of exposure to wagering advertisements and inducements on intended and actual betting expenditure: An ecological momentary assessment study. *Journal of Behavioral Addictions*, *8*(1), 146–156. https://doi.org/10.1556/2006.8.2019.10

Buhagiar, R., Cortis, D., & Newall, P. W. S. (2018). Why do some soccer bettors lose more money than others? *Journal of Behavioral and Experimental Finance*, *18*(2018), 85–93. https://doi.org/10.1016/j.jbef.2018.01.010

Burek, O. (2023). *Make money from matched betting (full guide)*. Save the Student. https://web.archive.org/web/20231208160421/https://www.savethestudent.org/make-money/what-is-matched-betting.html

Chen, B., & Ankenman, J. (2006). *The mathematics of poker*. ConJelCo LLC.

Cortis, D. (2015). Expected values and variances in bookmaker payouts: A theoretical approach towards setting limits on odds. *The Journal of Prediction Markets*, *9*(1), 1–14. https://doi.org/10.5750/jpm.v9i1.987

Cortis, D. (2019). On developing a solvency framework for bookmakers. *Variance*, *12*(2), 214-225.

Department of Local Government, Sport and Cultural Industries. (2023). *Gambling advertising and inducements*. https://web.archive.org/web/20230318160939/https://www.dlgsc.wa.gov.au/department/publications/publication/gambling-advertising-and-inducements

Di Censo, G., Delfabbro, P., & King, D. L. (2023). Young people's perceptions of the effects and value of sports betting inducements. *International Journal of Mental Health and Addiction*. https://doi.org/10.1007/s11469-023-01173-0

Eggert, K. (2004). Truth in Gaming: Toward Consumer Protection in the Gambling Industry. *Maryland Law Review*, *63*(2), 217–286.

Farrell, K. (2006). *Mansion members receive the rewards—Pittsburgh Steelers 2006 Superbowl champs promotion*. Icomarks. https://web.archive.org/web/20221004175238/https://www.prweb.com/releases/2006/09/prweb433344.htm

Franck, E., Verbeek, E., & Nüesch, S. (2010). Prediction accuracy of different market structures—Bookmakers versus a betting exchange. *International Journal of Forecasting*, *26*(3), 448–459. https://doi.org/10.1016/j.ijforecast.2010.01.004

Gambling Commission. (2023). *Autumn 2023 consultation on proposed changes to Licence Conditions and Codes of Practice (LCCP) and Remote Gambling and Software Technical Standards (RTS)*. https://web.archive.org/web/20231223142002/https://consult.gamblingcommission.gov.uk/author/autumn_2023_consultation_lccp_rts/consult_view/

Gambling Commission. (2025). *Autumn 2023 consultation – Proposed changes to LCCP and RTS – Socially responsible incentives: Consultation Response*. https://web.archive.org/web/20250000000000*/https://www.gamblingcommission.gov.uk/consultation-response/autumn-2023-consultation-proposed-changes-to-lccp-and-rts-socially/proposal-3-proposed-changes-to-lccp-sr-code-5-1-1-to-make-the-structure-and

Griffith, R. M. (1949). Odds adjustments by American horse-race bettors. *The American Journal of Psychology*, *62*(2), 290-294. https://doi.org/10.2307/1418469

Harrigan, K., & Dixon, M. (2009). PAR Sheets, probabilities, and slot machine play: Implications for problem and non-problem gambling. *Journal of Gambling Issues*, *23*, 81–110. https://doi.org/10.4309/jgi.2009.23.5

Harrigan, K., & Dixon, M. (2010). Government sanctioned "tight" and "loose" slot machines: How having multiple versions of the same slot machine game may impact problem gambling. *Journal of Gambling Studies*, *26*(1), 159–174. https://doi.org/10.1007/s10899-009-9154-8

Hassanniakalager, A., & Newall, P. W. S. (2019). A machine learning perspective on responsible gambling. *Behavioural Public Policy*. https://doi.org/10.1017/bpp.2019.9

Hing, N., Browne, M., Russell, A. M. T., Greer, N., Thomas, A., Jenkinson, R., & Rockloff, M. (2018). Where's the bonus in bonus bets? Assessing sports bettors' comprehension of their true cost. *Journal of Gambling Studies*, *35*(2), 587–599. https://doi.org/10.1007/s10899-018-9800-0

Hing, N., Russell, A. M. T., Thomas, A., & Jenkinson, R. (2019). Wagering advertisements and inducements: Exposure and perceived influence on betting behaviour. *Journal of Gambling Studies*, *35*(3), 793–811. https://doi.org/10.1007/s10899-018-09823-y

Hing, N., Smith, M., Rockloff, M., Thorne, H., Russell, A. M. T., Dowling, N. A., & Breen, H. (2022). How structural changes in online gambling are shaping the contemporary experiences and behaviours of online gamblers: An interview study. *BMC Public Health*, *22*(1), 1620. https://doi.org/10.1186/s12889-022-14019-6

Hing, N., Sproston, K., Brook, K., & Brading, R. (2016). The structural features of sports and race betting inducements: Issues for harm minimisation and consumer protection. *Journal of Gambling Studies*, *33*(2), 685–704. https://doi.org/10.1007/s10899-016-9642-6

Koning, R. H., & Zijm, R. (2023). Betting market efficiency and prediction in binary choice models. *Annals of Operations Research*, *325*(1), 135–148. https://doi.org/10.1007/s10479-022-04722-3

Lantz, B., & Isaksson, A. (2016). Rake policies of for-profit and non-profit online poker sites: A case study. *The Journal of Gambling Business and Economics*, *10*(3), Article 3. https://doi.org/10.5750/jgbe.v10i3.1198

Lloyd, J., Nicklin, L. L., Rhodes, S. K., & Hurst, G. (2021). A qualitative study of gambling, deprivation and monetary motivations. *International Gambling Studies*, *21*(2), 307–325. https://doi.org/10.1080/14459795.2021.1883093

Lopez-Gonzalez, H., Guerrero-Solé, F., & Griffiths, M. D. (2018). A content analysis of how 'normal' sports betting behaviour is represented in gambling advertising. *Addiction Research & Theory*, *26*(3), 238–247. https://doi.org/10.1080/16066359.2017.1353082

Newall, P. W. S., & Andrade, M. (2022). Commercial provision of zero house-edge gambling products. *Gaming Law Review*. https://doi.org/10.1089/glr2.2022.0035

Newall, P. W. S., & Cortis, D. (2019). High-stakes hedges are misunderstood too. A commentary on:"Valuing bets and hedges: Implications for the construct of risk preference". *Judgment and Decision Making*, *14*(5), 605–607. https://doi.org/10.1017/s1930297500004897

Newall, P. W. S., & Cortis, D. (2021). Are sports bettors biased toward longshots, favorites, or both? A literature review. *Risks*, *9*(1), 22. https://doi.org/10.3390/risks9010022

Newall, P. W. S., Ferreira, C. A., & Sharman, S. (2022). The frequency and content of televised UK gambling advertising during the men's 2020 Euro soccer tournament.*Experimental Results*, *3*, e28. https://doi.org/10.1017/exp.2022.26

Newall, P. W. S., Moodie, C., Reith, G., Stead, M., Critchlow, N., Morgan, A., & Dobbie, F. (2019). Gambling marketing from 2014 to 2018: A literature review. *Current Addiction Reports*, *6*(2), 49–56. https://doi.org/10.1007/s40429-019-00239-1

Newall, P. W. S., Walasek, L., Hassanniakalager, A., Russell, A. M. T., Ludvig, E. A., & Browne, M. (2020). Statistical risk warnings in gambling. *Behavioural Public Policy*. https://doi.org/10.1017/bpp.2020.59

Newall, P. W. S., Walasek, L., Ludvig, E. A., & Rockloff, M. J. (2022). Nudge versus sludge in gambling warning labels: How the effectiveness of a consumer protection measure can be undermined. *Behavioral Science & Policy*, *8*(1), 17–23. https://doi.org/10.1177/237946152200800103

Newall, P. W. S., Walasek, L., Vázquez Kiesel, R., Ludvig, E. A., & Meyer, C. (2020). Request-a-bet sports betting products indicate patterns of bettor preference and bookmaker profits. *Journal of Behavioral Addictions*. https://doi.org/10.1556/2006.2020.00054

Paul, R. J., & Weinbach, A. (2012). Wagering preferences of NFL bettors: Determinants of betting volume. *Journal of Prediction Markets*, *6*(1), 42–55. https://doi.org/10.5750/jpm.v6i1.496

Pierce, T. J. (2008). Bonus hunter: Confessions of an online gambler. *The Missouri Review*, *31*(3), 112–134. https://doi.org/10.1353/mis.0.0041

Rockloff, M. J., Browne, M., Russell, A. M., Hing, N., & Greer, N. (2019). Sports betting incentives encourage gamblers to select the long odds: An experimental investigation using monetary rewards. *Journal of Behavioral Addictions*, *8*(2), 268–276. https://doi.org/10.1556/2006.8.2019.30

Sharman, S., Piper, T., McGrane, E., & Newall, P. W. S. (2023). Gambling adverts in live TV coverage of the Qatar 2022 FIFA Men's World Cup. *Addiction Research & Theory*. https://doi.org/10.1080/16066359.2023.2245330

Sklansky, D. (1999). *The theory of poker*. Two Plus Two Publishing.

Spanier, D. (1987). *Easy money: Inside the gambler's mind*. Secker & Warburg.

Turner, N. E. (2011). Volatility, house edge and prize structure of gambling games. *Journal of Gambling Studies*, *27*(4), 607–623. https://doi.org/10.1007/s10899-011-9238-0

Turner, N. E., & Shi, J. (2015). The relationship between game volatility, house edge and prize structure of gambling games and what it tells us about gambling game design. *International Journal of Computer Research*, *22*(2), 107–131.

Whelan, K., & Hegarty, T. (2023). *Calculating the bookmaker's margin: Why bets lose more on average than you are warned* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.4374924

Woolley, R., Livingstone, C., Harrigan, K., & Rintoul, A. (2013). House edge: Hold percentage and the cost of EGM gambling. *International Gambling Studies*, *13*(3), 388–402. https://doi.org/10.1080/14459795.2013.829515