

# Youth Oriented Advertising in Ireland's National Lottery: A Quantitative Content Analysis of Advertisements

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## SUMMARY

**Background:** Gambling on the National Lottery in Ireland peaked recently at an annual gross spend of over €1 billion. There is ample evidence of underage participation in the lotto. Youth participation in gambling is associated with problematic gambling in adulthood. A recent examination of the National Lottery's website identified child-friendly Halloween themed advertising.

**Objectives:** This research sought to investigate National Lottery advertisements to identify potentially child and youth-oriented marketing.

**Methods:** Quantitative content analysis of 127 video advertisements hosted on the National Lottery YouTube website were examined, using a pre-constructed six item framework.

**Results:** There was evidence relating to three of the six categories of content examined. In total 21.3% (n=27) of the videos examined made direct use of signs, symbols, themes, drawings, fictitious characters, or real people of primary or particular appeal to children. A total of 6.3% (n=8) of the videos examined included children, while 0.8% (n=1) featured adolescent, juvenile, or loutish behaviour.

**Conclusions:** Child-friendly marketing is present in National Lottery advertising. A more robust assessment of all National Lottery marketing materials is required. The Gambling Regulation Act, 2024, should be extended to oversee all gambling in Ireland, including the National Lottery. A public health approach to gambling is required across all state agencies and the Government.

**Keywords:** Gambling Lottery; children adolescents Ireland advertising

## INTRODUCTION

The global gambling industry is rapidly developing. As a result of improvements in digitisation and information and communications technology, access to gambling has now become almost ubiquitous for much of the population [1]. The industry's global revenue has increased significantly, and it has been projected that by 2028, consumer net losses are expected to approach US\$700 billion [2]. Ireland is a significant contributor to this growth. In 2019, the Irish population were in the top-quartile of gamblers in the EU [3];

wagering an estimated €9.8 billion [4]. In 2024, Ireland's online gambling market was estimated to be €1.24 billion, with forecasts suggesting that it will increase to €1.40 billion by 2029 [5].

With ticket sales in excess €1 billion in 2021 [6], the National Lottery accounts for a substantial proportion of Irish gambling. According to the National Drugs and Alcohol Survey (NDAS), almost half (49%) of Irish adults gambled in the year 2019-20, with 29% accredited to the lottery alone [7]. The National Lottery has also strategically increased its online offerings in recent years, with their online gambling platforms delivering €155.1 million worth of sales in 2024 [8].

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The National Lottery's broadening online offerings may appear harmless to many, as lottery wagers are often not even considered gambling [9]. However, such an approach is naive. Online gambling can incur equally detrimental effects, including adverse mental and physical health outcomes, lower quality of life, and increasing financial precarity [10]. Mobile gambling applications and online gambling accounts have also been associated with reports of problematic gambling practices [11]. According to recent estimates from the Economic and Social Research Institute (ESRI), 1 in 30 adults in Ireland, or 130,000 people, suffer from 'problem gambling'. In addition, another 7.1% of adults, or 279,000 people, display 'moderate evidence' of problem gambling [12]. This figure is approximately ten times higher than previous estimates. Problematic gambling has been identified as a global issue [13].

The problems associated with gambling on national and state lotteries have been noted internationally [14-15]. An examination of a country's national lottery can be very revealing, as it exemplifies what Markham & Young term '*the global industry-state gambling complex*' [16]. Gambling is increasingly acknowledged as an important commercial determinant of health (CDoH) nationally and internationally [2]. In Ireland the College of Psychiatrists of Ireland have stated that gambling is a 'major Public Health concern' [17].

The damage caused by gambling must not be under-stated [18-21], despite the careful framing by the gambling industry [22-27]. Langham et al. have created a useful taxonomy of gambling harms that focusses on varying dimensions and timespans [28]. When evaluating the harms caused by the global gambling industry it is helpful to consider the impacts on individuals, as well as on partners and families. However, there is also substantial evidence that organised crime routinely utilises the gambling industry to both increase and launder profits from various criminal activities, including illicit drugs revenue, people trafficking and illegal sex work [29-39].

Returning to an individual perspective, online access not only increases the likelihood of addiction to gambling but also poses the additional hazards of underage access and harm [40-41]. The most recent report of the European School Survey Project on Alcohol and Other Drugs (ESPAD) for Ireland in 2024 noted that 32.2% of 15-16-year-olds had wagered in that year [40], which increased 24% in 2019 [42]. Such figures to serve to highlight the serious issue of youth gambling. In addition, 26.1% of adolescent participants reported using online gambling platforms [42]. Young people using online platforms had a 4.2-fold increased risk of problem gambling [43]. Lotteries remain one of the most popular forms of teenage gambling, with a reported 15.6% playing in person and 7.2% playing online [40].

Gambling on the National Lottery is often considered acceptable within Irish households [9, 43]. However, recent research has shown that gambling prior to age

18 nearly doubles the likelihood of problem gambling in adulthood [44]. An examination of 3,000 adults in Ireland who received treatment for problem gambling between the years 2008 and 2019 noted that half of the cohort had started gambling prior to being 17 years of age [45]. Online gambling at 17 years of age has been identified as a significant independent predictor of online gambling activity at age 20 [44].

The National Lottery in Ireland is not unaware of the issue of youth gambling, including underage purchase of their tickets. For example, two underage purchasing exercises on National Lottery items in retail establishments by Ipsos MRBI, were commissioned by the Office of the Regulator of the National Lottery (ORN), in 2018 and 2024 respectively [46-47]. A total of 562 retail locations were included in the 2024 repeat of the exercise. In this iteration of the study, 29% of test purchases made by 15-17-year-olds were successful [47]. In 2018 the figure for successful purchases was 37% [46].

Gambling in Ireland is notable in that its legislative regulation is divided between National Lottery gambling, and most other forms of gambling. The Irish National Lottery is therefore explicitly exempted from Ireland's Gambling Regulation Act, 2024 [48]. Ireland traditionally has operated a light-touch approach to Government regulation in many commercial spheres [49-50]. Instead, it has supported self-regulation by industry. Therefore, many of the advertising voluntary codes in Ireland explicitly exclude all [51], or the majority, elements of National Lottery advertising [52].

Although officially excluded from such codes, it must be acknowledged that the National Lottery's own codes of marketing and advertising practice are effectively identical to wider industry codes [51-52]. Details of the *National Lottery Advertising and Promotion Code of Practice* from Premier Lotteries Ireland [53], the Operator of the National Lottery in Ireland are detailed in Table 1.

Table 1. National Lottery Advertising and Promotion Code of Practice [53]

**Under 18 (Children)**

29. Advertising and Promotion activities shall not exploit the susceptibilities, aspirations, credulity, inexperience or lack of knowledge of children;

30. Advertising and Promotion activities shall not be likely to be of particular appeal to children, especially by being associated with youth culture;

31. Advertising and Promotion activities shall not make direct use of:

- signs, symbols, themes, drawings, fictitious characters or real people of primary or particular appeal to children;
- depict adolescent, juvenile or loutish behaviour;
- contain endorsements by recognisable figures who would be regarded as heroes or heroines of children; or
- induce a child to regard National Lottery play as a natural element of his or her leisure time/activities;

32. Advertising and Promotion activities shall not be aimed at persons under 18 years of age;

33. Social media Advertising and Promotion will be designed by PLI to reach only those who are 21+;

34. No suggestion/inference shall be made (in any Advertising and Promotion activities) that anyone under the age of 18 years of age may participate in a National Lottery Game;

The Annual Report of the Regulator of the National Lottery for the year 2017 notes that a breach in advertising standards by the Operator of the National Lottery was observed [54]. Minimal details are given, although no fine appears to have been issued in relation to this breach.

It is clear from the Office of the Regulator of the National Lottery (ORNL) annual reports, that new games and marketing materials proposed by the lottery operator are assessed. The outcomes of such evaluations are annually detailed in the yearly reports of the Regulator. However, a review of these annual reports for the last three years (2022-2024) appears to detail just three instances of game related proposals having been refused approval [55-57]. No details are given in the reports of such rejections, merely the phrase 'Commercially Sensitive' [57].

Youth focussed marketing by the addiction industries has been explored by researchers from a range of countries in recent decades [58-62]. This research has included an examination of the tactics and strategies used by 'Big Gambling' to target young people [24, 63-66].

Similar research has been carried out in Ireland. A recent study by Daly et al. noted child-friendly Halloween themed images for gambling games on Ireland's National Lottery website [67]. Kerr et al. recently explored gambling advertising to young people aged 14-14 in Ireland and stated it had reached saturation level [68]. These authors were so concerned by their findings that they stated that the situation '*warrants calling a 'Code-Red' emergency*' [68]. This is a particular concern in terms of underage gambling, as other research by Daly et al has also noted inadequate age verification checks in Ireland's National Lottery [69]. This finding reinforces earlier research that noted inadequate protections for patrons of Irish online gambling platforms [70].

**METHOD**

This research sought to investigate other National Lottery advertising materials to determine how child friendly they are. This project utilised quantitative content analysis of visual imagery displayed on Ireland's National Lottery YouTube Channel. This approach is routinely used in media analysis [71]. In Rose's ground-breaking text on visual methodologies she outlines four steps to quantitative content analysis [72]: Finding your images; Devising your categories; Coding the images; Analysing the results. Content analysis of the YouTube videos was based on a priori codes that were developed largely based on child protection marketing guidelines in place in Ireland [51-53]. One additional category examined was that of the inclusion of children in adverts, as this is an acknowledged marketing strategy for appealing to children [73-74]. Table 2 details the categories examined. Content of the videos was screened by one of the authors (FH) and then discussed and agreed with another author (DH).

Table 2. Coding Framework for Content Analysis

Category
<b>Contains advertising and promotion activities that...</b>
1) ...exploit the susceptibilities, aspirations, credulity, inexperience, or lack of knowledge of children
2) ...make direct use of signs, symbols, themes, drawings, fictitious characters, or real people of primary or particular appeal to children
3) ...depict adolescent, juvenile, or loutish behaviour
4) ...contain endorsements by recognisable figures who would be regarded as heroes or heroines of children
5) ...induce a child to regard National Lottery play as a natural element of his or her leisure time/activities
6) ...include children

This project focussed on the Irish National Lottery YouTube Channel website (<http://www.youtube.com/IrishNationalLottery>). This site in turn links to the National Lottery website ([lottery.ie](http://lottery.ie)), as well as to Twitter ([twitter.com/NationalLottery](http://twitter.com/NationalLottery)), Facebook ([facebook.com/nationallotteryireland](http://facebook.com/nationallotteryireland)) and Instagram ([Instagram.com/nationallottery](http://Instagram.com/nationallottery)). At the time of the analysis (October 2025) the National Lottery YouTube site contained 18 categories of playlist (<https://www.youtube.com/@IrishNationalLottery/playlists>). Six of these categories were not adverts but video clips showing the weekly results of draws, awards ceremonies, or outlines of how the money raised via the lottery was spent rather than adverts. These were excluded from the analysis, which left 133 videos for analysis. However, 6 videos were unavailable on YouTube, leaving 127 videos for analysis.

As this analysis was based on publicly accessible webpages, this research did not require ethical approval. This analysis was based on video clips contained on the Irish National Lottery YouTube channel.

## RESULTS

The results of the quantitative content analysis of the 127 videos are detailed in Table 3 [72]. There were no examples of content relating to three of the six categories of material examined. However, there was evidence relating to categories two, three and six. Of most concern is the finding that 21.3% (n=27) of the videos examined made direct use of signs, symbols, themes, drawings, fictitious characters, or real people of primary or particular appeal to children. In total, 6.3% (n=8) of the videos examined included children, while 0.8% (n=1) featured adolescent, juvenile, or loutish behaviour.

Table 3. Coding Framework for Content Analysis

Category	Number of Videos Exhibiting Codes	Number of Videos Examined
<b>Contains advertising and promotion activities that...</b>		
1) ...exploit the susceptibilities, aspirations, credulity, inexperience, or lack of knowledge of children	0% (n=0)	127
2) ...make direct use of signs, symbols, themes, drawings, fictitious characters, or real people of primary or particular appeal to children	21.3% (n=27)	127
3) ...depict adolescent, juvenile, or loutish behaviour	0.8% (n=1)	127
4) ...contain endorsements by recognisable figures who would be regarded as heroes or heroines of children	0% (n=0)	127
5) ...induce a child to regard National Lottery play as a natural element of his or her leisure time/activities	0% (n=0)	127
6) ...include children	6.3% (n=8)	127

Figure 1. Exemplars of Child-Friendly Content from Videos Included on the Official National Lottery YouTube Channel

<p>Anthropomorphic Washing Machine ('Hank')</p> 	<p>Waterslide</p> 
<p>Soft Toy Character</p> 	<p>Another Soft Toy Character</p> 
<p>Soft Toy Characters in Sunglasses</p> 	<p>Tyre Swing</p> 
<p>Tree House</p> 	<p>Wooden Toy Characters</p> 

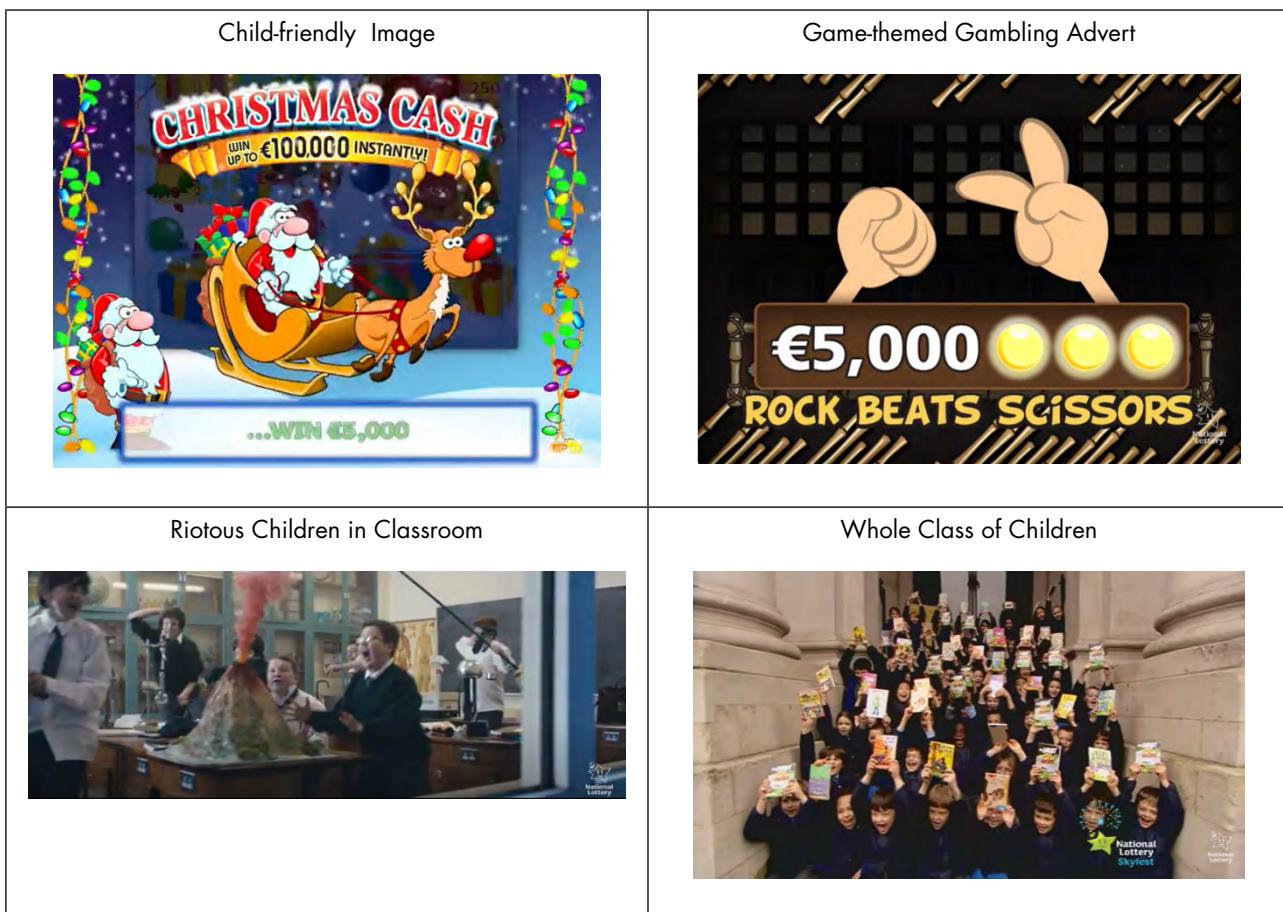


Figure 1 details exemplars of some of the imagery used in the advertisements. Please note that these images are stills taken from the videos. To see a selection of the videos themselves, please see Appendix 1. Imagery categorised as Category 2 include anthropomorphic machines (see Figure 2a), a colourful waterslide (see Figure 2b), and speaking soft toy style characters (see Figures 2c, 2d and 2e). Other images include a tyre-swing (see Figure 2f), and a tree house (see Figure 2g).

Further imagery categorised under Category 2 include the wooden toy characters ('Jasper'; see Figure 2h), as well as the youth-oriented online gambling featured in images 2i (Santa Clause/ Father Christmas & Rudolf) and 2j (the rock, paper, scissors game). In relation to the other categories in the coding framework, figure 2k includes both a depiction of juvenile and loutish behaviour (Category 3) and children (Category 6), while image 2l features an entire class of children (Category 6).

## DISCUSSION

It is an issue of concern that evidence relating to three of the six categories examined in the quantitative content analysis was observed. Of particular note was the finding that 21.3% of videos examined featured

material that made '*direct use of signs, symbols, themes, drawings, fictitious characters, or real people of primary or particular appeal to children*' [53]. Given the ostensible prohibition on such imagery and themes this would finding appear to indicate a lack of robust appraisal of National Lottery advertising materials.

This finding is important given evidence relating to underage gambling. Evidence suggests that early initiation to gambling is a significant predictor of future gambling issues [65,70-78]. Youth gambling on the National Lottery in Ireland is an acknowledged problem dating back many years [46]. This is notable given both the identified poor performance of the Irish National Lottery age verification process [69], and the child-oriented nature of some National Lottery online game advertising [67]. It is therefore an issue of significant concern that over 20% of elements of National Lottery videos in this sample from the official National Lottery YouTube site featured child friendly imagery. It has been suggested that such marketing is '*priming young minds*' for gambling [79].

The values of the Office of the Regulator of the National Lottery are listed as: Independence; Guardianship; Future Focused; Accountability; Professionalism; Valuing Our People; and Transparency [57]. The most important of these in the context of this examination is that of *Guardianship*. This is described

Table 4: Functions of the Office of the Regulator of the (Irish) National Lottery [81]

**The Functions of the Regulator which support the vision above, are prescribed in the National Lottery Act 2013, and include the following:**

1. To procure the holding of the National Lottery.
2. To oversee the operation of the National Lottery and to monitor and enforce compliance by the Operator with the Act and the Licence.
3. To consider for approval certain matters relating to the National Lottery (including schemes for National Lottery games).
4. To manage and control the National Lottery Fund.
5. To exercise the enforcement rights of any trademark of the National Lottery.

The Regulator is required to carry out these functions in a manner most likely to ensure –

- a) that the National Lottery is run with all due propriety,
- b) that the interests of participants in the National Lottery are protected,
- c) that the long-term sustainability of the National Lottery is safeguarded,

and, subject to above points a) to c), to ensure revenues allocated to the Central Fund for disbursement for the purposes permitted by the Act ("Good Causes") are as great as possible, subject to the terms of the Licence

by the Regulator as 'Acting in the public interest with integrity' [57]. The functions of the Regulator of the Irish Lottery are listed in Table 4. However, it is clear that the ORNL has competing and potentially opposing functions that may force it into a compromised position. This is particularly important for an addiction industry, such as gambling, as there is substantial evidence of the pareto (80/20) principal, in which 80% or more of total income is derived from 20% of participants [42, 80].

Thus, the Regulator of the National Lottery is placed in the invidious position of having to both safeguard the long-term viability of the National Lottery, while at the same time seeking to protect gamblers, and safeguard children. This delicate equilibrium is supposed to be achieved, while also maximising revenue. This may force the ORNL into moral jeopardy wherein

they compromise on player protections in order to safeguard the money being raised to support 'Good Causes' and the financial viability of the National Lottery itself [82-84].

Examination of the Annual Report of the Office of the Regulator of the National Lottery indicates a penalty was imposed in 2022. The Regulator withheld €150,000 in 2022 for breaches of the licence [55]. It is notable that, as the Regulator stated this 'was the first withholding of monies from payments due to the Operator under the Licence' [55]. Subsequently in 2024 the Regulator withheld €23,000 for another breach [57].

Table 5: Payments &amp; Fines Levied by the Office of the Regulator of the (Irish) National Lottery (ORNL) to the Operator of the National Lottery [54-57, 85-90]

Year	Payments made to the Lottery Operator	Monies Withheld
<b>2014</b>	€61 million	€0 (0%)
<b>2015</b>	€74 million	€0 (0%)
<b>2016</b>	€69 million	€0 (0%)
<b>2017</b>	€74 million	€0 (0%)
<b>2018</b>	€73 million	€0 (0%)
<b>2019</b>	€83 million	€0 (0%)
<b>2020</b>	€89 million	€0 (0%)
<b>2021</b>	€103 million	€0 (0%)
<b>2022</b>	€90 million	€150,000 (0.0017%)
<b>2023</b>	€84 million	€0 (0%)
<b>2024</b>	€82 million	€23,000 (0.0003%)
<b>TOTAL</b>	€882 million	€173,000 (0.0002%)

The total fines or payments withheld of just 0.0002% of income to the operator (this figure relates purely to their return and excludes prizes, money paid to the Government for re-allocation to 'Good Causes', and a sizeable advertising budget) is minuscule in the context of income (See Table 5). Given inadequate youth protections observed in the operation of the lottery [46,47,69], and child & youth oriented National Lottery marketing observed in this study, and elsewhere [67], it is hard to understand why this figure is so low. In the UK in contrast, gambling operators have been forced to pay multimillion-pound fines for breaching consumer-protection and under-18 gambling regulations [91].

## CONCLUSION

A proportion of the population either regularly or periodically engage in problematic gambling [2,7,12,92]. Many adult problem gamblers have a history of underage gambling [42]. Therefore, any child-friendly lotto advertising is a significant issue. It is strongly recommended that child friendly marketing videos on the official National Lottery YouTube website are deleted. Moving forward, it is crucial that a significantly more robust assessment of National Lottery marketing and promotion materials is enforced by the ORNL. As regards policy options, it is suggested that Ireland's new Gambling Regulation Act, 2024, is extended to cover the National Lottery [48]. This would eliminate the problematic and potentially compromised role of the ORNL in having to safeguard gamblers, ensure the viability of the National Lottery, and raise funds for 'Good Causes'. Such legislation would also force the operator of the National Lottery operator to be subject to more restricted marketing rules that will be introduced for other gambling companies under the Gambling Regulation Act, 2024 [48]. It is also imperative that the Government of Ireland and the ORNL adopt a public health approach to gambling [2,93].

Further research could usefully explore child and youth perceptions of National Lottery advertising. Additional research should also be conducted to explore other communications and marketing practices of the National Lottery to develop a more rounded appraisal of their marketing activities. Similar evaluations are additionally required to explore the marketing strategies of other gambling companies in Ireland.

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## DATA AVAILABILITY STATEMENT

Data available on request from the authors.

## CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

## REFERENCES

1. Thomas S, Cowlishaw S, Francis J, Van Schalkwyk MC, Daube M, Pitt H, McCarthy S, McGee D, Petricrew M, Rwafa-Ponela T, Minja A. Global public health action is needed to counter the commercial gambling industry. *Health Promotion International*. 2023;38(5):daad110. Available from: <https://doi.org/10.1093/heapro/daad110>
2. Wardle H, Degenhardt L, Marionneau V, Reith G, Livingstone C, Sparrow M, Tran LT, Biggar B, Bunn C, Farrell M, Kesaite V. The Lancet public health commission on gambling. *The Lancet Public Health*. 2024;9(11):e950-94. Available from: <https://doi.org/10.1093/heapro/daad110>
3. Michael N. €10bn staked by Irish gamblers in 2019 dubbed a 'very worrying' statistic. *Irish Examiner*. 23 Dec 2019. Available from: <https://www.irishexaminer.com/news/ard-30972076.html>
4. Hutton B. Irish fourth-worst gamblers in EU as move online accelerates. *Irish Times*. 12 Jul 2021. Available from: <https://www.irishtimes.com/news/social-affairs/irish-fourth-worst-gamblers-in-eu-as-move-online-accelerates-1.4617386>
5. Berry C. A review of the Irish gambling market in 2024. Available from <https://caanberry.com/a-review-of-the-irish-gambling-market/>
6. Slattery L. National Lottery's annual ticket sales pass €1bn mark for first time. *Irish Times*. 22 Jul 2022. Available from: <https://www.irishtimes.com/business/2022/07/22/national-lotterys-annual-ticket-sales-pass-1bn-mark-for-first-time/>
7. Mongan D, Millar SR, Doyle A, Chakraborty S, Galvin B. Gambling in the Republic of Ireland: results from the 2019–20 National Drug and Alcohol Survey. Dublin: Health Research Board; 2022. Available from: <https://www.drugsandalcohol.ie/35305>
8. National Lottery. 2024 Annual Report. Dublin: National Lottery; 2025. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Regulator-AR-2024-6-English.pdf>
9. Fulton C. Playing social roulette: The impact of gambling on individuals and society in Ireland. University College Dublin; 2015. Available from: <http://hdl.handle.net/10197/6796>
10. Papineau E, Lacroix G, Sevigny S, Biron JF, Corneau-Tremblay N, Lemétayer F. Assessing the differential impacts of online, mixed, and offline gambling. *International Gambling Studies*. 2018;18(1):69-91. Available from: <https://doi.org/10.1080/14459795.2017.1378362>
11. Murphy MP, Murphy R, Roberts A. Correlates of problematic gambling in emerging adult university students in Ireland. *Journal of Gambling Studies*. 2024;40(4):1987-2004. Available from: <https://doi.org/10.1007/s10899-024-10323-5>
12. Ó Ceallaigh D, Timmons S, Robertson D, Lunn P.

Measures of problem gambling, gambling behaviours and perceptions of gambling in Ireland. Dublin: Economic & Social Research Institute Research Series; 2023. Available from: <https://doi.org/10.26504/rs169>

13. Tran LT, Wardle H, Colledge-Frisby S, Taylor S, Lynch M, Rehm J, Volberg R, Marionneau V, Saxena S, Bunn C, Farrell M, Degenhardt L. The prevalence of gambling and problematic gambling: a systematic review and meta-analysis. *The Lancet Public Health*. 2024;9(8):e594–e613. Available from: [https://doi.org/10.1016/S2468-2667\(24\)00126-9](https://doi.org/10.1016/S2468-2667(24)00126-9)

14. Costes JM, Kairouz S, Monson E, Eroukmanoff V. Where Lies the Harm in Lottery Gambling? A Portrait of Gambling Practices and Associated Problems. *Journal of Gambling Studies*. 2018;34(4):1293–1311. Available from: <https://doi.org/10.1007/s10899-018-9761-3>

15. Newall PWS, Russell AMT, Sharman S, Walasek L. Associations between recalled use of legal UK youth gambling products and adult disordered gambling. *Journal of Behavioral Addictions*. 2020;9(3):863–868. Available from: <https://doi.org/10.1556/2006.2020.00048>

16. Markham F, Young M. "Big Gambling": The rise of the global industry-state gambling complex. *Addiction Research & Theory*. 2015;23(1):1–4. Available from: <https://doi.org/10.3109/16066359.2014.929118>

17. College of Psychiatrists of Ireland. Gambling disorder position paper. Dublin: College of Psychiatrists of Ireland; 2020. Available from: <https://www.drugsandalcohol.ie/33550/1/Gambling-Disorder.pdf>

18. Latvala T, Lintonen T, Konu A. Public health effects of gambling - debate on a conceptual model. *BMC Public Health*. 2019;19(1):1077. Available from: <https://doi.org/10.1186/s12889-019-7391-z>

19. Salonen AH, Hellman M, Latvala T, Castrén S. Gambling participation, gambling habits, gambling-related harm, and opinions on gambling advertising in Finland in 2016. *Nordisk Alkohol- & Narkotikatidskrift : NAT*. 2018;35(3):215–234. Available from: <https://doi.org/10.1177/1455072518765875>

20. Currie SR, Hodgins DC, Williams RJ, Fiest K. Predicting future harm from gambling over a five-year period in a general population sample: a survival analysis. *BMC Psychiatry*. 2021;21(1):15. Available from: <https://doi.org/10.1186/s12888-020-03016-x>

21. Li E, Browne M, Rawat V, Langham E, Rockloff M. Breaking Bad: Comparing Gambling Harms Among Gamblers and Affected Others. *Journal of Gambling Studies*. 2017;33(1):223–248. Available from: <https://doi.org/10.1007/s10899-016-9632-8>

22. van Schalkwyk MC, Maani N, McKee M, Thomas S, Knai C, Petticrew M. "When the Fun Stops, Stop": An analysis of the provenance, framing and evidence of a 'responsible gambling' campaign. *PLoS ONE*. 2021;16(8):e0255145. Available from: <https://doi.org/10.1371/journal.pone.0255145>

23. Korn D, Gibbins R, Azmier J. Framing Public Policy Towards a Public Health Paradigm for Gambling. *Journal of Gambling Studies*. 2003;19:235–256.

Available from: <https://link.springer.com/article/10.1023/A:1023685416816>

24. Labrador FJ, Estupina FJ, Vallejo-Achon M, Sanchez-Iglesias I, Gonzalez Alvarez M, Fernandez-Arias I, Labrador M, Bernald-de-Quiros M. Exposure of adolescents and youth to Gambling advertising: a systematic review. *Anales de Psicologia/ Annals of Psychology*. 2021;37(1):149-160. Available from: <https://doi.org/10.6018/analesps.428921>

25. McMullan JL, Miller DE, Perrier DC. "I've seen them so much they are just there": Exploring young people's perceptions of gambling in advertising. *International Journal of Mental Health Addiction*. 2012;10:829–848. Available from: <https://doi.org/10.1007/s11469-012-9379-0>

26. Gainsbury SM, Delfabbro P, King DL, Hing N. An Exploratory Study of Gambling Operators' Use of Social Media and the Latent Messages Conveyed. *Journal of Gambling Studies*. 2016;32(1):125–141. Available from: <http://dx.doi.org/10.1007/s10899015-9525-2>.

27. Houghton F, Houghton D, Daly M, Campbell A. Complicit in the Charade: A critical content analysis of the Annual Reports of Ireland's Regulator of the National Lottery 2014-2024. *Journal of Global, Public and One Health*. 2025(2):20. Available from: [https://jgpoh.com/wp-content/uploads/2025/12/Frank-Houghton-JGPOH-2025\\_2\\_Approved-FH.pdf](https://jgpoh.com/wp-content/uploads/2025/12/Frank-Houghton-JGPOH-2025_2_Approved-FH.pdf)

28. Langham E, Thorne H, Browne M, Donaldson P, Rose J, Rockloff M. Understanding gambling related harm: a proposed definition, conceptual framework, and taxonomy of harms. *BMC Public Health*. 2016;16:80. Available from: <https://doi.org/10.1186/s12889-016-2747-0>

29. Banks J, Waugh D. A taxonomy of gambling-related crime. *International Gambling Studies*. 2018;19(2):339-357. Available from: <https://doi.org/10.1080/14459795.2018.1554084>

30. Department of Finance. Irish Gambling Sector Risk Assessment. Dublin: Department of Finance; 2018. Available from: <https://assets.gov.ie/7705/4b1ee8ee060a4cedaccbc5af12eb46af.pdf>

31. McNamee M. The integrity of sport: Unregulated gambling, match fixing and corruption. *Sport, Ethics and Philosophy*. 2013;7(2):173-174. Available from: <https://doi.org/10.1080/17511321.2013.791159>

32. Huggins M. Match-Fixing: A Historical Perspective. *The International Journal of the History of Sport*. 2018;35(2-3):123–140. Available from: <https://doi.org/10.1080/09523367.2018.1476341>

33. Serby T. Gambling related match-fixing: a terminal threat to the integrity of sport? *International Sports Law Journal*. 2012;12(2):7-12. Available from: <https://link.gale.com/apps/doc/A352250326/AONE?u=googlescholar&sid=bookmark-AONE&xid=4bd8191b>

34. Pepi K. An Exploratory Study Into The Money Laundering Threats, Vulnerabilities, And Controls Within The UK Bookmaker Sector, With A Specific Focus on Fixed-Odds Betting Terminals. *UNLV Gaming Research & Review Journal*. 2018;22(1):1-27. Available from: <https://oasis.library.unlv.edu/grrj/vol22/>

iss1/2/

35. Brooks G. Online gambling and money laundering: "views from the inside". *Journal of Money Laundering Control*. 2012;15(3):304-31. Available from: <https://doi.org/10.1108/13685201211238052>
36. Schneider F, Windischbauer U. Money Laundering: Some Facts. *Economics of Security Working Paper 25*. Berlin: Department of International Economics, German Institute for Economic Research; 2010. Available from: [https://www.econstor.eu/bitstream/10419/119350/1/diw\\_econsec0025.pdf](https://www.econstor.eu/bitstream/10419/119350/1/diw_econsec0025.pdf)
37. Convery S. Financial watchdog launches investigation into Sportsbet and Bet365 over money laundering suspicions. *The Guardian*. 2022 3rd November. Available from: <https://amp.theguardian.com/australia-news/2022/nov/03/financial-watchdog-launches-investigation-into-sportsbet-and-bet365-over-money-laundering-suspicions>
38. Kassam A. How criminals used Canada's casinos to launder millions. *Toronto Business Journal*. 2018 15<sup>th</sup> October. Available from: [https://www.tobj.ca/news/market\\_insider/2018/10/15/1388-how-criminals-used-canadas-casinos-to-launder-millions.html](https://www.tobj.ca/news/market_insider/2018/10/15/1388-how-criminals-used-canadas-casinos-to-launder-millions.html)
39. Butler B. Crown casino yet to fix money laundering risks and presence of alleged criminals, documents reveal. *The Guardian*. 2019 31st July. Available from: <https://amp.theguardian.com/australia-news/2019/aug/01/crown-casino-yet-to-fix-money-laundering-risks-and-presence-of-alleged-criminals-documents-reveal>
40. Hanafin J, Sunday S, Fitzmaurice H, Clancy L. ESPAD Ireland 2024: Results from the European School Survey Project on Alcohol and Other Drugs. Dublin: TobaccoFree Research Institute Ireland for the Department of Health Ireland; 2025. Available from: <https://doi.org/10.21427/bqh8-5p87>
41. Ó Ceallaigh D, Timmons S, Robertson D, Lunn P. Childhood gambling experiences and adult problem gambling. *ESRI Working Paper*; 2024. Available from: <https://hdl.handle.net/10419/299337>
42. McAvoy H, Reynolds C, Sunday S, Hanafin J, Clancy L. Children and gambling evidence to inform regulation and responses in Ireland. Based on a secondary analysis of the European School Survey Project on Alcohol and Other Drugs (ESPAD). Dublin Institute of Public Health. 2023. Available from: <https://www.publichealth.ie/sites/default/files/resources/Gambling%20and%20children%20report%20final.pdf>
43. Dalton E. Lottery regulator urges against 'well-intentioned' scratchcards as Christmas gifts for children. *The Journal*. 12 Dec 2024. Available from: <https://www.thejournal.ie/scratch-cards-christmas-6569802-Dec2024/>
44. Duggan B, Mohan G. A longitudinal examination of young people's gambling behaviours and participation in team sports. *Journal of Gambling Studies*. 2023 Jun;39(2):541-57. Available from: <https://doi.org/10.1007/s10899-022-10175-x>
45. Condon I, Lyons S, Carew AM. Gambling in Ireland: profile of treatment episodes from a national treatment reporting system. *Irish Journal of Psychological Medicine*. 2024;41(1):94-101. Available from: <https://doi.org/10.1017/ijpm.2022.20>
46. Ipsos MRBI. Test Purchasing Exercise on Under-age Purchase of National Lottery Products in Retail Premises. Dublin: Regulator of the National Lottery; 2018. Available from: <https://www.rnl.ie/assets/PDFs/independent-research/Mystery-Shop-Report-2018.pdf>
47. Ipsos B&A. Test Purchasing Exercise on Under-age Purchase of National Lottery Products in Retail Premises. Dublin: Regulator of the National Lottery; 2024. Available from: <https://www.rnl.ie/assets/PDFs/independent-research/24-017329-RNL-Underage-Test-Purchasing-Research-Report-Client-FINAL-26th-Nov.pdf>
48. Government of Ireland. Ireland's Gambling Regulation Act. Dublin: Government of Ireland; 2024. Available from: <https://www.irishstatutebook.ie/eli/2024/act/35/enacted/en/html>
49. Kelly S. Light-touch regulation: The rise and fall of the Irish banking sector. In *The Political Economy of the Irish Crisis*. London: Palgrave Macmillan; 2014, pp. 47–68. Available from: [https://link.springer.com/content/pdf/10.1057/9781137377050\\_3.pdf](https://link.springer.com/content/pdf/10.1057/9781137377050_3.pdf)
50. Brown C, Scott C. *Regulation in Ireland: History, structure, style and reform*. UCD Geary Institute Working Paper Series, WP 44. Dublin: University College Dublin; 2010. Available from: <https://www.ucd.ie/geary/static/publications/workingpapers/gearywp201044.pdf>
51. ASAI. Code of Standards for Advertising and Marketing Communications in Ireland. Dublin: Advertising Standards Authority for Ireland (7th Edition); 2016. Available from: <https://adstandards.ie/asa-code/>
52. Broadcasting Authority of Ireland. General Commercial Communications Code. Dublin: Broadcasting Authority of Ireland; 2017.
53. Premier Lotteries Ireland. National Lottery Advertising and Promotion Code of Practice. Dublin: PLI; 2024. Available at: [https://cdn2.lottery.ie/uploads/codes\\_of\\_practice\\_advertising\\_promotion\\_98ccc6acec.pdf](https://cdn2.lottery.ie/uploads/codes_of_practice_advertising_promotion_98ccc6acec.pdf)
54. Regulator of the National Lottery. Annual Report and Accounts 2017. Dublin: Office of the Regulator of the National Lottery; 2018. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Annual-Report-2017-English.pdf>
55. Regulator of the National Lottery. Annual Report 2022. Dublin: Office of the Regulator of the National Lottery; 2023. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Regulator-AR-2022-English-revised.pdf>
56. Regulator of the National Lottery. Annual Report 2023. Dublin: Office of the Regulator of the National Lottery; 2024. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Regulator-AR-2023-English.pdf>
57. Regulator of the National Lottery. Annual Report 2024. Dublin: Office of the Regulator of the National Lottery; 2025. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Regulator-AR-2024-6-English.pdf>
58. Watkins L, Gage R, Smith M, McKerchar C, Aitken R, Signal L. An objective assessment of children's

exposure to brand marketing in New Zealand (Kids'Cam): a cross-sectional study. *Lancet Planet Health.* 2022;6:e132-38. Available from: [https://doi.org/10.1016/S2542-5196\(21\)00290-4](https://doi.org/10.1016/S2542-5196(21)00290-4)

59. Kinsky ES, Bichard S. "Mom! I've seen that on a commercial!" US preschoolers' recognition of brand logos. *Young Consumers.* 2011;12(2):145-158. Available from: <https://doi.org/10.1108/17473611111141605>

60. Borzekowski DLG, Pires PP. A six country study of young children's media exposure, logo recognition, and dietary preferences. *Journal of Children and Media.* 2018; 12(2):143-158. Available from: <https://doi.org/10.1080/17482798.2018.1425730>

61. Arredondo E, Castaneda D, Elder JP, Slymen D, David Dozier, D. Brand Name Logo Recognition of Fast Food and Healthy Food among Children. *Journal of Community Health.* 2009; 34:73-78. Available from: <https://doi.org/10.1007/s10900-008-9119-3>

62. Kopelman CA, Roberts LM, Adab P. Advertising of food to children: is brand logo recognition related to their food knowledge, eating behaviours and food preferences? *Journal of Public Health.* 2007;29(4):358-367. Available from: <https://doi.org/10.1093/pubmed/fdm067>

63. Torrance J, Roderique-Davies G, Thomas SL, Davies N, John B. 'It's basically everywhere': young adults' perceptions of gambling advertising in the UK. *Health Promotion International.* 2021;36:976-988. Available from: <https://doi.org/10.1093/heapro/daaa126>

64. Bestman A, Thomas SL, Randle M, Thomas SDM. (2015) Children's implicit recall of junk food, alcohol and gambling sponsorship in Australian sport. *BMC Public Health.* 2015;15:1022. Available from: <https://doi.org/10.1186/s12889-015-2348-3>

65. Smith M, Chambers T, Abbott M, Signal L. High Stakes: Children's Exposure to Gambling and Gambling Marketing Using Wearable Cameras. *International Journal of Mental Health and Addiction.* 2020;18:1025-1047. Available from: [https://www.researchgate.net/publication/333522480\\_High\\_Stakes\\_Children's\\_Exposure\\_to\\_Gambling\\_and\\_Gambling\\_Marketing\\_Using\\_Wearable\\_Cameras#fullTextFileContent](https://www.researchgate.net/publication/333522480_High_Stakes_Children's_Exposure_to_Gambling_and_Gambling_Marketing_Using_Wearable_Cameras#fullTextFileContent)

66. Hing N, Cherney L, Blaszczynski A, Gainsbury SM, Lubman DI. Do advertising and promotions for online gambling increase gambling consumption? An exploratory study. *International Gambling Studies.* 2014;14(3):394-409. Available from: <https://doi.org/10.1080/14459795.2014.903989>

67. Daly M, Houghton D, Campbell A, Houghton F. Child Oriented Advertising on Ireland's National Lottery Website: A Visual Content Analysis. *Journal of Global, Public and One Health.* 2025(2):19. Available from: <https://jgpoh.com/wp-content/uploads/2025/11/Mia-Daly-JGPOH-2025-AP-PROVED.pdf>

68. Kerr A, Kitchin P, O' Brennan J, Bidav T, McEvoy E. Code-Red: Young People and their Exposure to Gambling Marketing through Media and Sport on the island of Ireland. Final Report of the Youth, Gambling Marketing and the Shared Ireland project. Maynooth University, Maynooth, Ireland: Maynooth University; 2024. Available from: [https://pure.ulster.ac.uk/ws/portalfiles/portal/213471728/Code\\_Red\\_Final\\_Report\\_October\\_2024.pdf](https://pure.ulster.ac.uk/ws/portalfiles/portal/213471728/Code_Red_Final_Report_October_2024.pdf)

69. Daly M, Campbell A, Houghton F. Examining Youth Protections against Gambling in Ireland: A Tiger Team (Red Team) Examination of the National Lottery. *Epidemiology, Biostatistics, and Public Health.* 2026;21(1):1-5. Available from: <https://riviste.unimi.it/index.php/ebph/article/view/30098/25019>

70. Cooney C, Columb D, Costa J, Griffiths MD, O'Gara C. An Analysis of Consumer Protection for Gamblers Across Different Online Gambling Operators in Ireland: A Descriptive Study. *International Journal of Mental Health and Addiction.* 2021;19:19-21. Available from: [https://irep.ntu.ac.uk/id/eprint/34602/1/12098\\_Griffiths.pdf](https://irep.ntu.ac.uk/id/eprint/34602/1/12098_Griffiths.pdf)

71. Bell P. Content analysis of visual images. In T. van Leeuwen and C. Jewitt (eds.) *Handbook of Visual Analysis.* London: Sage Publications Ltd; 2001.

72. Rose G. *Visual Methodologies.* London: Sage; 2016.

73. Kinsey J. The Use of Children in Advertising and the Impact of Advertising Aimed at Children. *International Journal of Advertising.* 1987;6(2):169-175. Available from: <https://doi.org/10.1080/02650487.1987.11107013>

74. Hebden L, King L, Kelly B. Art of persuasion: An analysis of techniques used to market foods to children. *Journal of Paediatrics and Child Health.* 2011;47:776-782. Available from: <https://doi.org/10.1111/j.1440-1754.2011.02025.x>

75. Winters KC, Stinchfield RD, Fulkerson J. Toward the development of an adolescent gambling problem severity scale. *Journal of Gambling Studies.* 1993;9(1):63-84. Available from: <https://doi.org/10.1007/BF01019925>

76. Saugeres L, Thomas A, Moore S, Bates G. Gamblers tell their stories: Life patterns of gambling. Victoria, Australia: Victorian Responsible Gambling Foundation; 2012. Available from [https://www.responsiblegambling.vic.gov.au/\\_data/assets/pdf\\_file/0008/4031/Report-Gamblers-tell-their-story.pdf](https://www.responsiblegambling.vic.gov.au/_data/assets/pdf_file/0008/4031/Report-Gamblers-tell-their-story.pdf)

77. Valentine G. Literature review of children and young people's gambling. London: The Gambling Commission; 2008. Available from: <https://www.gambleaware.org/media/hymmc3v/1-june-update-children-young-people-literature-review.pdf>

78. Volberg RA, Gupta R, Griffiths MD, Olason DT, Delfabbro P. An international perspective on youth gambling prevalence studies. *International Journal of Adolescent Medicine and Health.* 2010;22(1):3-38.

79. Rossi R, Nairn A. Priming Young Minds: The Appeal of Gambling Advertising to Children and Young People. *Journal of the Association for Consumer Research.* 2024;9(2):187-199. Available from: [https://research-information.bris.ac.uk/ws/files/395962678/Priming\\_Young\\_Minds\\_Accepted\\_Manuscript.pdf](https://research-information.bris.ac.uk/ws/files/395962678/Priming_Young_Minds_Accepted_Manuscript.pdf)

80. Den X, Lesch T, Clark L. Pareto distributions in online casino gambling: Sensitivity to timeframe and as-

sociations with self exclusion. *Addictive Behaviors*. 2021;120:106968. Available from: <https://doi.org/10.1016/j.addbeh.2021.106968>.

81. Government of Ireland. National Lottery Act 2013. Dublin: Government of Ireland; 2013. Available from: <https://www.irishstatutebook.ie/eli/2013/act/13/en/html>

82. Adams PJ. Moral Jeopardy: Risks of Accepting Money from the Alcohol, Tobacco and Gambling Industries. Cambridge: Cambridge University Press; 2016.

83. Adams PJ, Rossen F. Reducing the moral jeopardy associated with receiving funds from the proceeds of gambling. *Journal of Gambling Issues*. 2006; Available from: <https://cdspress.ca/wp-content/uploads/2022/08/Peter-J.-Adams-Fiona-Rossen-.pdf>

84. Adams PJ, Gregan MJ. Moral jeopardy, conflicts of interest and the integrity of public health research, *International Journal of Epidemiology*. 2024;53(2). Available from: <https://doi.org/10.1093/ije/dyae023>

85. Regulator of the National Lottery. Annual Report and Accounts 2015. Dublin: Office of the Regulator of the National Lottery; 2016. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Annual-Report-2015-English.pdf>

86. Regulator of the National Lottery. Annual Report and Accounts 2016. Dublin: Office of the Regulator of the National Lottery; 2017. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Annual-Report-2016-English.pdf>

87. Regulator of the National Lottery. Annual Report and Accounts 2018. Dublin: Office of the Regulator of the National Lottery; 2019. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Annual-Report-2018-English.pdf>

88. Regulator of the National Lottery. Annual Report 2019. Dublin: Office of the Regulator of the National Lottery; 2020. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Annual-Report-2019-English.pdf>

89. Regulator of the National Lottery. Annual Report 2020. Dublin: Office of the Regulator of the National Lottery; 2021. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Annual-Report-2020-English.pdf>

90. Regulator of the National Lottery. Annual Report 2021. Dublin: Office of the Regulator of the National Lottery; 2022. Available from: <https://www.rnl.ie/assets/PDFs/annual-reports/Annual-Report-2021-English.pdf>

91. Gambling Commission. Enforcement. Available from: <https://www.gamblingcommission.gov.uk/news/enforcement-action>

92. Reynolds CME, Cox G, Lyons S, McAvoy H, O'Connor L, Kavalidou K. A qualitative analysis of people who died by suicide and had gambling documented in their coronial file. *Addictive Behaviors*. 2025;163:108267. Available from: <https://doi.org/10.1016/j.addbeh.2025.108267>

93. Wardle H, Reith G, Langham E, Rogers RD. Gambling and public health: we need policy action to prevent harm. *British Medical Journal*. 2019;365:1807. Available at: <https://doi.org/10.1136/bmj.l1807>

## Appendix 1

[https://www.youtube.com/watch?v=wlx\\_M\\_YqJAk&list=PLf\\_rtlzFiefc0OvWhl4dfCkanV\\_eeHFC1&index=39](https://www.youtube.com/watch?v=wlx_M_YqJAk&list=PLf_rtlzFiefc0OvWhl4dfCkanV_eeHFC1&index=39)  
[https://www.youtube.com/watch?v=Sv0chgbmPIA&list=PLf\\_rtlzFiefc0OvWhl4dfCkanV\\_eeHFC1&index=46](https://www.youtube.com/watch?v=Sv0chgbmPIA&list=PLf_rtlzFiefc0OvWhl4dfCkanV_eeHFC1&index=46)  
[https://www.youtube.com/watch?v=d7JaRdkW4rE&list=PLf\\_rtlzFiefd6\\_FBOUF6kRP-Dfyi7N3Ps&index=5](https://www.youtube.com/watch?v=d7JaRdkW4rE&list=PLf_rtlzFiefd6_FBOUF6kRP-Dfyi7N3Ps&index=5)  
[https://www.youtube.com/watch?v=upiWINzB\\_k&list=PLf\\_rtlzFiefd6\\_FBOUF6kRP-Dfyi7N3Ps&index=6](https://www.youtube.com/watch?v=upiWINzB_k&list=PLf_rtlzFiefd6_FBOUF6kRP-Dfyi7N3Ps&index=6)  
[https://www.youtube.com/watch?v=Vr-dEdhWhjw&list=PLf\\_rtlzFiefd6\\_FBOUF6kRP-Dfyi7N3Ps&index=2](https://www.youtube.com/watch?v=Vr-dEdhWhjw&list=PLf_rtlzFiefd6_FBOUF6kRP-Dfyi7N3Ps&index=2)  
[https://www.youtube.com/watch?v=BqDaITYOpYE&list=PLf\\_rtlzFiefc0OvWhl4dfCkanV\\_eeHFC1&index=35](https://www.youtube.com/watch?v=BqDaITYOpYE&list=PLf_rtlzFiefc0OvWhl4dfCkanV_eeHFC1&index=35)  
[https://www.youtube.com/watch?v=pbL2IQyCQkA&list=PLf\\_rtlzFiefc0OvWhl4dfCkanV\\_eeHFC1&index=36](https://www.youtube.com/watch?v=pbL2IQyCQkA&list=PLf_rtlzFiefc0OvWhl4dfCkanV_eeHFC1&index=36)  
[https://www.youtube.com/watch?v=ZVAnC3AlS4g&list=PLf\\_rtlzFiefc0OvWhl4dfCkanV\\_eeHFC1&index=33](https://www.youtube.com/watch?v=ZVAnC3AlS4g&list=PLf_rtlzFiefc0OvWhl4dfCkanV_eeHFC1&index=33)  
<https://www.youtube.com/watch?v=ljukoQQK1Bg&list=PL1812C775291CB82C&index=5>  
[https://www.youtube.com/watch?v=pyYbLNEglOs&list=PLf\\_rtlzFiefc0OvWhl4dfCkanV\\_eeHFC1&index=7](https://www.youtube.com/watch?v=pyYbLNEglOs&list=PLf_rtlzFiefc0OvWhl4dfCkanV_eeHFC1&index=7)