

ADVERTISING IN TRADITIONAL MEDIA AND GAMBLING BEHAVIOURS IN YOUNG ADULTS

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ABSTRACT

The proliferation of gambling advertising across various media formats raises urgent concerns about its potential impact on gambling behaviours. With the growing use of and investment in digital advertising, traditional advertising channels, once central to communication strategies, have assumed an increasingly peripheral role in debates over advertising effects. This study aims to address that gap by examining perceived exposure to gambling advertising in traditional media and point-of-sale promotion. The analysis focuses on EuroMillions and Scratchcards, two of the most popular forms of gambling in Portugal, drawing on a representative sample of young adult gamblers. The objective is to understand the player profiles for each of these gambling modalities and to what extent exposure to traditional media advertising and point-of-sale communication is associated with the frequency of participation in these games. Although Scratchcards and EuroMillions attract relatively similar player profiles, some differences persist, particularly in terms of gender and age. The results indicate that television remains the main source of perceived gambling advertising exposure among young adult gamblers, with significant gender- and age-related differences in perceived exposure to radio ads, outdoor advertising, and point-of-sale promotions. Furthermore, EuroMillions players who report higher exposure to radio and point-of-sale advertising show a slightly increased tendency to engage in more frequent gambling practices. This study contributes to broader, critical reflection on the effects of gambling advertising on a vulnerable group, highlighting the need to include traditional media advertising in the ongoing public health and gambling regulation policy debate.

KEYWORDS

traditional media advertising, point-of-sale advertising, advertising exposure, gambling behaviours

PUBLICIDADE NOS MÉDIA TRADICIONAIS E COMPORTAMENTOS DE JOGO EM JOVENS ADULTOS

RESUMO

A proliferação da publicidade de jogo a dinheiro em diferentes formatos mediáticos levanta questões urgentes sobre o seu impacto potencial nos comportamentos de jogo. Com o crescente uso e investimento na publicidade digital, os canais tradicionais de publicidade, outrora centrais nas estratégias de comunicação, têm vindo a assumir um papel cada vez mais periférico no debate sobre os efeitos da publicidade. Este estudo procura colmatar essa lacuna, examinando a exposição percebida à publicidade de jogo a dinheiro nos meios tradicionais e nos espaços físicos de venda. A análise incide sobre o Euromilhões e a Raspadinha, duas das modalidades mais populares em Portugal, com recurso a uma amostra representativa de jovens adultos jogadores. Pretende-se compreender qual o perfil dos jogadores de cada uma destas modalidades e em que medida a exposição à publicidade nos meios tradicionais, bem como a comunicação nos pontos de venda, se relacionam com a frequência da participação nestas modalidades. Embora a Raspadinha e o Euromilhões atraiam perfis de jogadores em certa medida similares, subsistem algumas diferenças devido ao género e à idade. Os resultados indicam que a televisão continua a ser a principal fonte de exposição percebida à publicidade de jogo a dinheiro para os jovens adultos jogadores, com diferenças significativas relacionadas com o género e a idade na exposição percebida a anúncios de rádio, *outdoors* e em pontos de venda. Adicionalmente, os jogadores do Euromilhões que relatam uma maior exposição à publicidade na rádio e nos pontos de venda revelam uma propensão para adotar práticas de jogo mais frequentes. Este estudo contribui para uma reflexão crítica e alargada sobre os efeitos da publicidade ao jogo a dinheiro junto de um grupo vulnerável, sublinhando a necessidade de integrar a publicidade nos meios tradicionais no debate sobre saúde pública e políticas de regulação do jogo a dinheiro.

PALAVRAS-CHAVE

publicidade em meios tradicionais, publicidade em pontos de venda, exposição à publicidade, comportamentos de jogo a dinheiro

1. INTRODUCTION

Advertising has undergone a significant transformation in recent years, with a marked shift in investment from traditional channels such as radio, television, or out-of-home advertising to digital platforms. In 2025, global digital advertising spending is projected to reach \$740.3 billion, far surpassing the \$306.8 billion allocated to non-digital advertising in 2023, which is expected to grow modestly by 2.5% between 2024 and 2026 (Statista, 2022, 2025). This trend reflects a broader realignment of marketing strategies, with digital-first approaches dominating, relegating traditional media to a less central role. However, in Portugal, the advertising landscape diverges from this global trend. According to the *Media & Advertising Global Report 2024* by the Grupo Marktest (2025), traditional media channels such as television, radio, and outdoor advertising still command a significant share of advertising budgets, accounting for 88.6%, 1.8%, and 2.6% of total investments, respectively. In contrast, digital advertising accounts for only around 5% of advertising spending.

Despite the ascendancy of digital media, traditional advertising remains an influential force, particularly in shaping consumer behaviour. Prior research highlights its ability to enhance brand perceptions such as quality, value, and satisfaction (Du et al., 2019), while many consumers perceive traditional media as more trustworthy than digital platforms (Korenkova et al., 2020). Among various advertising formats, radio prompts the least avoidance behaviour from audiences, with studies reporting that only 3% of listeners avoid radio ads (Michelon et al., 2020). Moreover, traditional media remains an effective way to reach specific demographic groups, including older adults who tend to favour television and radio over digital alternatives (Todor, 2016). However, certain traditional formats are increasingly subject to consumer ad avoidance (Wottrich & Voorveld, 2016), highlighting the complex dynamics of advertising efficacy across channels.

In gambling advertising, a notable trend is its substantial shift to digital channels, with social media emerging as a primary focus (e.g., Rossi et al., 2021; Singer et al., 2024). Research in this area follows this trend, while studies examining the impact of traditional media advertising, such as radio, outdoor ads, and point-of-sale promotions, remain sparse. This gap is crucial, as exposure to specific advertising channels may uniquely influence gambling behaviours (Syvertsen et al., 2022), underscoring the need for a broader exploration of traditional media's role.

In Portugal, research on the relationship between gambling advertising and consumer behaviour remains limited, particularly regarding traditional media influence across different gambling modalities. This study addresses this gap by examining the perceived exposure to advertising and its effects on gamblers of two of the most popular gambling products in Portugal: Scratchcards and EuroMillions. Operated by Jogos Santa Casa — a State-run entity channelling profits toward social causes — both games contributed heavily to the €3.143 billion in total gross sales of this gambling operator in 2025 (Santa Casa da Misericórdia de Lisboa - Departamento de Jogos, 2025).

This paper contributes to the existing literature by exploring how perceived exposure to traditional media advertising influences gambling behaviours related to these two modalities among Portuguese young adults. Additionally, it investigates the role of point-of-sale advertising in shaping gambling behaviours. The study aims to provide valuable insights for both academics and practitioners by addressing the following objectives:

- to profile gamblers for each gambling modality studied;
- to investigate perceived exposure to gambling advertising across traditional media and point-of-sale contexts, identifying potential differences;
- to analyse relationships between gambling behaviours in EuroMillions and Scratchcards and perceived exposure to advertising via traditional media channels, including television, radio, and outdoor advertising;
- to investigate associations between gambling behaviours in these modalities and perceived exposure to point-of-sale advertising.

2. EUROMillIONS AND SCRATCHCARDS: PREVALENCE, PROFILE, GAMBLING BEHAVIOURS AND PREFERENCES

The prevalence of gambling and the profile of Portuguese gamblers are relatively well-documented. These insights are largely derived from national surveys (Balsa et al., 2014, 2018, 2024). According to these studies, approximately one in two Portuguese (55.6%) engage in gambling activities. Narrowing the scope to young adult gamblers, Farias and Antunes (2024) identified a significantly higher prevalence of gambling behaviours compared to the general population, as they found that approximately two out of three young adults (68.4%) aged 18 to 34 years participate in or have already participated in gambling activities.

Two of the most popular gambling modalities in Portugal are instant lotteries (Scratchcards) and EuroMillions. EuroMillions is a poll-betting, transnational lottery in which players select five numbers from 1 to 50 and two “lucky star” numbers from a pool of 12. In 2025, EuroMillions generated €509 million in revenue and accounted for approximately 16.1% of the Jogos Santa Casa total gross sales (Santa Casa da Misericórdia de Lisboa - Departamento de Jogos, 2025), remaining one of the main products within its portfolio.

Instant lotteries, introduced in Portugal in 1995 and rebranded as “Raspadinha” (Scratchcard) in 2010, consist of pre-printed tickets in which players reveal symbols to determine whether they have won a prize. Unlike traditional lottery games, Scratchcards provide immediate disclosure of outcome and rewards. They are also characterised by low cost, broad accessibility, short payout intervals, and no expertise requirements, characteristics that may contribute to their widespread appeal in Portugal (Vilaverde & Morgado, 2020). Since their introduction, Scratchcards have shown sustained growth, reaching approximately 60% of total Jogos Santa Casa sales in 2025 (Santa Casa da Misericórdia de Lisboa - Departamento de Jogos, 2025) and generating revenue of €1.886 billion, making them now the leading product in the Jogos Santa Casa gambling portfolio. Regarding gambling participation, EuroMillions stands out, with nearly half the population (45.6%) participating. Scratchcards follow closely, with a prevalence rate of 36.8% (Balsa et al., 2024).

Regarding their profile, EuroMillions gamblers are depicted as lower-income males whose gambling behaviour is motivated by financial goals, such as buying a car, purchasing a home, and paying off debt (Balsa et al., 2018; Brochado et al., 2018). The profile of Scratchcard gamblers remains inconclusive. While Maurício and Rodrigues-Silva (2023) and Morgado et al. (2023) assert that these gamblers are predominantly employed adult males with lower incomes, Balsa et al. (2018) report higher prevalence rates among women. According to Brochado et al. (2018), frequent Scratchcard players were predominantly younger women with lower levels of income and educational attainment, whose participation appeared to be primarily driven by self-esteem-related motivations. In contrast, male Scratchcard players were more likely to report financial and security-related motives. This suggests that additional indicators are warranted to strengthen and further complete the profile of EuroMillions and Scratchcards gamblers.

3. GAMBLING ADVERTISING

The prominence of gambling advertising has surged in recent years, emerging as a focal point of public discourse due to its pervasiveness and deep integration into everyday life (e.g., Bouguettaya et al., 2020; Wardle et al., 2024). Contemporary gambling advertising is increasingly refined, carefully tailoring content and communication methods to target specific demographic groups (Newall et al., 2019; Torrance et al., 2021). It is designed to be highly persuasive, often depicting gambling in a positive light, and associating it with having fun and excitement, as a positive experience that may involve substantial economic gain (e.g., Gainsbury et al., 2016; Torrance et al., 2024).

Gambling advertising has garnered substantial academic attention (e.g., Kristiansen & Severin-Nielsen, 2022; Wardle et al., 2024), with research generally divided into two primary strands. The first investigates the exposition and impact of gambling advertisements on gamblers and the broader public, exploring behavioural and psychological outcomes. The second focuses on analysing the content of these advertisements, uncovering the strategies, key themes, and messaging employed to engage audiences.

Focusing on the first strand and attending to their consumption of different media types, it is assumed that all people, including children, adolescents, and young adults, are heavily exposed to gambling advertising, in particular in digital media (e.g., De Jans et al., 2023; Labrador et al., 2021; Thomas et al., 2018). Gambling advertising has become increasingly pervasive, as operators have expanded their presence across social media platforms, streaming services, and gaming applications. This trend is further compounded in online environments, where gambling-related content may not always be clearly identifiable as advertising (e.g., Gainsbury et al., 2016; Syvertsen et al., 2022).

Despite this, the self-perceived impact of gambling advertising on behaviour is low, with studies indicating that most gamblers believe that exposure to such ads has little to no influence on their gambling participation (e.g., Binde & Romild, 2019). For instance, a Danish survey found that 78% of respondents considered gambling advertising to have no significant influence on their gambling consumption, 19% acknowledged a small or minor impact, and only 2% attributed significant or substantial importance to such advertising (Bjerg Kommunikation, 2014). Binde and Romild (2019) added that although relatively few gamblers reported being negatively influenced by gambling advertisements, problem gamblers were overrepresented among those who reported such influence.

Contrary to this self-perception, the existing evidence suggests that exposure to gambling advertising is related to increased gambling participation, higher gambling frequency, heightened intentions to gamble, increased intensity, and greater financial expenditure on gambling activities (Binde & Romild, 2019; García-Pérez et al., 2024; Newall et al., 2019; Syvertsen et al., 2022), with this association occurring with greater magnitude in men (Perez-Gonzaga et al., 2024). Systematic and meta-analytic reviews corroborate these findings, revealing a causal relationship between exposure to gambling advertising and more favourable attitudes toward gambling, increased gambling intentions, higher gambling activity, and riskier/more impulsive betting (Bouguettaya et al., 2020; McGrane et al., 2023). McGrane et al. (2023) and Bouguettaya et al. (2020) even

identified a “dose-response” effect: greater advertising exposure increases gambling participation, thereby elevating the risk of gambling-related harm (Wardle et al., 2024).

3.1. GAMBLING ADVERTISING IN TRADITIONAL MEDIA AND POINTS-OF-SALE: THE EFFECTS ON GAMBLERS

Recently, the emphasis has been placed on studying digital advertising and its influence on gamblers. In contrast, less attention has been devoted to understanding the impact of traditional media advertising on gambling attitudes and behaviours. The existing evidence in the latter reveals that research has prioritised gambling advertising on television, often overlooking the influence of other traditional media, such as radio and out-of-home advertising.

Interestingly, studies from previous decades indicate that television is the most common source of exposure to gambling advertisements for adolescents and young adults (e.g., Derevensky et al., 2010; Djohari et al., 2019; Lemarié & Chebat, 2015; Thomas et al., 2018). Korn et al. (2008) found that Canadian adolescents aged 13–17 could recall specific television gambling advertisements, including slogans and jingles, highlighting their memorability among younger audiences. Similarly, Lemarié and Chebat (2015) observed that Canadian adults exposed to gambling ads on television developed more positive attitudes toward the gambling industry, which were significantly linked to an increased gambling intention. Browne et al. (2019) provided evidence that television gambling advertisements influenced gambling expenditure among Australian race bettors.

Existing studies of gambling advertising on radio have primarily focused on its content (e.g., McMullan & Miller, 2010; Sklar & Derevensky, 2010). One of the few exceptions is the study by Stranahan and Borg (1998), which found that high recall of radio gambling advertising was associated with relatively infrequent lottery participation. Derevensky et al. (2010) also found that young participants had a greater recall of gambling advertising in magazines, television, newspapers, billboards, and radio. Yet, this greater recall may not translate into behaviour. In a study analysing the distinct effects of newspaper, radio, and television advertising on Lotto sales in Colorado, Heiens (1999) concluded that radio advertising had no significant impact. In contrast, television and newspaper advertisements have a measurable influence. A recent comparative study by He and Klein (2022) on the effects of radio and television advertising on gambling behaviour in the context of the Dutch State Lottery found that both significantly boost short-term online sales, with total sales 16.7% lower in the absence of the advertising reminder effect. However, their impact differs: a radio ad reaching 1% of the population increased sales by 1.55% within four hours, whereas a television ad increased sales by 0.78%.

Out-of-home advertising is broadly categorised into four main formats: outdoor, transit, street furniture, and alternative out-of-home formats (Babst et al., 2020; Roux, 2017). Focusing on outdoor gambling advertising, typically located along major roads and highways and mounted on freestanding structures or integrated into buildings for high visibility (Roux, 2017), the existing empirical evidence on its impact is scarce. De Jans

et al. (2023) investigated Flemish young adults' exposure to gambling advertising and found that they were mainly exposed to digital gambling ads, with low exposure to other formats, such as outdoor advertising. Noble et al. (2022), in a recent study examining the relationship between exposure to different forms of gambling advertising and adolescent gambling behaviours, found no significant association between exposure to traditional media advertisements (e.g., television, radio, billboards) and adolescent gambling activity.

Although not considered a traditional advertising medium, retail point advertising can entice young adults to gambling venues, fostering impulsive and immediate engagement with gambling activities by creating opportunities for unplanned participation and lowering barriers to entry at the point of exposure (Labrador et al., 2021). Syvertsen et al. (2022) found that gambling advertising in retail points predicted increased gambling involvement and a higher knowledge of gambling forms and operators. Point-of-sale advertising can capture receivers' attention by highlighting gambling opportunities while offering immediate accessibility, potentially encouraging impulsive behaviour. Notably, recall of point-of-sale lottery advertising is positively associated with intentions to gamble on lotteries (e.g., Felsher et al., 2004).

4. METHOD

A representative sample of Portuguese young adults aged 18 to 34 was surveyed using quota sampling to ensure representation across regions. Data collection was conducted via computer-assisted telephone interviewing, with strict quality control procedures in place to ensure accuracy and reliability. Of the 1,363 participants, 989 reported having participated in gambling activities at least once. This group constituted the sub-sample analysed in the current paper.

Before starting the survey, all participants provided their informed consent after being briefed on the study's purpose and confidentiality protocols. The study received ethical approval from Lusófona University's Ethics and Professional Conduct Committee for Scientific Research (protocol code: CEDIC-2023-02-08).

The survey included measures of perceived exposure to gambling advertising, gambling behaviours, and demographic information, further described below:

- *Perceived exposure to gambling advertising* was assessed across point-of-sale promotions and three traditional media platforms: outdoor advertisements, radio, and television. Respondents rated their exposure using a Likert scale ranging from 1 ("never") to 5 ("very often");
- *Gambling behaviours* were measured for two specific gambling modalities — Scratchcards and EuroMillions. Participants reported the frequency of their participation in each modality, distinguishing between online and land-based formats. Frequency was categorised from 1 ("never") to 5 ("several times a day"). Additional items captured preferences for gambling modality;
- *Sociodemographic and occupational variables*: information included age, gender, marital status, educational attainment, employment status, and household composition. These variables were used to explore potential sociodemographic influences on gambling behaviours and perceptions of advertising exposure.

5. RESULTS

A comprehensive overview of the sample's demographic and social characteristics shows a relatively balanced gender distribution (52.4% male and 47.6% female). Participants' ages range from 18 to 34 years, with an average age of 27 years (Figure 1).

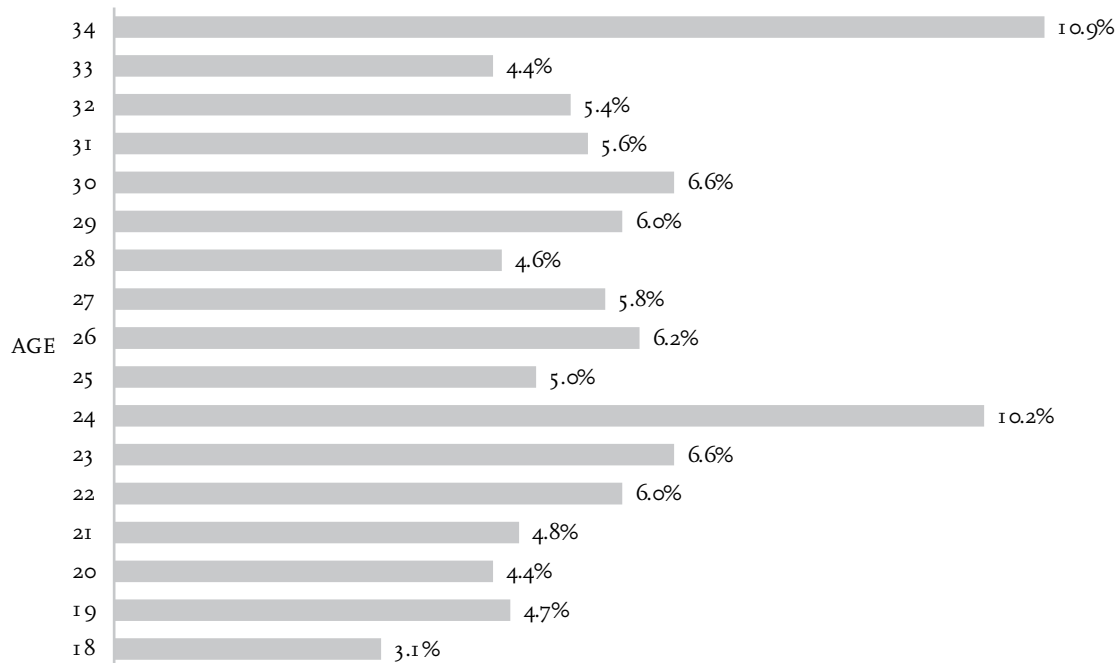


Figure 1. Age distribution (percentage)

Regarding education, almost half of the participants (45.2%) have between seven and 12 years of schooling, while 45.0% are either pursuing higher education or have already completed it. Regarding marital status, the majority (71.5%) are single, while just over a quarter (26.7%) are married or in a common-law union.

Employment status reveals that most gamblers (67.0%) are employed, with 18.1% identifying as students and 5.6% as unemployed. Household composition shows that 80.0% of players live in households with two to four members, while 11.8% live alone.

5.1. PROFILES AND BEHAVIOURS: SCRATCHCARDS AND EUROMillIONS

Among the participants, 989 individuals play at least one of the two gambling options: Scratchcards or EuroMillions. Scratchcards stand out as the most favoured game, with 782 (79.1%) players choosing it. EuroMillions, however, also holds considerable appeal, with 631 (63.8%) players. A substantial portion of participants, 424 (42.9%), play both games, highlighting the overlap in player preferences. It is noteworthy that a greater number of individuals participate in both gambling modalities combined than those who play only one (Figure 2).

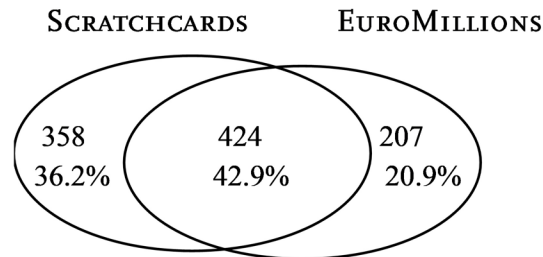


Figure 2. Gambler distribution by game

The average age of both Scratchcards and EuroMillions players ranges from 26 to 28 years, with educational backgrounds spanning from seven to 16 years of schooling. Most participants are employed, single, and live in households of two to four members (see Table 1).

CHARACTERISTICS	SCRATCHCARDS	EUROMILLIONS
Gender		
Female	50.0%	44.1%
Male	50.0%	55.9%
Age		
Average	26	28
Median	26	28
Minimum	18	18
Maximum	34	34
Standard deviation	4.7	4.6
Years of education		
0 to 6	1.1%	1.1%
7 to 12	46.1%	44.3%
13 to 16	44.3%	45.7%
More than 16	8.5%	8.9%
Occupation		
Self-employed	7.9%	10.3%
Employee	66.2%	73.0%
Unemployed	6.3%	5.1%
Responsible for shopping/housework	0.1%	0%
Student	19.5%	11.6%
Marital status		
Single	73.2%	66.1%
Married/Common-law union	25.9%	32.9%
Divorced	0.9%	1.0%
Number of people in the household		
1 person	10.9%	12.0%
2 people	26.3%	27.4%
3 people	30.7%	31.1%
4 people	24.7%	22.7%
5 people	5.4%	4.3%
6 or more	3.0%	2.5%

Table 1. Profile of Scratchcards and EuroMillions players

Despite these commonalities, differences emerge in players' profiles across game types. The gender distribution for Scratchcards players is evenly split between men and women, whereas EuroMillions shows a slight predominance of male gamblers (55.9%). Additionally, EuroMillions players tend to be, on average, two years older than Scratchcard gamblers. Also, students and single individuals are more likely to engage with Scratchcards, reflecting its appeal more to younger individuals, particularly those aged 18–24. Employed individuals and those who are married or in a civil partnership show a preference for EuroMillions over Scratchcards, suggesting that this game resonates more with a slightly older age group (25–34) and with individuals at different life-cycle phases.

The frequency of participation in these games (Table 2) tends to be relatively low, with more gamblers (37.7%) reporting playing only “once every three months”. This is followed by those who play “once a month” (24.8%), “once a year” (18.3%), and “once a week” (17.7%). For EuroMillions, the most common response (36.2%) is that it is “never” played (Table 3). Daily participation is rare across both games; however, among those who play daily, Scratchcards are the preferred choice, with 12 individuals reporting this behaviour. In contrast, only two participants reported playing EuroMillions daily, and one reported playing “several times a day”.

	ONCE A YEAR	ONCE EVERY THREE MONTHS	ONCE A MONTH	ONCE A WEEK	EVERY DAY	SEVERAL TIMES A DAY
Frequency	181	373	245	175	14	1
Percentage	18.8%	37.7%	24.8%	17.7%	1.4%	0.1%

Table 2. Frequency of gambling in Scratchcards or EuroMillions

	NEVER	ONCE A YEAR	ONCE EVERY THREE MONTHS	ONCE A MONTH	ONCE A WEEK	EVERY DAY	SEVERAL TIMES A DAY
Scratchcards	207	179	321	193	77	12	0
	20.9%	18.1%	32.5%	19.5%	7.8%	1.2%	0%
EuroMillions	358	158	213	135	122	2	1
	36.2%	16.0%	21.5%	13.7%	12.3%	0.2%	0.1%

Table 3. Playing frequency across gambling modalities

Although individuals who more frequently play one game have a slight tendency to increase their participation in the other (Spearman's $\rho = 0.290$, p -value = $1.39\text{E-}16$), the frequency of gambling differs significantly between the two games — Wilcoxon test (standardised) = -4.604 , p -value = $0.4\text{E-}05$. There is a tendency towards more frequent participation in Scratchcards compared to EuroMillions.

5.2. FREQUENT GAMBLERS PROFILE

When examining the gambling frequency, differences emerge across gender, age, and education levels. For Scratchcards, gender-specific behaviours are particularly evident (Chi-square = 20.232, p -value = 0.001). The most common response among participants (32.5%) is playing “once every three months”, with a higher proportion of females (37.4%) compared to males (27.2%). The second most frequent response is that they “never” play (20.9%), with male gamblers showing a higher percentage (24.5%) than female players (17.0%). Similarly, for the option “once a week”, chosen by only 7.8% of participants, male players again show a higher representation (9.8%) compared to female players (5.7%).

Age also plays a significant role (Chi-square = 20.984, p -value = 0.001). Among those who gamble “once every three months” (32.5%), younger individuals (aged 18–24) make up 37.9%, compared to 28.9% of those aged 25–34. Conversely, among those who “never” play Scratchcards (20.9%), older participants (25.5%) are more represented than younger ones (12.4%). Education level further distinguishes gambling behaviour (Chi-square = 18.639, p -value = 0.002), particularly among frequent players. Participants with up to 12 years of schooling are more likely to gamble frequently, such as “once a week” (10.7%) or daily (2.0%), compared to those with more advanced education (“once a week”: 5.3%; “every day”: 0.6%).

For EuroMillions, gambling frequency is also significantly influenced by gender (Chi-square = 24.472, p -value = 1.76E-05) and age (Chi-square = 122.998, p -value = 7.27E-25), while education level, marital status, and occupation show no significant impact. In the most frequent response, “never” (36.2%), a substantial gender disparity is observed, with females showing a higher tendency not to play (41.0%) than males (31.9%). This trend is reversed among those who play “once a week”.

EuroMillions is less popular among younger participants: 56% of those aged 18–24 report “never” playing, compared to only 23.2% of older participants. Conversely, older participants are more likely to gamble “once a month” (15.8%) or “once a week” (16.6%) than younger participants (10.4% and 5.9%, respectively).

Some differences emerge in gambling behaviours between these two games. Scratchcards were the most popular gambling modality, especially among younger individuals (aged 18–24) and women, while EuroMillions appealed more to older participants (aged 25–34) and men.

5.3. PERCEIVED EXPOSURE TO GAMBLING ADVERTISEMENTS

Approximately 75% of respondents report feeling exposed to gambling ads on television, in stark contrast to other media, where over 40% of participants do not perceive themselves as exposed. Gamblers’ perceptions of television advertising exposure are more evenly distributed across categories such as “never”, “rarely”, “sometimes”, and “often”. Notably, the proportion of players who feel exposed to television advertising

“often” or “always” is approximately three times higher than for other media, highlighting television’s significant impact (Figure 3).

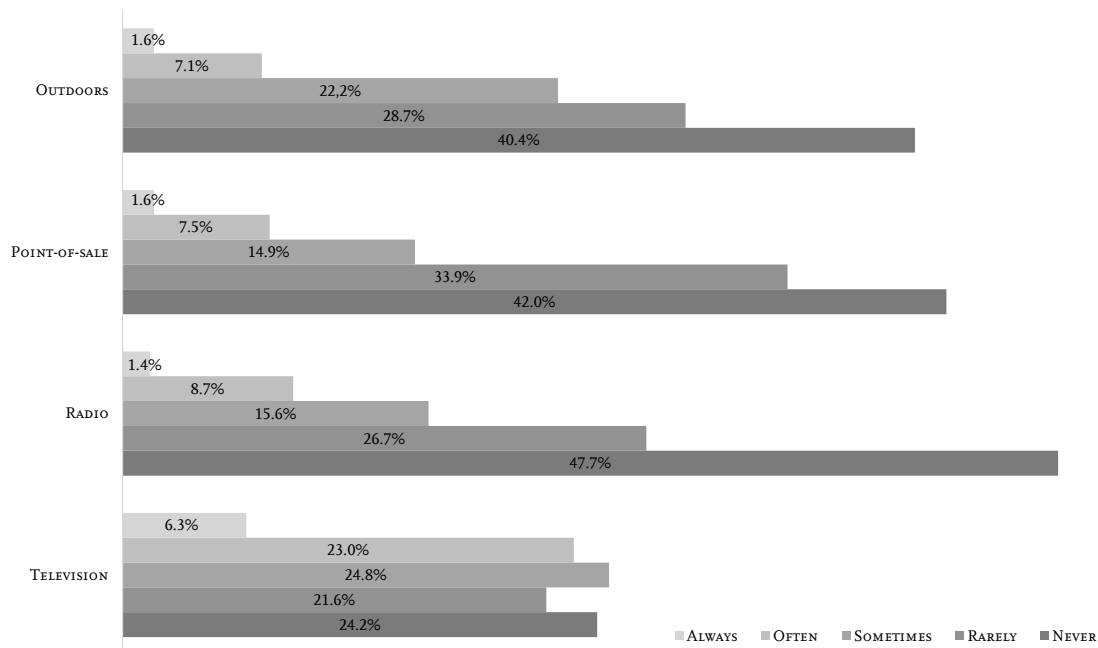


Figure 3. Perceived exposure to gambling ads: outdoors, point-of-sale, radio, and television

Excluding television, outdoor advertising is the most frequently noticed, with 59.6% of participants reporting exposure. This is closely followed by advertisements at points of sale (58.0%) and radio ads (52.3%). When looking specifically at participants who report higher levels of perceived exposure (combining the responses “sometimes”, “often”, and “always”), the figures are as follows: outdoors is reported most frequently at 30.9%, followed by radio at 25.7% and points of sale at 24.0%. If we further narrow the analysis to only the highest level of perceived exposure, “often” and “always”, although the differences between the percentages are small, the ranking changes. Radio leads with 10.1%, followed by points of sale at 9.1% and outdoor advertising at 8.7%.

Perceived exposure to television advertisements is notably higher, as confirmed by a statistical hypothesis test (Kruskal-Wallis test = 131.993, p -value = 2.01E-28). While some variations are observed in perceptions of exposure to radio, outdoor, and point-of-sale advertisements, Kruskal-Wallis’ multiple comparisons reveal that these differences are not statistically significant. This suggests there is no substantial evidence of significant differences in perceived exposure across these three media, with television being the exception.

Overall, gamblers tend to have a similar perception of their exposure to gambling advertisements on television. However, some variations are observed based on gender and age. Almost half of the participants (47.7%) do not perceive themselves as exposed to radio advertising, with this perception more pronounced among younger individuals (54.1%) than among those aged 25 or older (43.5%; Chi-square = 7.054, p -value = 0.070).

Perceived exposure to outdoor advertising varies significantly between male and female gamblers (Chi-square = 11.632, p -value = 0.009). A larger percentage of women (46.9%) report “never” feeling exposed to outdoor advertising compared to men (34.0%). Conversely, 11.6% of men report feeling “often” or “always” exposed, and 5.7% of women do.

Perceptions of exposure to advertising at the point of sale differ based on gender (Chi-square = 8.308, p -value = 0.040) and age (Chi-square = 6.490, p -value = 0.090). Among the 42.0% who report “never” being exposed, women represent a higher proportion (46.5%) than men (37.6%). Among the 33.9% who claim to be “sometimes” exposed, a significantly higher percentage, 40.5%, are men, and 29.8% are women. While there is no substantial gender disparity in the “often” or “always” response categories, differences emerge by age. Although only 9.1% of participants report feeling “often” or “always” exposed to advertising at points of sale, this perception is more common among participants over 25 years of age (11.4%) than younger ones aged 18–24 (5.6%).

5.4. EXPOSURE TO GAMBLING ADS BY SCRATCHCARD AND EUROMillIONS PLAYERS

When analysing players’ perceived exposure for each gambling modality separately, the differences in perceptions of advertising exposure become more nuanced. Scratchcard gamblers generally share similar perceptions of exposure to television, radio, point-of-sale, and outdoor advertising, with this perceived exposure not significantly varying across sociodemographic characteristics such as gender, age, education, occupation, marital status, or household size. This uniformity suggests that the advertising might be perceived as less targeted or uniformly distributed across different demographic groups.

In contrast, EuroMillions players express more varied opinions about their exposure to advertising. Perceived exposure of television gambling advertisements is significantly influenced by education level (Chi-square = 10.366, p -value = 0.016). Individuals with more than 12 years of schooling (41.3%) are the most likely to frequently perceive themselves as being exposed to this type of advertising. Perceived exposure to radio advertising is influenced by occupation (Chi-square = 15.607, p -value = 0.076), with 84.6% of unemployed individuals reporting “never” noticing such advertisements.

Gender also plays a significant role in how advertising is perceived at points of sale (Chi-square = 9.776, p -value = 0.021) and in outdoor formats (Chi-square = 14.286, p -value = 0.003). When comparing genders, female EuroMillions gamblers (47.1%) are more likely to report “never” feeling exposed to gambling advertisements at the point of sale, compared to male players (33.3%). However, more male players (14.5%) than female players (5.8%) report “often” or “always” feeling exposed. A similar pattern is observed with outdoor advertising: 46.2% of female gamblers report “never” feeling exposed, compared to 29.0% of male gamblers. Meanwhile, 15.2% of male gamblers and just 2.9% of female gamblers feel that they are “often” or “always” exposed to outdoor advertisements.

These findings underscore the nuanced role sociodemographic characteristics play in shaping individuals' awareness of gambling advertisements, with EuroMillions gamblers demonstrating a more segmented perception influenced by gender and education.

5.5. RELATION BETWEEN PERCEIVED ADVERTISING EXPOSURE AND GAMBLING FREQUENCY

When analysing the relationship between gambling frequency and perceived exposure to advertising, it was observed that Scratchcard players do not exhibit a significant correlation. However, for EuroMillions players, a weak association was found between gambling frequency and the perceptions of advertising exposure at points of sale (Spearman's $\rho = 0.142$, p -value = 0.006) and on the radio (Spearman's $\rho = 0.093$, p -value = 0.074). In both cases, higher perceived exposure to advertising is associated with more frequent play, and vice versa. Although this is a low-intensity relationship, it is significant.

6. DISCUSSION

The present study explored the relationship between perceived exposure to gambling advertising on television, radio, outdoor, and points of sale, and gambling behaviours among Portuguese young adults, focusing on two prominent and widely played gambling modalities: Scratchcards and EuroMillions. It also identified gamblers' profiles and how their gambling frequency relates to the types of advertising to which they feel most exposed.

6.1. GAMBLING BEHAVIOUR PATTERNS

Scratchcards emerged as the most popular gambling choice among young adults, particularly appealing to younger Portuguese individuals (aged 18–24, averaging 26 years old), single and employed, with women more prominent among frequent players and men dominating monthly play. In contrast, EuroMillions tends to attract slightly older participants, averaging 28 years old, with men being more frequent players, especially weekly, while women are more likely to report never playing. These findings align with Balsa et al. (2018) and Brochado et al. (2020), who observed similar demographic patterns in gambling preferences, emphasising the role of sociodemographic factors in shaping gambling habits.

Strategies aimed at reducing harm or promoting responsible gambling must reflect the distinct motivations, habits and media consumption patterns of these groups. For instance, campaigns targeting Scratchcard users should consider the appeal of habitual and easily accessible gambling, particularly among younger women, while EuroMillions-focused interventions might address structured play among older male gamblers.

Previous studies have shown that EuroMillions is the most popular gambling modality in Portugal, with 45.6% of the population participating, followed by Scratchcards at 36.8%, which have seen significant growth in recent years (Balsa et al., 2024). However,

our results reveal a slightly different distribution among participants who have previously engaged in these gambling modalities. Scratchcards emerged as the most frequently played modality, favoured by 79.1% of participants, with many playing every three months. While EuroMillions was less frequently played, it remained popular among 63.8% of participants, particularly older individuals.

Daily participation in both modalities was rare, suggesting that gambling behaviours in these cases are primarily occasional or recreational. These findings focus specifically on the younger generation, which appears to exhibit a distinct pattern compared to the Portuguese population. Additionally, these results align with a potential shift in traditional gambling patterns, as noted by Maurício and Rodrigues-Silva (2023), who observed the rising popularity of Scratchcards in Portugal and the slightly more sporadic engagement with EuroMillions.

6.2. PERCEIVED GAMBLING ADVERTISING EXPOSURE

Participants reported varied levels of perceived exposure to gambling advertisements across different traditional media. Television was the most frequently noticed advertising medium, with 75% of participants reporting some level of exposure. Outdoor advertising was the second most noticed (59.6%), followed closely by point-of-sale advertising (58.0%) and radio ads (52.3%). Notably, over 40% of participants did not perceive themselves as exposed to gambling advertisements at all, suggesting that advertising recall may vary significantly across individuals.

Additionally, we found that sociodemographic characteristics influenced perceptions of advertising exposure. Men reported higher exposure across all media types, while younger participants (18–24) perceived lower exposure to traditional media gambling ads, likely due to their increased consumption of digital media (Todor, 2016). These findings align with Syvertsen et al. (2022), who found that demographic characteristics influence advertising recall and perception.

6.3. PERCEIVED GAMBLING ADVERTISING EXPOSURE AND GAMBLING BEHAVIOUR

Although the overall relationship between advertising exposure and gambling frequency was weak, associations were observed for EuroMillions players. A weak but significant correlation was found between EuroMillions gambling frequency and perceived exposure to radio and point-of-sale advertisements, suggesting that these media may contribute to sustaining gambling participation. The association between radio advertising and EuroMillions participation may stem from the nature of lottery advertising, which often relies on auditory elements such as jingles and repeated messaging, making these ads more memorable (Kristiansen & Severin-Nielsen, 2022). Similarly, point-of-sale advertising may reinforce gambling behaviour by triggering impulsive participation at the moment of purchase (Syvertsen et al., 2022). These findings suggest that advertising may act as a reinforcement mechanism rather than a direct trigger for gambling

participation. In contrast, the impact of television and outdoor advertising on gambling frequency appears to be limited in this context. This may be explained by the fact that these media typically involve passive consumption and delayed behavioural responses, lacking the immediacy of action that might influence habitual play.

Interestingly, no significant link was found between perceived advertising exposure and Scratchcard gambling frequency. This result challenges the assumption that traditional media gambling ads directly influence participation in all gambling modalities. One possible explanation is that Scratchcard gambling behaviour tends to be more frequent and can be influenced by accessibility rather than advertising exposure. Since Scratchcards are widely available at retail locations, their purchase may be driven more by situational factors (e.g., convenience, routine) than by advertising exposure. Another possibility is that social and peer influence play a stronger role in Scratchcard gambling than media exposure. Previous studies (Maurício & Rodrigues-Silva, 2023) suggest that the social environment surrounding Scratchcard gambling, such as friends or family engaging in the activity, may have a greater impact on participation than traditional advertising channels. Future research should investigate the roles of social dynamics, environmental cues, and retail marketing strategies in shaping Scratchcard gambling behaviours, as these factors may provide better insights for designing effective communication strategies.

The findings of this study carry significant implications for both communication research and gambling policy. The observed differences in advertising exposure and gambling behaviours suggest that communication strategies should be tailored to different demographic segments, as the effectiveness of traditional media advertising varies across age and gender groups. The association between EuroMillions players' gambling frequency and their perception of advertising exposure at points of sale and on the radio suggests that these traditional channels may influence gambling behaviour within this group. At the same time, this is not found in television or outdoor advertising. For marketers, this highlights the need to evaluate the effectiveness of these media for this specific audience and to consider reallocating efforts toward a broader strategy that does not focus solely on digital or social media, but also on traditional media, such as radio and point-of-sale advertising.

7. CONCLUSION

Scratchcards emerged as the most popular gambling option among young adults in Portugal, particularly among younger participants and women. In contrast, EuroMillions tended to appeal to slightly older participants and was more commonly preferred by men. These differences suggest that the two products may be associated with distinct patterns of engagement, motivations, perceptions of risk, and behavioural routines. Although a more detailed psychological comparison between Scratchcards and EuroMillions should be examined in future research.

This study highlights how different forms of traditional gambling advertising are associated with gambling behaviours among Portuguese young adults. Television was identified as the most prominent and widely perceived source of gambling-related messaging. Point-of-sale and radio advertising showed weak but statistically significant associations with EuroMillions participation. However, no significant association was found between advertising exposure and the frequency of Scratchcard gambling. This suggests that different gambling behaviours may be shaped not only by media influence but also by structural factors such as accessibility, price, and habitual use.

While digital platforms dominate contemporary media discourse, the findings emphasise that conventional media remain relevant in influencing consumer decisions among younger audiences. From a communication perspective, the results reinforce the need to critically evaluate the ethical dimensions and regulatory implications of gambling-related messaging across different media ecosystems.

Although this study provides valuable evidence on young Portuguese adults, its findings cannot be generalised to the wider population or to other cultural contexts. Nevertheless, they highlight the importance of extending similar analyses to older age groups, particularly adults over 50, who remain substantial consumers of traditional media such as television and radio, which are a significant part of the target of Jogos Santa Casa. A more comprehensive understanding of the population-level effects of gambling advertising would support the development of more nuanced, age-sensitive regulatory and public health strategies.

Furthermore, reliance on self-reported perceptions of advertising exposure introduces the possibility of memory bias or subjectivity in responses. Future research should expand on these findings, incorporating, for instance, longitudinal designs. Additional interdisciplinary studies would also be valuable in mapping the intersections between communication practices, media literacy, psychological mechanisms, and behavioural regulation in the context of gaming and other potentially addictive behaviours.

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