

‘No evidence of harm’ implies no evidence of safety: Framing the lack of causal evidence in gambling advertising research

Gambling advertising is a common feature in international jurisdictions that have liberalized gambling. In the Anglosphere, countries such as Australia, New Zealand and the United Kingdom have experienced extensive gambling advertising during the past decade. This advertising is particularly prominent in relation to professional sports and lottery products. More recently, some Canadian provinces and US states have also witnessed a similar rise in gambling advertising. Several European governments, including Belgium, Italy, Netherlands and Spain, have more recently restricted gambling advertising and sponsorship in professional sports, but the UK government did not announce any action on gambling advertising and sponsorship in its 2023 White Paper. In September 2023, the UK's Minister for Sport, Gambling and Civil Society addressed a governmental select committee, stating: ‘We have very much gone on the evidence, and there's little evidence that exposure to advertising alone causes people to enter into gambling harm’ [1]. This is consistent with the position of the main UK gambling industry trade body, which frequently states in the media that there is ‘no evidence’ linking gambling advertising to harm [2].

We are a group of stakeholders writing to say that this is a misleading framing of the underlying evidence base. It would be equally true to say that there is no evidence demonstrating gambling advertising's safety. This supposed lack of causal evidence (a point contested by some academics [3]) is simply an absence of evidence due to methodological difficulties inherent to gambling advertising research. Importantly, there is also no evidence of an absence of an effect. People are exposed to gambling advertising in their daily lives, and yet the majority of the research community lacks access to the gambling operator data which could be used to investigate longitudinal relationships [4]. Causality is often best tested for via well-controlled laboratory experiments, and yet no contrived experiment can recreate the experience of being exposed to—and potentially influenced by—gambling advertising during one's daily life.

Despite these methodological challenges regarding causality, gambling researchers have assembled a wealth of evidence on other aspects of gambling advertising. Gambling advertising can be highly prevalent, especially around live sport [5, 6]; features certain distinct types of content which use a variety of psychological hooks [5, 6], and is often perceived poorly by its recipients [5, 6]. Research has also linked self-reported advertising exposure and gambling [7–9], especially among disordered gamblers, and linked the use of wagering inducements to gambling behaviour using data from an on-line gambling operator [10]. Evidence also suggests that the safer gambling messages found in many

gambling adverts are unlikely to counteract any potential harms from advertising [11, 12]. In time, econometric analyses might be run to test for causal reductions in gambling harm from various governmental restrictions on gambling advertising.

Policy decisions regarding gambling advertising should not necessitate evidence of a direct causal link to change the *status quo*, as those who argue that gambling advertising is safe have not been held to the same evidential standard.

KEYWORDS

Causal evidence, gambling advertising, gambling marketing, gambling-related harm, policy, regulation

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None.

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DECLARATION OF INTERESTS

Philip Newall: Philip Newall is a member of the Advisory Board for Safer Gambling—an advisory group of the Gambling Commission in Great Britain—and in 2020 was a special advisor to the House of Lords Select Committee Enquiry on the Social and Economic Impact of the Gambling Industry. In the last 3 years, Philip Newall has contributed to research projects funded by the Academic Forum for the Study of Gambling, Clean Up Gambling, Gambling Research Australia, NSW Responsible Gambling Fund and the Victorian Responsible Gambling Foundation. Philip Newall has received travel and accommodation funding from Alberta Gambling Research Institute and received open access fee funding from Greo Evidence Insights. **Youssef Allami**: Youssef Allami has received consulting fees from the social responsibility division of a provincial (Crown Corporation) gambling operator in Canada. **Maira Andrade**: Maira Andrade is a PhD student who was awarded a University of Bristol Scholarship to investigate online gambling with cryptocurrencies. **Peter Ayton**: N/A. **Rosalind Baker-Frampton**: Rosalind Baker-Frampton is the research and evaluation lead at Gordon Moody, which has received funding from gambling operators and GambleAware. **Daniel Bennett**: Daniel Bennett has received research funding from the Australian National Health and Medical Research Council. **Matthew Browne**: Matthew Browne has received research funds from the Gambling Research Australia, Victorian Responsible Gambling Foundation, Queensland Government Department of Health, South Australian Government, Australian Department of Social Services and the New Zealand Ministry of Health. **Christopher Bunn**: In the last 5 years, Chris Bunn has received funding for research relating to gambling from ESRC, NIHR and the British Academy. **Reece Bush-Evans**: Reece Bush-Evans has received

research funding in the last 5 years from the Academic Forum for the Study of Gambling (AFSG) and Greo Evidence Insights, and GambleAware. He has received conference travel from AFSG and funding from Aspire Global to deliver a presentation on safer gambling in 2021. **Sonia Chen**: Sonia Chen works as the principal research advisor at the Ministry of Health New Zealand, leading the gambling harm research programme of the Preventing and Minimising Gambling Harm Strategy. **Sharon Collard**: Sharon Collard has received funding for gambling harms research from GambleAware, abrdn Financial Fairness Trust, ESRC IAA, The Seafarer's Charity and Gambling Commission regulatory settlement funds. She is a member of the Bristol Hub for Gambling Harms Research. **Steffi De Jans**: N/A. **Jeffrey Derevensky**: Jeffrey Derevensky has received funding from a number of governmental bodies and gambling operators. **Nicki A. Dowling**: In the last 3 years, Nicki A. Dowling has received research funding from multiple sources, including the Victorian Responsible Gambling Foundation, New South Wales Office of Responsible Gambling, Tasmanian Department of Treasury and Finance, Gambling Research Australia, Swedish Gambling Research Council, Health Research Council of New Zealand and New Zealand Ministry of Health. She has been the recipient of a Deakin University Faculty of Health Mid-Career Fellowship. She has not knowingly received research or consultancy funding from the gambling, tobacco or alcohol industries or any industry-sponsored organisation. **Simon Dymond**: Simon Dymond has received funding from GambleAware, Gambling Commission (regulatory settlements), Greo Evidence Insights, Academic Forum for the Study of Gambling (AFSG) and International Center for Responsible Gaming. Simon Dymond is a founding member of the AFSG Executive Committee. He is the director of the Gambling Research, Education and Treatment (GREAT) Network Wales, which is funded by Welsh Government through Health and Care Research Wales (HCRW). The views expressed are those of the author/s and not necessarily those of HCRW or Welsh Government. **Andree Froude**: N/A. **Elizabeth Goyder**: N/A. **Robert M. Heirene**: Robert Heirene has worked on a project funded by Responsible Wagering Australia (a representative body of Australian online wagering operators; 2019–2021) and as an independent, sub-contracted statistical consultant for PRET Solutions Inc. on a commissioned project (funded by an Australian Casino operator; 2023). **Nerilee Hing**: In the last 5 years, Nerilee Hing has received funding from the Victorian Responsible Gambling Foundation; New South Wales Office of Responsible Gambling; South Australian Government; Gambling Research Australia; Australia's National Research Organisation for Women's Safety; New Zealand Ministry of Health; Australian Communications and Media Authority; and the Alberta Gambling Research Institute. **Liselot Hudders**: N/A. **Kate Hunt**: N/A. **Richard J. E. James**: Richard James has been principal investigator on grants funded by Greo Evidence Insights and the Academic Forum for the Study of Gambling (AFSG), and co-investigator on a grant funded by the International Center for Responsible Gaming. The funds for the grants from Greo Evidence Insights and AFSG were sourced from regulatory settlements levied by the UK Gambling Commission. The ICRG is funded by charitable donations sourced from the American gaming industry and administered by an independent scientific panel.

En Li: In the last 5 years, En Li has received funding from the Victorian Responsible Gambling Foundation. Elliot A. Ludvig: N/A. Virve Marionneau: In the last 5 years, Virve Marionneau has received funding from the Academy of Finland, Finnish Ministry of Health and Welfare, and Finnish Foundation for Alcohol Studies. Ellen McGrane: N/A. Stephanie S. Merkouris: In the last 3 years, Stephanie Merkouris has received research funding from the Victorian Responsible Gambling Foundation, New South Wales Office of Responsible Gambling, Gambling Research Australia, Health Research Council of New Zealand and New Zealand Ministry of Health. She is currently the recipient of a New South Wales Office of Responsible Gambling Postdoctoral Fellowship. She has not knowingly received research or consultancy funding from the gambling, tobacco or alcohol industries or any industry-sponsored organisation. Jim Orford: N/A. Alberto Parrado-González: N/A. Robert Pryce: N/A. Matthew Rockloff: In the last 5 years, Matthew Rockloff has received funding from the Victorian Responsible Gambling Foundation; New South Wales Office of Responsible Gambling; South Australian Government; Gambling Research Australia; New Zealand Ministry of Health; Australian Communications and Media Authority; and the Alberta Gambling Research Institute. Ulla Romild: Ulla Romild is a member of the Advisory Board for Safer Gambling, an advisory group of the Gambling Commission in Great Britain, and a member of the Svenska Spel Research Board, an independent group in charge of distributing research funds from Svenska Spel. Raffaello Rossi: Raffaello Rossi has received funding from ESRC, GambleAware, UK Gambling Commission and Action Against Gambling Harms. He is member of the Bristol Hub for Gambling Harms Research. Alex M. T. Russell: In the last 5 years, Alex M. T. Russell has received funding from Victorian Responsible Gambling Foundation; New South Wales Office of Responsible Gambling; South Australian Government; Gambling Research Australia; New Zealand Ministry of Health; Australian Communications and Media Authority; and the Alberta Gambling Research Institute. He has had travel expenses paid to present research by the Victorian Responsible Gambling Foundation, PsychMed and the Hawthorn Hawks Football Club Players Association. He has received an honorarium from Movember for assessing applications for funding and consulting fees from the Victorian Responsible Gambling Foundation. He declares no conflicts of interest in relation to this manuscript. Henrik Singmann: N/A. Trudy Smit Quosai: Trudy Smit Quosai is the CEO of Greo Evidence Insights. Greo Evidence Insights has received funds in the last 3 years from the Ontario Ministry of Health and Long-Term Care (Canada), social responsibility arms of Canadian state monopolies with responsibility to conduct and manage gambling (Canada), non-profits, charities, and post-secondary institutions (Canada), regulatory settlement funds (Great Britain), third-sector charities (Great Britain) and other international regulators. Sasha Stark: Sasha Stark is the Director of Research and Evidence Services at Greo Evidence Insights. Greo Evidence Insights has received funds in the last 3 years from the Ontario Ministry of Health and Long-Term Care (Canada), social responsibility arms of Canadian state monopolies with responsibility to conduct and manage gambling (Canada), non-profits, charities,

and post-secondary institutions (Canada), regulatory settlement funds (Great Britain), third-sector charities (Great Britain) and other international regulators. In the last 2 years in her previous role at the Responsible Gambling Council, Sasha Stark worked on projects funded by the Alcohol and Gaming Commission of Ontario (Canada), Carleton University (Canada), iGaming Ontario (Canada), Greo Evidence Insights (Canada/Great Britain), the International Center for Responsible Gaming (US), MGM Resorts International (US), GambleAware (Great Britain) and Playtech (Great Britain). Aino Suomi: Aino Suomi has received funding from multiple sources, including Australian Federal and State/Territory government departments including the Victorian Responsible Gambling Foundation and the ACT Gambling and Racing Commission (through hypothecated taxes from gambling revenue). She has not received direct funding from the gambling industry. Thomas B. Swanton: In the last 3 years, Thomas Swanton has received a PhD scholarship through the NSW Government's Gambling Research Capacity Grants program, funded by the NSW Responsible Gambling Fund, and supported by the NSW Office of Responsible Gambling. He has received student travel grants from the National Association for Gambling Studies. Niri Talberg: Niri Talberg is a board member of The Nordic Society Foundation For Information About Problem Gambling (SNSUS) and Norwegian Association On Gambling And Gaming Problems (NFSP). Volker Thoma: Volker Thoma is a former member of the Advisory Board for Safer Gambling (ABSG)—one of his PhD students has received a PhD stipend from GambleAware. Jamie Torrance: In the last 3 years, Jamie Torrance has received (1) PhD funding from GambleAware, (2) open access publication funding from Greo Evidence Insights, (3) paid consultancy fees from Channel 4, (4) conference travel and accommodation funding from the Academic Forum for the Study of Gambling (AFSG) and (5) a minor exploratory research grant from the ASFG and Greo Evidence Insights. Catherine Tulloch: In the last 5 years, Catherine Tulloch has received funding from the New South Wales Office of Responsible Gambling and the Victorian Responsible Gambling Foundation and has contributed to research projects funded by Gambling Research Australia. Ruth J. van Holst: N/A. Lukasz Walasek: Lukasz Walasek received funding from the Greo Evidence Insights and the Academic Forum for the Study Gambling (AFSG). Heather Wardle: In the last 5 years, HW has received funding for gambling-related projects from the National Institute for Health Research, Economic and Social Research Council, Wellcome Trust, Office of Health Improvements and Disparities, Public Health England, Gambling Commission (including from regulatory settlements), Gambling Research Exchange Ontario, Greater London Authority, Greater Manchester Combined Authority, and the Department for Culture Media and Sport. In 2018/19 HW has received funding from GambleAware for a project on gambling and suicide. HW declares consultancy fees from the Institute of Public Health, Ireland and the National Institute for Economic and Social Research; payment for her role as deputy chair of the Advisory Board for Safer Gambling, remunerated by the Gambling Commission; payment as an expert witness on gambling by Lambeth and Middlesbrough Borough Councils; payment for delivery of a webinar by McGill University. She has provided unpaid advice on

research to GamCare; has received support for travel from the Turkish Green Crescent Society, Gambling Regulators European Forum, and Alberta Gambling Research Institute; is a member of the WHO Panel on gambling; and runs a research consultancy practice for public and third sector bodies. HW has not, and does not, provide services to the gambling industry. Jane West: Jane West is a member of the Advisory Board for Safer Gambling. Jamie Wheaton: Jamie Wheaton has received funding from GambleAware and is a member of the Bristol Hub for Gambling Harms Research. He has also received seedcorn funding from the British Academy for conference travel. Leon Y. Xiao: Leon Y. Xiao is supported by a PhD Fellowship funded by the IT University of Copenhagen (IT-Universitetet i København), which is publicly funded by the Kingdom of Denmark (Kongeriget Danmark). He was employed by LiveMe, then a subsidiary of Cheetah Mobile (NYSE: CMCM), as an in-house counsel intern from July to August 2019 in Beijing, People's Republic of China. He was not involved with the monetisation of video games by Cheetah Mobile or its subsidiaries. He undertook a brief period of voluntary work experience at Wiggin LLP (Solicitors Regulation Authority (SRA) number: 420659) in London, England in August 2022. He has contributed and continues to contribute to research projects that were enabled by data access provided by the video game industry, specifically Unity Technologies (NYSE:U) (October 2022–present). He has met and discussed policy, regulation and enforcement with the Belgian Gaming Commission [Belgische Kansspelcommissie] (June 2022 & February 2023), the Danish Competition and Consumer Authority [Konkurrence- og Forbrugerstyrelsen] (August 2022), the Department for Digital, Culture, Media and Sport (DCMS) and its successor of the UK Government (August 2022 & August 2023), PEGI (Pan-European Game Information) (January & March 2023), a member of the European Parliament (February 2023), the US Federal Trade Commission (February 2023), the Finnish Gambling Administration at the National Police Board [Poliisihallituksen arpajaishallinto/Polisstyrelsens lotteriförvaltning] (March 2023), the Danish Gambling Authority [Spillemyndigheden] (April 2023), the Netherlands Authority for Consumers and Markets [Autoriteit Consument & Markt] (May & June 2023) and the Swedish Gambling Authority [Spelinspektionen] (June 2023). He has been invited to provide advice to the DCMS on the technical working group for loot boxes and the Video Games Research Framework. He was the recipient of two AFSG (Academic Forum for the Study of Gambling) Postgraduate Research Support Grants that were derived from 'regulatory settlements applied for socially responsible purposes' received by the UK Gambling Commission and administered by Greo Evidence Insights (March 2022 & January 2023). He has accepted funding to publish academic papers open access from Greo Evidence Insights that was received by the UK Gambling Commission as above (October, November, & December 2022). He has accepted conference travel and attendance grants from the Socio-Legal Studies Association (February 2022 & February 2023); the Current Advances in Gambling Research Conference Organising Committee with support from Greo Evidence Insights (February 2022); the International Relations Office of The Jagiellonian University (Uniwersytet Jagielloński), the Polish National Agency for Academic Exchange (NAWA; Narodowa Agencja Wymiany

Akademickiej), and the Republic of Poland (Rzeczpospolita Polska) with co-financing from the European Social Fund of the European Commission of the European Union under the Knowledge Education Development Operational Programme (May 2022); the Society for the Study of Addiction (November 2022 & March 2023); and the organisers of the 13th Nordic SNSUS (Stiftelsen Nordiska Sällskapet för Upplysning om Spelberoende; the Nordic Society Foundation for Information about Problem Gambling) Conference, which received gambling industry sponsorship (January 2023). He has received an honorarium from the Center for Ludomani for contributing a parent guide about a mobile game for Tjekspillet.dk, which is funded by the Danish Ministry of Health's gambling addiction pool (Sundhedsministeriets Ludomanipulje) (March 2023). The up-to-date version of his conflict-of-interest statement is available via: <https://sites.google.com/view/leon-xiao/about/conflict-of-interest>. Matthew M. Young: Matthew Young is Chief Research Officer at Greo Evidence Insights. Greo Evidence Insights has received funds in the last 5 years from the Ontario Ministry of Health and Long-Term Care (Canada), non-profits, charities and post-secondary institutions (Canada). Greo Evidence Insights has also received funds from social responsibility arms of Canadian crown corporations (i.e., state monopolies) that conduct and manage provincial/territorial gambling, regulatory settlement funds (Great Britain), third-sector charities (Great Britain) and international regulators. He was employed for 12 years by the Canadian Centre on Substance Use and Addiction, which received funding from the Government of Canada. Maria Bellringer: Maria Bellringer has received research funding in the last 5 years from the New Zealand Ministry of Health, Health Research Council of New Zealand and Homecare Medical (NZ) Ltd Partnership. She has received consultancy funding from Health New Zealand and Victorian Responsible Gambling Foundation, and travel and related expenses from the Japan Academy of Integrated Resorts and Gambling Studies. She is a member of the Lotto NZ Responsible Gaming and Corporate Social Responsibility Voluntary Stakeholder Panel—she does not receive financial reimbursement for this role. Steve Sharman: Steve Sharman is a member of the Advisory Board for Safer Gambling (ABSG)—an advisory group of the Gambling Commission in Great Britain—and is a member of the Executive Committee for the Academic Forum for the Study of Gambling (AFSG). He is also co-chair of the AFSG Outreach committee and a founder member of the Current Advances in Gambling Research (CAGR) conference committee. Funding for the AFSG and CAGR is derived from regulatory settlements for socially responsible purposes that are approved by the Gambling Commission and is administered by Greo Evidence Insights. His research is currently funded by a UKRI Future Leaders Fellowship and, in the last 3 years, has received research funding from the Circle U Seed Funding, the UEL Research Internship Scheme, SSA Academic Fellowship and the King's Prize Fellowship. He has also received honoraria from Taylor Francis Publishing and RANGES Early Career Network. Amanda Roberts: Amanda Roberts is the co-chair of the Executive Committee of the Academic Forum for the Study of Gambling (AFSG). Funding for the AFSG is derived from regulatory settlements for socially responsible purposes that are approved by the Gambling Commission and is administered by Greo Evidence Insights. Amanda Roberts has received funding from the Society for the Study of

Addiction (SSA), Greo Evidence Insights, National Institute of Health Research (NIHR), Lincolnshire County Council, Ashfield District Council, Health and Care Research Wales, Public Health Lincoln and Santander. She does not have any potential conflicts of interest in relation to gambling or the gambling industry.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this letter as no datasets were generated or analysed.

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