



Themed Paper – Original Research

Visibility of age restriction warnings, harm reduction messages and terms and conditions: a content analysis of paid-for gambling advertising in the United Kingdom

N. Critchlow^{a,*}, C. Moodie^a, M. Stead^a, A. Morgan^a, P.W.S. Newall^b, F. Dobbie^c^a Institute for Social Marketing and Health, Faculty of Health Sciences and Sport, University of Stirling, Stirling, Scotland, FK9 4LA, UK^b Applied Psychology, WMG, University of Warwick, Coventry, Scotland, CV4 7AL, UK^c Usher Institute, University of Edinburgh, Edinburgh, Scotland, EH8 9AG, UK

ARTICLE INFO

Article history:

Received 22 August 2019

Received in revised form

23 February 2020

Accepted 2 April 2020

Available online 30 April 2020

Keywords:

Gambling advertising

Gambling marketing

Harm reduction

Age warnings

Terms and conditions

ABSTRACT

Objective: The inclusion and design of age restriction warnings, harm reduction messages and terms and conditions (T&Cs) in gambling advertising is self-regulated in the United Kingdom. Our study examines the visibility and nature of this information in a sample of paid-for gambling adverts.

Study design: A content analysis of a stratified random sample of gambling adverts ($n = 300$) in the United Kingdom from eight paid-for advertising channels (March 2018).

Methods: For each advert, we assessed whether any age restriction warnings, harm reduction messages and T&Cs were present. If so, visibility was scored on a five-point scale ranging from very poor ($\leq 10\%$ of advert space) to very good ($\geq 26\%$ of advert), which had high inter-rater reliability. Descriptive information on position, design and tone of language was recorded.

Results: One in seven adverts (14%) did not feature an age restriction warning or harm reduction message. In adverts that did, 84% of age restriction warnings and 54% of harm reduction messages had very poor visibility. At least one in ten adverts did not contain T&Cs. In adverts that did, 73% had very poor visibility. For age restriction warnings, harm reduction messages and T&Cs, most appeared in small fonts and outside the main advert frame. Most harm reduction messages did not actually reference gambling-related harms.

Conclusion: Age restriction warnings, harm reduction messages and T&Cs do not always appear in paid-for gambling advertising. When they do, visibility is often very poor and the messaging not clear. The findings do not support a self-regulatory approach to managing this information in gambling adverts.

© 2020 The Authors. Published by Elsevier Ltd on behalf of The Royal Society for Public Health. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

Introduction

While gambling is a popular recreational activity for many people, for some it can lead to significant problems that affect both the individual and others around them.^{1–3} There is wide variation in past-year problem gambling rates in different countries across both Europe (0.12–3.4%) and the world (0.12–5.8%).⁴ In the United Kingdom (UK), an estimated 430,000 adults (approximately 0.7% of population) are problem gamblers and a further two million (3% of population) are at risk of gambling-related problems.⁵ Understanding the drivers of such behaviour, and opportunities for prevention, is important given that higher risk gambling is associated

with individual, social and economic concomitant harms.⁶ In the UK, and elsewhere, there are calls for a comprehensive harm reduction strategy that reflects the products, environment and marketing that shapes gambling behaviour.^{1,7–9}

Given the reported links between marketing and gambling behaviour,¹⁰ including consumer protection information in advertising is a low-cost and high-reach intervention that may help to mitigate gambling-related harm. Such information can include age restriction warnings, harm reduction messages and terms and conditions (T&Cs). In the UK, there are legal age restrictions for gambling (≥ 16 years for lotteries and ≥ 18 years for other gambling),¹¹ and therefore, age restriction warnings may plausibly reduce the perceived relevance of marketing to young people. Age restriction messages are particularly important as earlier initiation and increased gambling behaviour among children and adolescents

* Corresponding author. Tel.: +44(0)1786 467382.

E-mail address: nathan.critchlow@stir.ac.uk (N. Critchlow).

is associated with a variety of adverse outcomes.^{12–14} Although there is no legal mandate to include age warnings in gambling adverts in the UK, self-regulatory marketing codes remind operators that it is an offence under the Gambling Act (2005) to invite, cause or permit an underage individual to gamble.¹¹

Harm reduction messages have the potential to moderate the promotional message by encouraging controlled or reduced gambling, highlighting negative consequences and signposting support.^{15,16} In the UK, there is no legal requirement to include harm reduction messages in gambling advertising and no standardised requirements on design, language, format and placement, although harm reduction phrases are suggested by self-regulatory marketing codes (e.g., “When the FUN stops, Stop” or “Know your limits and play within it”).^{17,18} Research suggests that harm reduction messages can promote moderate changes in gambling behaviour.^{19,20} The efficacy and salience of messages, however, is dependent on the positioning design, content and context, with those that are brief, easy to read and direct being the most effective.¹⁹ Research also indicates that harm reduction messages should vary or may need to be tailored to different audiences, as reactions differ by age and degree of gambling experience.^{20,21} These differences relate to the language used, whether consumers must actively respond to remove the message, and message framing.^{20,21}

Advertised gambling products often display T&Cs, which may be related to the ability to withdraw funds, eligibility to obtain bonuses and inducements or time restrictions.^{22,23} Although it is not a legal requirement in the UK for gambling marketing to contain T&Cs, complaints regarding transparency about the advertised product (e.g., a gamble or offer) are subject to laws on consumer rights and trading standards, which provide a de facto mandate for their inclusion.²⁴ The design, tone, positioning and information included in T&Cs is at the discretion of the gambling operator and varies depending on the level and complexity of gambling or inducement promoted. Hing et al.²³ found that T&Cs can influence the perceived attractiveness of an advertised gamble among sports bettors. It is suggested, however, that the manner in which such information is currently presented in marketing can lead consumers to overestimate the attractiveness of offers and underestimate the true cost of obtaining bonuses or inducements.²³ Research has found that gamblers are often exposed to persuasively presented incentives and inducements in advertising, which may encourage more frequent or higher spend betting behaviour or

stimulate impulse bets.^{25–28} Consequently, clear and easily comprehensible T&Cs, which accurately reflect the odds of winning or magnitude of potential returns, may be particularly important for discouraging higher risk gambling and may have a particularly pronounced impact on problem gamblers.

In this study, we examine the presence and visibility of age restriction warnings, harm reduction messages and T&Cs within paid-for of gambling advertising in the UK. We do so across a range of advertisement formats, including broadcast (e.g., television and radio), and non-broadcast (e-mail and outdoor), and across a range of gambling formats (e.g., sports betting and bookmakers to lotteries).

Methods

Design and sample

A content analysis was conducted on paid-for gambling advertising ($n = 300$) from eight media channels in the UK (Table 1). Gambling adverts for print press, internet, television, radio and e-mail were sampled during a two-week period in 2018 (5–11th March and 12th–18th March), selected using six months of gambling advertising expenditure data. The weeks were chosen to reflect a week with high intensity of gambling advertising (i.e., the highest weekly expenditure in £GBP) and an adjacent week closest to the average weekly expenditure over that six months. Ebiquity, a marketing and media consultancy agency,²⁹ supplied the expenditure data, the advert ‘creatives’ and information on design and placement (e.g., day of week shown). The paid-for advert channels sampled were limited to those monitored by Ebiquity (i.e., not social media pages or smartphone apps). Spend data across the advertising channels sampled are reported elsewhere.³⁰

One-hundred and fifty adverts were randomly sampled from each week. These were chosen from a maximum of 370 adverts in week 1 (average-intensity week) and 666 adverts in week 2 (high-intensity week). Within each week, the random sample was stratified by the proportion of adverts reported through each channel (Table 1). For stratification purposes, adverts only available at a monthly level (direct mail, door drops and outdoor) were divided across the two weeks and then randomly sampled. The type of gambling and the brand promoted was recorded by the research team when reviewing adverts.

Table 1
Sample of gambling adverts included, by week of selection and advertising channel.

Advert channel	Week 1 (5th – 11th March 2018) ^a			Week 2 (12th – 18th March 2018) ^a			Total selected
	<i>n</i>	% in week	<i>n</i> selected ^b	<i>n</i>	% in week	<i>n</i> selected ^b	
Print press	270	73	108	518	78	116	224
Internet	36	10	15	54	8	12	27
TV	32	9	13	39	6	9	22
Radio	13	4	6	21	3	5	11
e-mail/media	7	2	3	23	3	5	8
Direct mail ^c	5	1	2	5	1	1	3
Door drops ^c	6	2	2	5	1	1	3
Outdoor ^c	1	0	1 ^d	1	0	1 ^d	2
Total	370	100	150	666	100	150	300

^a Week 2 was the week with a high intensity of gambling marketing activity (i.e., the week with the highest weekly expenditure 30th October – 30th April 2018). Week 1 was the adjacent week that reflected average marketing expenditure over the six months.

^b The number of marketing creatives selected from each week was determined by calculating the weekly proportion of each channel as a function of 150 creatives (i.e., 10% of adverts were internet in week one, which translated into 15/150 in the sample selected that week).

^c The number of creatives for these channels was only available at a monthly level. Because there were only a small number of creatives in March 2018, for stratification purposes, the monthly total was divided across the two weeks.

^d This number rounded to zero in the percent calculation (see footnote b). To ensure at least one creative from each channel was included it was purposefully rounded up and one creative was removed from the media channel with highest level of representation (print press).

Table 2

Coding protocol for age restriction warnings, harm reduction messages and terms and conditions (T&Cs) in gambling adverts.

Feature	Definition	Codes and visibility threshold
Age restriction warning	How much marketing space is afforded to information or warnings that the content is only appropriate for those above the minimum legal purchasing age for that form of gambling (≥ 16 years old for lotteries and ≥ 18 years old for other gambling)?	<ul style="list-style-type: none"> • No age restriction warning • Very poor visibility ($\leq 10\%$ of space) • Poor visibility (11–15% of space) • Acceptable visibility (16–20% of space) • Good visibility (21–25% of space) • Very good ($\geq 26\%$ of space)
Harm reduction	How much marketing space is afforded to information about controlled or reduced gambling (e.g., gamble responsibly) or signposting to help for higher risk gambling (e.g., helpline)?	<ul style="list-style-type: none"> • No harm reduction message. • Very poor visibility ($\leq 10\%$ of space) • Poor visibility (11–15% of space) • Acceptable visibility (16–20% of space) • Good visibility (21–25% of space) • Very good ($\geq 26\%$ of space)
Terms and conditions (T&Cs)	How much marketing space is afforded to terms and conditions about the bet, gamble, offer, or inducements promoted (e.g., time limits on free bets, eligibility criteria, or restrictions on any cash withdrawals)?	<ul style="list-style-type: none"> • No terms and conditions. • Not applicable – No gamble promoted • Very poor visibility ($\leq 10\%$ of space) • Poor visibility (11–15% of space) • Acceptable visibility (16–20% of space) • Good visibility (21–25% of space) • Very good ($\geq 26\%$ of space)

Visibility of age restriction warnings, harm reduction messages and T&Cs

A coding protocol was developed to examine the presence and visibility of (1) age restriction warnings, (2) harm reduction messages and (3) T&Cs about the gamble(s) or offer(s) promoted. In present, the visibility of each feature was rated on a five-point scale (1 = very poor visibility to 5 = very good visibility). For T&Cs, a 'not applicable' option was included for adverts that did not promote a specific gamble or offer, and therefore, T&Cs were not required.

Ratings were based on the relative space taken up by each feature within the advert (%) (Table 2). The visibility thresholds were developed, piloted and revised by the research team by analysing gambling adverts from the advertising channels sampled. The concept of proportional thresholds was derived from other conceptually similar public health contexts, such as the size of warnings used on cigarette packs.^{31,32} In this study, the upper threshold ($\geq 26\%$ of advert space) was determined by purposely identifying adverts considered to have good visibility of harm reduction features during initial codebook development. In development and piloting, descending increments of 5% were considered to adequately reflect the different sizes of age warnings, harm reduction messages and T&Cs observed across adverts. We decided to use the same thresholds for all three features to ensure meaningful comparison. Although colour, font and positioning also influence the degree of visibility for each feature, these were prohibitively complex, subjective and time-consuming to code. Visibility, in terms of relative space within the advert (%), provided a single metric that was comparable across advertising formats. For radio advertising, visibility was based on the duration of each feature (in seconds).

In addition to quantitative coding, a free-text response was provided for each item to enable the coders to record a rationale for their visibility score (e.g., how much relative space they estimated was taken up by each feature). The free-text response also captured descriptive information on content and language used (e.g., whether websites or telephone helplines were provided in harm reduction messages) and illustrative detail on positioning (e.g., whether situated inside the main advert frame) and design (e.g., fonts and colours used).

Inter-rater reliability

To establish inter-rater reliability, the two researchers who completed the main coding (N.C. and C.M.) independently rated two adverts from each advertising channel sampled ($n = 16$ adverts; 5% of sample). Discrepancies in ratings, and the level of detail recorded in the free-text responses, were resolved through discussion. There was agreement for 94% of adverts for the visibility of age restriction warnings (Cohen's $\kappa = 0.78$, classed as moderate), 94% agreement for visibility of harm reduction messages ($\kappa = 0.78$, moderate) and 100% agreement for visibility of the T&Cs ($\kappa = 1.00$, absolute agreement).

Data analysis

Data were analysed using SPSS, version 23 (Chicago, IL). Frequencies and proportions (%) were computed for advertising format, whether the advert appeared midweek (defined as Monday to Thursday) or at the weekend (Friday to Sunday), type of gambling advertised and gambling brands referenced. Frequencies and proportions (%) examined the visibility of age restriction warnings, harm reduction messages and T&Cs. For each feature, the main themes regarding size, positioning, font, positioning and text were summarised across all adverts, based on narrative information reported in the free-text responses.

Results

Sample characteristics

Most adverts sampled were from the print press (75%), with the remainder Internet (9%), television (7%), radio (4%), e-mail (3%), direct mail (1%), door drops (1%) and outdoor adverts (<1%) (Table 1). More than half (54%) of the adverts were first recorded midweek (i.e., Monday to Thursday). Most adverts were for bookmakers and sports betting companies (79%). One in eleven adverts (9%) promoted lotteries, and the remainder promoted online machine gaming (3%), online bingo (2%), casino or card games (1%) and football pools (1%). Six adverts (2%) referenced multiple types of gambling (e.g., sports betting and casino). For seven adverts, it was not clear what gambling format was promoted (2%). Across the adverts, 45 different gambling brands were promoted. One in ten adverts (10%) referenced multiple brands, including suggestions of

Table 3
Visibility of age restriction warnings, harm reduction messages and terms and conditions (T&Cs) in gambling adverts.

Feature ^a	%	n
Age restriction warning		
None present	14	42
Very poor visibility	84	252
Poor visibility	2	6
Acceptable visibility	-	-
Good visibility	-	-
Very good visibility	-	-
Harm reduction messages		
None present	14	42
Very poor visibility	54	163
Poor visibility	30	90
Acceptable visibility	1	4
Good visibility	-	-
Very good visibility	<1	1
Terms and conditions^b		
None present	11	31
Very poor visibility	73	207
Poor visibility	11	30
Acceptable visibility	2	5
Good visibility	3	7
Very good visibility	2	5
Not applicable ^c	-	15

^a Very poor visibility ($\leq 10\%$ of advertising space); poor visibility (11–15% of space); acceptable visibility (16–20% of space); good visibility (21–25% of space); very good visibility ($\geq 26\%$ of space).

^b Percentages reported are valid, i.e., excluding advertising for which T&Cs were not applicable.

^c Not applicable = No specific gamble presented in the advertising (i.e., only about the brand) and thus no terms and conditions applicable.

price matching with named competitors and references to sporting events sponsored by another gambling brand.

Visibility of age restriction messages

One in seven adverts (14%) did not feature an age restriction warning (Table 3) (Fig. 1). Of the adverts which did, 84% of age warnings were rated as 'very poor visibility' ($\leq 10\%$ of advert space), with the free-text responses indicating that most only took up 1–5% of space (Fig. 2). The limited visibility of age restriction warnings was consistent across advertising channels.

The free-text responses indicated that most age restriction messages were small logos stating '18+' (or '16+' for lotteries) in

the same banner as the harm reduction messages or short phrases reported as part of the T&Cs (e.g., 'over 18s only'). Most age restriction messages appeared in small font sizes (relative to the advertising content) were positioned outside of the main frame of the advert (i.e., banners at the extremities) and juxtaposed in terms of colour or size against visually stimulating advert content (Fig. 2).

Visibility of harm reduction messages

One in seven adverts (14%) did not contain a harm reduction message (Table 3) (Fig. 3). Of those that did, approximately half (54%) of harm reduction messages were rated as 'very poor visibility' ($\leq 10\%$ of advert space) (Fig. 4) and almost a third (30%) as 'poor visibility' ($< 15\%$ of advert space).

The free-text responses indicated that most harm reduction messages were in small font sizes (relative to the advert content), positioned outside the main frame of the advert (i.e., banners at the extremities) or juxtaposed against stimulating content (e.g., grey colours against more striking graphics) (Fig. 4). Of the four adverts rated as 'acceptable visibility' (16–20% of advert space), three were radio adverts during which the harm reduction messages were clearly narrated at the end. One Internet banner advert had a harm reduction message rated as 'very good visibility' ($\geq 26\%$ of space), as the message took up the entire final frame of the advert (Fig. 5). There were no substantive differences across the other advertising channels for harm reduction messages, with most having consistently poor or very poor visibility.

Phrases used in harm reduction messages included 'BeGambleAware.org', 'Play it safe', 'Play responsibly', 'Please bet responsibly', 'Enjoy gambling responsibly', 'Gamble responsibly' and 'When the FUN stops, stop'. Some adverts also signposted support, e.g., 'For advice and information visit www.begambleaware.org' and 'Need help? Call the National Gambling Helpline on 0800 8020 133', mostly within the T&Cs. No adverts communicated negative consequences associated with higher risk or problem gambling, or specific guidance on controlled gambling (e.g., limit setting or taking breaks).

Visibility of T&Cs

Five percent of adverts promoted a brand only (i.e., no gamble), and therefore, T&Cs were not required. For the remainder of adverts that did require such information, 11% did not contain any T&Cs (Fig. 6). Almost three-quarters of adverts (73%) had T&Cs



Fig. 1. Advert which did not feature an age restriction warning.



(Emphasis added in red to highlight age restriction warning)

Fig. 2. Advert which had an age restriction warning with very poor visibility (less than 10% of advertising space).

BETFRED
— AT THE HEART OF —
CHELTENHAM
13TH - 16TH MARCH

BEST ODDS GUARANTEED
ALL RACES
AT CHELTENHAM

TREBLE THE ODDS
FOR ONE WINNER ON A
LUCKY 15
PLUS UP TO 100% BONUS ON ALL
CORRECT CHELTENHAM LUCKY BETS

5 PLACES
ON THE 2:50PM
& 4:50PM RACES
4 PLACES
ON THE 5:30PM RACE

RSA INSURANCE NOVICES' CHASE
Cheltenham, 2:10pm. Live on ITV

5/2 Presenting Percy	9/1 Elegant Escape
7/2 Monalee	14/1 Ballyoptic
13/2 Al Boun Photo	18/1 Bombon Au Miel
7/1 Dounikos	33/1 Alysson Monterg
8/1 Black Corton	100/1 Full Irish

Each-way 1/5 1,2,3

BETWAY QUEEN MOTHER CHAMPION CHASE
Cheltenham 3:30pm. Live on ITV

6/5 Altior	40/1 Ar Mad
11/4 Douvan	40/1 Charbel
10/3 Min	50/1 Gae's Own
12/1 Poltologue	66/1 Ordinary World
25/1 Special Tiara	

Each-way 1/5 1,2,3

Best Odds Guaranteed - Take a price on any Cheltenham race from 6pm the day prior to racing and if the Starting Price is bigger, we'll pay you out at that price. Applies to Early Prices only. Bonuses - 25% bonus on all correct Lucky 15s, 50% bonus on all correct Lucky 31s, 100% bonus on all correct Lucky 63s. All selections within the Lucky bet must be on Cheltenham Festival runners for the bonus to apply. 20p minimum unit stake. Lucky bonuses apply to bets placed from Saturday 10th March 2018.

Fig. 3. Advert containing no harm reduction message.

rated as 'very poor visibility' ($\leq 10\%$ of advert space) (Fig. 7), and 11% were rated as 'poor visibility' ($\leq 15\%$ of space).

The free-text responses indicated that T&Cs were almost always presented in small fonts and neutral colours (e.g., black text on a white background), featured outside the main frame of the advert (i.e., banner at the bottom), contained information deemed complex or technical (e.g., stipulations on withdrawing free bets or bonuses) and were juxtaposed against stimulating advert content (Fig. 7). Only a few adverts had T&Cs rated as 'acceptable' (2%),

'good' (3%) or 'very good' visibility (2%). In some radio adverts, for example, clear narration outlined the T&Cs for approximately 10 s at the end (typically a third of the advert), while some e-mail adverts contained an extensive list of T&Cs at the bottom of the message. There was little difference among other advertising channels (e.g., print press and television). Comparatively high visibility did not, however, always translate into ease of readability or comprehension. In one print advert, for example, although the T&Cs occupied around 20% of advert space, this contained a lot of

MONEY BACK
as a Free Bet
IF YOU LOSE
on the FIRST & LAST race every day*

Cheltenham Festival

betway
for the love of the game

*Available to new (non-UK) customers. Min stake per bet £2. Max Free Bet £10. One Free Bet per customer per race, credited within 24 hours. Free eligible bet counts. Eligible bets must be placed on the first or last race each day of The Cheltenham Festival. Eligible bets must be single bets on the first or last race. Only bets placed from Saturday 9th March, 2018 are valid. New country/territory only. Full terms apply.

App Store Google Play

bet the responsible way
for more information visit bet.com/responsible-gambling

(Emphasis added in red to highlight the consumer protection message)

Fig. 4. Advert which had a harm reduction message with very poor visibility (less than 10% of advert space).

complex information and was displayed in small font, outside the main advert frame, and negatively juxtaposed against the marketing visuals (Fig. 8). This pattern of presentation was also true for most e-mail advertising.

Discussion

To our knowledge, this is the first study to examine the presence and visibility of age restriction warnings, harm reduction messages and T&Cs within paid-for gambling advertising in the UK. We found that these features were not present in at least one in ten gambling adverts. Currently, there is no legal mandate that gambling advertising in the UK must contain such consumer protection features. This means that inclusion is at the discretion of gambling operators, who are free to decide on design, tone, language, format and positioning, with no explicit and harmonised guidance.

The design and positioning of consumer protection messages influences their efficacy, with those that are brief, easy to read and direct most likely to be effective.^{19–23} Even when such features were present in this study, approximately three-quarters of adverts had age warnings and T&Cs with very poor visibility, and more than half had harm reduction messages with very poor visibility. This included messages positioned outside the main advert frame, designs juxtaposed against stimulating content (i.e., neutral colours versus brighter evocative graphics) and information in small fonts. It has been suggested that gambling platforms and marketing are carefully designed to include subtle cues that initiate or increase gambling behaviour, something which literature has termed ‘dark nudges’.³³ Our findings are consistent with this perspective, as most consumer protection features were subordinate to the advertising message and strategically placed where they will likely receive minimal attention in comparison with the marketing. The



Fig. 5. Advert which had a harm reduction message with very good visibility ($\geq 26\%$ of advert space, still taken from final frame of internet banner advert).

results therefore suggest that minimum standards of design may be necessary to increase the visibility of consumer protection messages in gambling advertising. Any attempts to revise or standardise such messages should be based on research that has tested optimal designs with consumers, as opposed to self-regulatory industry-led designs.

We also identified issues with the language used in consumer protection messages. For example, consistent with previous research, most adverts provided extensive and complex T&Cs concerning eligibility to participate or receive offers and often did so in a way that limited visibility.²² Research has shown that consumers find it challenging to interpret the likelihood of winning on complex gambles (e.g., player to score and team to win), even before taking into account the emotional and attentional commitment needed to process the marketing content and stipulations of participation.³⁴ There is also evidence that how T&Cs are currently

presented in marketing can lead consumers to overestimate the attractiveness of an offer and underestimate the true cost of obtaining bonuses or inducements.²³ Further research exploring consumers' comprehension and recall of T&Cs in gambling marketing, particularly in addition to processing the marketing content and gamble promoted, is a key research priority to improve the efficacy of current practice.

We found that no harm reduction messages explicitly discussed possible negative consequences of gambling (e.g., loss of time or money) or provided objective advice on controlled gambling (e.g., limit setting). Instead, most used phrases from the current self-regulatory guidance, such as 'When the FUN stops, stop', 'Enjoy gambling responsibly' and 'Play it safe' or simply stated telephone or Web addresses to signpost sources of support.^{17,18} These messages have been criticised for failing to provide objective guidance on controlling gambling, relying heavily on an individual's interpretation of responsibility and encouraging gambling.^{35–38} For example, the word 'fun' was almost always displayed more prominently than the rest of the message, thus acting as a promotional cue (Fig. 5). Research has also shown that the 'When the FUN Stops, Stop' message – which appeared in approximately two-fifths of the adverts analysed – may be associated with increased gambling compared with when no harm reduction message is shown at all.^{36,38} In addition, concerning reasons for past month gambling, a 2018 report by the Gambling Commission³⁹ found that in 2018, only 29% did so for fun or enjoyment. For the benefit of consumers, appropriate harm reduction messages need to be developed and tested without the involvement of vested interests of the operators.

This study has several strengths. The findings are from a large stratified random sample of paid-for gambling advertising and are based on a range of broadcast and non-broadcast advertising formats, gambling types and gambling brands, thus increasing generalisability. The visibility thresholds were piloted on gambling advertising, and the study had good inter-rater reliability. There are, however, some limitations and avenues for future research. First, we only considered the visibility of consumer protection features. Future research is required to examine the attention allocated to such messages by consumers and perceived salience and behavioural impact. This could eye-tracking studies to examine attention to paid to consumer protection messages⁴⁰ or research comparing industry self-regulatory messages to alternative

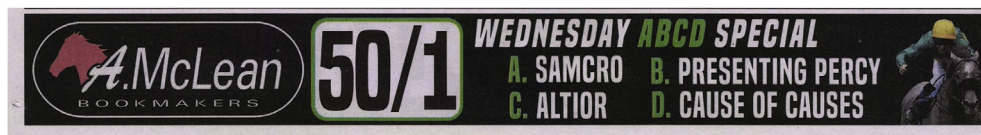


Fig. 6. Advert which contained no terms and conditions (T&Cs).



Emphasis added in red to highlight the T&Cs.

Fig. 7. Advert which had terms and conditions (T&Cs) rated as having very poor visibility (less than 10% of available advertising space).

bet365.com UK: 08000322365

PRICE PROMISE

WE WILL BE BEST PRICE ON EVERY HORSE RUNNING LIVE ON ITV RACING.

We will match or better the prices of the following Bookmakers: Ladbrokes, William Hill, Paddy Power, Coral, Sky Bet and BoyleSports.

Offer applies from 10am. Does not apply to Enhanced Place Term markets. Other exclusions apply. §

Enjoy gambling responsibly. BeGambleAware.org 18+

UP TO £100 IN BET CREDITS FOR NEW CUSTOMERS*

ITV RACING 4/1 OFFER
Back a winner at 4/1 or more on ANY race broadcast LIVE on ITV Racing and get a risk free bet on the next race shown LIVE on ITV Racing. ‡
Only available to new and eligible customers

ENHANCED ↑ PLACE TERM MARKETS CHELTENHAM

2.50	1-2-3-4-5-6
4.50 & 5.30	1-2-3-4-5
1.30 & 4.10	1-2-3-4

Price Promise does not apply to these markets

1/4 ODDS A PLACE ON ALL FESTIVAL RACES

Need Help? Call the National Helpline free on 0808 802 0133. View conditions of all our offers at www.bet365.com. *New customers only. Deposit £5 or more and claim within 30 days of registering to receive a 100% matched amount in Bet Credits up to £100. Bet Credits are released after settlement of qualifying bets (must settle within 30 days of claiming) and are non-withdrawable. Returns exclude Bet Credits stake. NETeller, Skrill and Skrill 1-Tap deposits don't count. Selections settled at odds of less than 1/5, Cashed Out bets and bets placed via our Telephone Betting service don't count towards release of Bet Credits. Other conditions, time limits & exclusions apply. §Offer applies to bets placed on Win and Each-Way Fixed Odds markets only, excluding Each Way Extra where place terms are selected which vary from our standard or enhanced place terms for that race. All other markets are excluded from this offer. Races covered by Price Promise are also available for Best Odds Guaranteed, for new and eligible customers. ‡Only available to new and eligible customers residing in Great Britain and Republic of Ireland. Max risk free bet amount is £50 per customer, per race. Bets must be placed in the usual way and can be paid for from your Withdrawable Balance or Bet Credits. Refunds from risk free bets will be returned to the applicable balance. Offer applies to bets placed on Win and Each-Way Fixed Odds markets and Enhanced Place Terms markets only, excluding Each Way Extra where place terms are selected which vary from our standard or enhanced place terms for that race. All other-markets are excluded from this offer. Bets placed using our Telephone Betting service will not qualify for this offer. Cash Out and Edit Bet restrictions, event selection & other conditions apply.

Fig. 8. Advert which had terms and conditions (T&Cs) rated as acceptable visibility, but with potentially challenging presentation.

designs.⁴¹ There is already some evidence about how to more effectively present T&Cs²³ and limitations around current harm reduction messages,³⁸ albeit more evidence is needed to improve visibility and effectiveness across different media and gambling formats. Second, all advertising came from two weeks in March 2018, and the findings may not be representative of advertising at other points of the year. For example, as the weeks selected included ongoing sports seasons (e.g., football and horse racing), this understandably led to a high proportion of adverts for sports betting. It is plausible there may be a greater proportion of adverts

for other forms of gambling at other stages of the year (e.g., lotteries and casinos), so comparative research would be beneficial. The sample was restricted to paid-for advertising, and the findings may not be generalised to other forms of marketing, particularly emergent activities such as social media.³⁰ Sampling was only based on advertising spend, but data were not available on audience targeting or reach. Finally, adverts were only stratified by the number of adverts reported through each channel, but not proportional spend.

Conclusion

This is the first study to examine the visibility, design, content and positioning of age restriction warnings, harm reduction messages and T&Cs in gambling advertising in the UK. The findings show that these features are not always present in gambling advertising, and even when they are, there are issues with respect to size, positioning, content and design. Given these limitations, additional regulatory steps should be considered to ensure that gambling advertising is accompanied by mandatory consumer protection messages. These messages should subscribe to minimum standards of design which ensure they are always easy to read, clearly visible, informative and reflect the actual harms that can result from gambling rather than subjective messages. These messages should be objectively developed and tested through research and consultation with consumers and those involved in gambling harm reduction and free from the vested interests of operators.

Author statements

Acknowledgements

The authors thank Professor Gerda Reith (University of Glasgow), Dr. Andy MacGregor, Hannah Biggs, Jessica Shields (All ScotCen Social Research), Dr Richard Purves (University of Stirling) and Professor Agnes Nairn (University of Bristol) for their advice as part of the wider project team. The authors thank Ebiquity for supplying the adverts and information and pay particular and special thanks to Steven Ginnis, Holly Kitson and Yasmin White (all Ipsos MORI) who made the arrangements to access the advert sample.

Ethical approval

The study was approved by the University of Stirling's General University Ethics Panel (GUEP413).

Funding

The study upon which this article is based was funded by GambleAware, a national charity instructed by Government to commission research into gambling in Great Britain. GambleAware is funded through contributions from the gambling industry, but decisions about what research to fund are made by the Advisory Board for Safer Gambling (ABSG, formerly the Responsible Gambling Strategy Board [RGSB]), an independent group that provides advice on gambling policy and research to Government. In September 2016, the ABSG (then RGSB) and GambleAware published a Research Commissioning and Governance Procedure that describes how research priorities are set and commissioned, in isolation from the gambling industry.

Competing interests

The authors declare that they have no conflict of interest.

Author contribution statement

N.C. designed the study, with input and support from all other authors. F.D. and N.C. led on data acquisition. N.C. and C.M. developed the coding protocol, with support from all other authors. N.C. and C.M. coded all data and established inter-rater reliability. N.C. was responsible for all data analysis. N.C. conceived and wrote the manuscript. All authors were involved in revising and editing the

manuscript and have read and approved the final version. F.D. was the principal investigator on the overall project, with support from M.S.

References

1. Wardle H, Reith G, Langham E, Rogers RD. Gambling and public health: we need policy action to prevent harm. *BMJ* 2019;**365**:11807. <https://doi.org/10.1136/bmj.11807>.
2. Reith G, Dobbie F. Gambling careers: a longitudinal, qualitative study of gambling behaviour. *Addiction Res Theor* 2013;**21**(5). <https://doi.org/10.3109/16066359.2012.731116>. 376–360.
3. Reith G, Dobbie F. Lost in the game: narratives of addiction and identity in recovery from problem gambling. *Addiction Res Theor* 2012;**20**(6):511–21. <https://doi.org/10.3109/16066359.2012.672599>.
4. Calado F, Griffiths D. Problem gambling worldwide: an update and systematic review of empirical research (2000–2015). *J Behav Addict* 2016;**5**(4):592–613. <https://doi.org/10.1556/2006.5.2016.073>.
5. Connolly A, Fuller E, Hones H, Maplethorpe N, Sondaal A, Wardle H. *Gambling behaviour in Great Britain in 2015: evidence from England, Scotland and Wales*. London: NatCen Social Research; 2015. <https://www.gamblingcommission.gov.uk/PDF/survey-data/Gambling-behaviour-in-Great-Britain-2015.pdf>.
6. Wardle H, Reith G, Best D, McDaid D, Platt S. *Measuring gambling-related harm: a framework for action*. London: Gambling Commission; 2018. <https://www.gamblingcommission.gov.uk/PDF/Measuring-gambling-related-harms.pdf>.
7. Gambling Commission. *National strategy to reduce gambling harms*. Birmingham: Gambling Commission; 2019. <https://www.reducinggamblingharm.org/asset-library/national-strategy-to-reduce-gambling-harms.pdf>.
8. Thomas SL, Randle M, Bestman A, Pitt H, Bowe SJ, Cowlshaw S, Daube M. Public attitudes towards gambling product harm and harm reduction strategies: an online study of 16–88 year olds in Victoria, Australia. *Harm Reduct J* 2017;**14**:e49. <https://doi.org/10.1186/s12954-017-0173-y>.
9. Ministry of Health. *Progress on gambling harm reduction 2010 to 2017: outcomes report – New Zealand strategy to prevent and minimise gambling harm*. Wellington: Ministry of Health, New Zealand Government; 2019. <https://www.health.govt.nz/system/files/documents/publications/progress-gambling-harm-reduction-2010-2017-mar2019.pdf>.
10. Newall PWS, Moodie C, Reith G, Stead M, Critchlow N, Morgan A, Dobbie F. Gambling marketing from 2014 to 2018: a literature review. *Curr Addict Rep* 2019;**6**(2):49–56. <https://doi.org/10.1007/s40429-019-00239-1>.
11. UK Government. *Gambling Act*. London: UK Government; 2005. http://www.legislation.gov.uk/ukpga/2005/19/pdfs/ukpga_20050019_en.pdf.
12. Messerlian C, Derevensky JL, Gupta R. Youth gambling problems: a public health perspective. *Health Promot Int* 2005;**20**(1):69–79. <https://doi.org/10.1093/heapro/dah509>.
13. Derevensky JL. *Teen gambling: understanding a grow epidemic*. Maryland, MD: Rowman and Littlefield Publishers; 2015.
14. Raisamo S, Halme J, Murto A, Lintonen T. Gambling-related harms among adolescents: a population-based study. *J Gambl Stud* 2013;**29**:151–9. <https://doi.org/10.1007/s10899-012-9298-9>.
15. Harris A, Griffiths MD. A critical review of the harm-minimisation tools available for electronic gambling. *J Gambl Stud* 2017;**33**(1):187–221. <https://doi.org/10.1007/s10899-016-9624-8>.
16. Ladouceur R, Shaffer P, Blaczynski A, Shaffer HJ. Responsible gambling: a synthesis of the empirical evidence. *Addiction Res Theor* 2017;**25**(3):225–35. <https://doi.org/10.1080/16066359.2016.1245294>.
17. Industry Group for Responsible Gambling. *Gambling industry code for socially responsible advertising*. 5th ed. London: Industry Group for Responsible Gambling; January 2019. <http://igrg.org.uk/wp-content/uploads/2015/12/Gambling-Industry-Code-for-Socially-Responsible-Advertising-Final-2nd-Edition-August-2015.pdf>.
18. The Senet Group. *Responsible gambling standards*. <https://senetgroup.org.uk/responsible-gambling-standards/>, 2019. [Accessed 13 August 2019].
19. Ginley MK, Whelan JP, Pfund RA, Peter SC, Meyers AW. Warning messages for electronic gambling machines: evidence for regulatory policies. *Addiction Res Theor* 2016;**25**(6):495–504. <https://doi.org/10.1080/16066359.2017.1321740>.
20. Johns R, Dale N, Alam SL, Keating B. *Impact of gambling warning messages on advertising perceptions*. Victoria: Victorian Responsible Gambling Foundation; 2017. <https://responsiblegambling.vic.gov.au/documents/62/Research-report-impact-of-gambling-warning-messages-on-advertising-perceptions.pdf>.
21. Gainsbury SM, Abarbanel BLL, Philander KS, Butler JV. Strategies to customize responsible gambling messages: a review and focus group study. *BMC Publ Health* 2018;**18**(1):e1381. <https://doi.org/10.1186/s12889-018-6281-0>.
22. Hing N, Sproston K, Brook K, Brading R. The structural features of sports and race betting inducements: issues for harm minimisations and consumer protection. *J Gambl Stud* 2017;**33**(2):685–704. <https://doi.org/10.1007/s10899-016-9642-6>.
23. Hing N, Browne M, Russell AMT, Greer N, Thomas A, Jenkinson R, Rockloff M. Where's the bonus in bonus bets? Assessing sports bettors comprehension of their true cost? *J Gambl Stud* 2019;**35**(2):587–99. <https://doi.org/10.1007/s10899-018-9800-0>.

24. Gambling Commission. *Your consumer rights*. 2019. <https://www.gamblingcommission.gov.uk/for-the-public/Your-rights/Your-consumer-rights.aspx>. [Accessed 13 August 2019].
25. Hing N, Russell AMT, Thomas A, Jenkinson R. Wagering advertisements and inducements: exposure and perceived influence on betting behaviour. *J Gamb Stud* 2019;**35**(3):793–811. <https://doi.org/10.1007/s10899-018-09823-y>.
26. Rawat V, Hing N, Russell AMT. What's the message? A content analysis of e-mails and text received from wagering operators during sports and racing events. *J Gamb Stud* 2019. <https://doi.org/10.1007/s10899-019-09896-3>.
27. Hing N, Russell AMT, Vitartas P. Does the uptake of wagering inducements predict impulse betting on sport. *J Behav Addict* 2018;**7**(1):146–57. <https://doi.org/10.1556/2006.7.2018.17>.
28. Rockloff MJ, Browne M, Russell AMT, Hing N, Greer N. Sports betting incentives encourage gamblers to select long-odds: an experimental investigation using monetary rewards. *J Behav Addict* 2019;**8**(2):268–76. <https://doi.org/10.1556/2006.8.2019.30>.
29. Ebiquty. <https://www.ebiquty.com/>[Accessed 18 August 2019].
30. Ipsos MORI. *Interim synthesis report: the effect of gambling marketing and advertising on children, young people, and vulnerable adults, July 2019*. London: Ipsos Mori; 2019.
31. Department of Health. *Tobacco packaging guidance: guidance for retailers, manufacturers, and distributors of tobacco products, enforcement agencies and the public on changes to tobacco packaging from 20 May 2016*. London: Department for Health; 2016.
32. Canadian Cancer Society. *Cigarette package health warnings: international status report*. 5th ed. Toronto: Canadian Cancer Society; 2016.
33. Newall PWS. Dark nudges in gambling. *Addiction Res Theor* 2019;**27**(2):65–7. <https://doi.org/10.1080/16066359.2018.1474206>.
34. Newall PWS. Behavioural complexity of British gambling advertising. *Addiction Res Theor* 2017;**25**(6):505–11. <https://doi.org/10.1080/16066359.2017.1287901>.
35. Livingstone C. *Gamble responsibly is an ad, not a deterrent*. The Drum; 2012 May 16. Available from: <https://www.abc.net.au/news/2012-05-16/livingstone-responsible-gambling/4014800>.
36. Davis R. *Warning message on gambling ad does little to stop betting – study*. The Guardian; 2019 August 4. Available from: <https://www.theguardian.com/society/2019/aug/04/warning-message-on-gambling-ads-does-little-to-stop-betting-study>.
37. Savage M. *Gambling ads must have serious addiction warnings, demand MPs*. The Observer; 2017 May 27. Available from: <https://www.theguardian.com/society/2018/may/27/gambling-adverts-fuelling-british-health-crisis-warn-mps-crackdown>.
38. Newall PWS, Walasek L, Singmann H, Ludvig EA. Testing a gambling warning label's effect on behaviour. *arXiv* 2019. <https://doi.org/10.31234/osf.io/dxfkj>. cited 2019 Aug 18. Available from:.
39. Gambling Commission. *Gambling participation in 2018: behaviour, awareness, and attitudes annual report*. Birmingham: Gambling Commission; 2019. www.gamblingcommission.gov.uk/PDF/survey-data/Gambling-participation-in-2018-behaviour-awareness-and-attitudes.pdf.
40. Kersbergen I, Field M. Alcohol consumers' attention to warning labels and brand information on alcohol packaging: findings from cross-sectional and experimental studies. *BMC Publ Health* 2017;**17**:123. <https://doi.org/10.1186/s12889-017-4055-8>.
41. Blackwell AKM, Drax K, Attwood AS, Munafo MR, Maynard OM. Informing drinkers: can current alcohol labels be improved? *Drug Alcohol Depend* 2018;**192**:163–70. <https://doi.org/10.1016/j.drugalcdep.2018.07.032>.