

How alcohol and gambling companies target people most at risk with marketing for addictive products on Facebook

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The Centre for Digital Cultures & Societies (DCS) is a Centre within the Faculty of Humanities, Arts and Social Sciences at The University of Queensland. Researchers at DCS address questions of power and ethics, industrial transformation, and the relationships between digital technologies and our cultural practices and expressions. Our researchers come from across the humanities, arts, and social sciences to envision digital cultures that enrich our relationships with one another, facilitate social cohesion, foster cultural understanding and belonging, and create societies that are fair and just.



The Foundation for Alcohol Research and Education (FARE) is a not-for-profit organisation with a vision for an Australia free from alcohol harms – where communities are healthy and well and where laws, policies and programs are fair, equitable and just. Working with local communities, people with lived experience of alcohol harm, values-aligned organisations, health professionals, researchers and governments across the nation, we are improving the health and wellbeing of everyone in Australia.



The Alliance for Gambling Reform is a national peak body which represents a collaboration of organisations with a shared concern about the harmful aspects of gambling and its normalisation in Australian culture. We are a registered health promotion charity. The Alliance supports public policy and regulatory regimes that make Australia a safer, healthier, and more equitable society by reducing the level of gambling harm.



The Victorian Health Promotion Foundation (VicHealth) is a pioneer in health promotion – the process of enabling people to increase control over and improve their health. Our primary focus is promoting good health and preventing chronic disease. Our work includes creating and funding world-class interventions, conducting vital research to advance Victoria's population health, producing and supporting public campaigns to promote a healthier Victoria, and providing transformational expertise and insights to government.

Citation Information

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Key Findings

Facebook tags people at risk of harm and trying to reduce their use of alcohol and gambling as interested in these addictive products to target them with advertising.

- Together, 10 people in the study were tagged by Facebook with 89 different alcohol and gambling related advertising interests.
- One person was tagged with as many as 25 alcohol related advertising interests while another was tagged with as many as 41 gambling related advertising interests.

Alcohol and gambling companies uploaded data on people at risk of harm and trying to reduce their use of alcohol or gambling to fuel targeted marketing on Facebook.

- A total of 201 alcohol and 63 gambling companies uploaded data on 10 people in the study.
- One woman, who was trying to reduce her current high-risk alcohol use, had 123 alcohol companies upload data about her to target her with marketing. Another woman, who has been trying over the past 10 years to reduce her alcohol use, had 95 alcohol companies upload data about her.
- One man, who was currently engaging in high-risk gambling, had 52 gambling companies upload data about him to target him with advertising.

People who are trying to reduce their alcohol use or gambling are constantly faced with advertisements for these addictive products on social media.

- For one woman who was trying to reduce her current high-risk alcohol use, a quarter of the ads captured from her Facebook were for alcohol.
- For one man who was experiencing gambling harm and has been trying to reduce his gambling over the past year, almost two thirds of the ads captured from his Facebook were for gambling and he often saw 15 or more gambling ads in a row.

People who are trying to reduce their alcohol use or gambling don't want to be profiled and targeted for alcohol and gambling and can find it impossible to escape this advertising when they are on social media.

The more we know about someone, the more we can control their behaviour... but you know, give us a break. Give the people that are vulnerable the chance to not be taken advantage of. – Chris

There's no option on Facebook to say I don't want to see alcohol or gambling ads. You report what you can, but then it still just keeps appearing. – Miles

Introduction

Our phones connect us to friends and family, to news and entertainment, to shopping and banking. As we scroll, search and swipe each day, a vast number of companies collect and exchange information about us. This information fuels automated advertising models designed by digital platforms to increase their profits by targeting us with advertising when we are online. Digital platforms hide the data that they collect about us and only make the ads we see visible for a moment in time.

Through digital platforms and their own data collection and sharing practices, companies selling and advertising harmful and addictive products like alcohol and gambling ‘tune in’ to our individual behaviours, preferences and affinities to target us with ads.

Alcohol and gambling companies know who use their addictive products in the highest amounts and can target these people most at-risk of harm with digital advertising. This propensity to target the people who are at the highest risk of harm underpins the current business model of alcohol and gambling companies, who sell the vast proportion of their harmful and addictive products to the people who use these products in the most harmful amounts (Cook et al. 2022). This can make it very hard for the people trying to reduce alcohol use or gambling to escape the clutches of these companies.

By targeting people with advertising for their harmful and addictive products online, alcohol and gambling companies are exacerbating the significant harm these products cause to Australians. Alcohol use is causally linked to over 200 disease and injury conditions (Rehm et al. 2017), with nearly 6,000 people losing their lives and more than 144,000 people hospitalised from use of alcoholic products each year (Lensvelt et al. 2018). Gambling companies take \$25 billion each year from Australians (AIHW 2023), contributing to significant social, psychological, health, legal and financial harm (De Castella et al. 2011).

Researchers, civil society and regulators face significant challenges to systematically monitor digital advertising as companies provide little transparency over their digital marketing practices, making it challenging to hold companies accountable for harmful marketing practices (Carah et al. 2024). Existing social media ad libraries offer limited oversight in that they do not include information about the intricacies of how people are targeted with ads, the audiences that have viewed ads, and do not archive ads beyond the time they are actively running on the platform (Hawker et al. 2022).

In this study we piloted a novel digital data donation method that enables people to collect the ads that are targeted at them on Facebook via a mobile app and to share the data that platforms create about them. We aimed to explore the experiences of Australians who had experienced or who were at risk of harm from alcohol and gambling products, to investigate how digital advertising of addictive products contributes to harm.

Method

We purposefully recruited 11 Australians who had experienced or who were at risk of harm from alcohol and gambling products. This included people with current high-risk alcohol use (more than 10 standard drinks per week or four standard drinks on a single occasion), current high-risk gambling (experiencing gambling harm or affected by gambling issues), currently trying to reduce their alcohol use or gambling, and people who self-identified as recovering from alcohol use disorder or alcohol dependency or recovering from gambling issues or gambling harm. This was assessed via a pre-study screening survey.

To observe personalised and ephemeral alcohol and gambling advertising on the Meta platform Facebook, we piloted a custom-built Android mobile application called the Australian Ad Observatory Mobile Toolkit developed by the ARC Centre of Excellence for Automated Decision-Making and Society. Participants were asked to collect ads for a one-week period, by ensuring the app was switched on while using Facebook to record digital advertising via their device's screen. Recordings are stored on the device and processed by the app, which uses machine vision to identify when a Facebook ad has appeared on the screen and crop the image to ensure no personal information is captured. Ads appear in the dashboard within the app and are then uploaded to a secure research database.

Participants were also asked to provide a list of Facebook *ad interests* and a *list of advertisers* who had targeted their profile. *Ad interests* describe topics that the Facebook advertising algorithm tags a person's profile with to use in targeting them with advertising on Facebook. They can include general themes such as wine, cooking or home improvement as well as specific brands. The *list of advertisers* consists of companies who have shared information about a person with Facebook to use in targeting them with advertising. This can include information collected and shared from a person's web browsing (e.g., when you have visited a company's website or used their app), as well as mailing lists which can include people's personal information such as their phone number and email address.

Following data donation, semi-structured interviews were conducted with participants via Zoom lasting between 45 and 90 minutes. All data collection occurred between May and October 2024. All interviews were transcribed and de-identified.

Results

Eleven research participants who had experienced or were at risk of harm from alcohol or gambling products were recruited, ten of whom agreed to provide advertising data downloaded from their Facebook account. Of the total number of unique ad interests Facebook used to target ten participants (N=3,812), 48 were alcohol-related and 41 were gambling-related. Of the total number of advertisers uploading data to target participants (N=34,346), 201 were alcohol-related advertisers and 63 were gambling-related advertisers (Table 1).

Table 1. Summary of Facebook advertising data

	TOTAL	AVERAGE PER PARTICIPANT
Total number of ad interests	3,812	592
Alcohol-related ad interests	48	12
Gambling-related ad interests	41	6
Total number of advertisers	34,346	4,975
Alcohol-related advertisers	201	37
Gambling-related advertisers	63	12

Five alcohol advertisers and five gambling advertisers were found to have targeted at least half of the ten participants who provided advertiser lists (Table 2).

When considering all advertisers, the most common advertisers to target participants were predominately marketing and media companies such as PHD, Havas Media, OMD, and Nielsen Marketing Cloud. These companies buy media space, including Meta digital advertising, on behalf of advertisers, including alcohol and gambling companies. However, we are unable to tell where these companies are undertaking targeting activities on behalf of alcohol and gambling companies specifically, and therefore the true extent of alcohol and gambling targeting might be underrepresented.

Table 2. The most common alcohol and gambling advertisers uploading data to targeted participants

ALCOHOL ADVERTISERS TARGETING THE MOST PARTICIPANTS		GAMBLING ADVERTISERS TARGETING THE MOST PARTICIPANTS	
BWS	8	The Lott	10
XXXX	7	TAB	7
Guinness	6	The Roar Racing	6
Penfolds	5	PointsBet	5
Chandon Australia	5	C3 Casinos	5

Participants collected a total of 1091 ads from their Facebook feeds.

Mariana

→ **Woman in her early 30s, trying to reduce high-risk alcohol use, lives in Queensland**

Mariana is in her 30s and enjoys playing and watching sport. When she moved to Australia four years ago, she found drinking at the pub to be a quintessential part of Australian culture. However, reflecting that her drinking was accumulating across the week, she decided to take steps to reduce her alcohol use by avoiding drinking during the week and sticking to one night on the weekend:

I was bored and I would go home or to the pub and have at least one beer. Monday to Friday. Then Saturday's a big night. Sunday, hangover. After that, that's when I made the switch. It's probably since a year ago that I've been trying to cut out alcohol. I did 3 months cutting down to one beer a week and then I saw an improvement in my life.

Of the 40 Facebook ads captured for Mariana, a quarter of the ads were related to alcohol. These ads were mostly for pubs, alcohol brand merchandise, and for cultural, music and sporting events where Mariana drank alcohol, or associated with alcohol use. This advertising was familiar to Mariana.

Mariana noticed alcohol advertising in her feed for brands like Canadian Club and Bundaberg Rum, which often give away limited edition merch or hold promotions like 'spin a wheel' for a prize.

Reflecting on digital alcohol advertising, she noted that alcohol placement could be subtle within ads:

They hide it with merch. They hide it with events. The approach is the same. You go there, you enjoy drinking. You go to a social event, you end up drinking. There's no way you go to Felons [brewery] and you don't drink. So they're mixing it all together, sports, events, socialising and alcohol. They target you very good and then you fall for it.

Mariana especially noticed ads for alcohol brand merchandise and would click on these ads and sometimes buy the product. She reflected that the merch made her 'feel cool being part of the brand':

Let's say I'm going to the park and I'm wearing my XXXX hat. I feel like, oh yeah, I look like a true Queenslander, you know what I mean? But if I will go to the Australian Open and I'm drinking Aperol Spritz, I'm like yeah, I'm part of this. Like, I fit in.

There were other ways that Mariana noticed alcohol 'woven in' to the ads she saw on Facebook. For instance, discussing an ad for Doordash in her collection, she recalled that she had been seeing ads where you could get a discount if you added alcohol to food orders, because they'd just started delivering alcohol.

Mariana was alarmed to see that she had 25 alcohol-related ad interests associated with her Facebook account. Not only a type of alcohol like 'rum' but also specific brands like 'Bundaberg Rum', alongside many other brands and alcohol themes. It made her reflect on how much alcohol advertising she was seeing and how her account is targeted. She was also surprised by how many advertisers were using her personal contact information to target her account.

Mariana desired more autonomy for people to control their Facebook accounts and ad interests. While she was targeted with advertising for mental health awareness, Dry July and alcohol interventions, Mariana would like to see more pro-social and health promotion advertising in her feed.

I get ads from the government trying to push people, if you have any problems to approach the phone lines for support and they give you guidelines as well. But are those equal to amount to the alcohol ads we get? I don't think so.

Bundaberg Rum
Sponsored

Bundaberg Rum We can think of 24 reasons to have the gang over on game day. Hit the link for a chance to win a fridge-filler. [Apply now](#)

Felons Barrel Hall
Sponsored

Pass the Popcorn! We're screening big screen classics every Tuesday night at Felons Barrel Hall Cinema Sessions (Free Entry)! 🍿

Kick back in a bean bag & enjoy frosty beers direct to your seat! Swipe through to view the full season calendar or hit the link below to book! Walk ins welcome.

felonsbrewingco.com.au
Every Tuesday [Learn more](#)

Tagged with
25 alcohol advertising interests

- Drinking
- Beer
- Brewing
- Bundaberg Rum
- Rum
- Wine

Data uploaded for targeting by
123 alcohol companies

- Felons Barrel Hall
- Canadian Club Aus
- XXXX
- BWS
- Liquor Marketing Group

Ebony

→ **Woman in her late 20s, trying to reduce high-risk alcohol use, lives in Queensland**

Ebony likes to travel and socialise with friends at bars and nightclubs. As part of her job, she often attends client functions and meetings where drinking alcohol is the norm. She had started to reduce the overall amount she drank because she knew that staying out late drinking impacted her disposition and performance at work.

Ebony captured 112 Facebook ads during her period of data collection. One in every ten ads Ebony saw was for alcohol. Ebony was a wine drinker and mentioned having a subscription to Good Pair Days. Wine was also a prominent theme in the ad interests and the advertisers that targeted her account, such as Good Pair Days, Vinomofu, Molly Dooker Wines and local wine bars.

Along with alcohol ads, Ebony saw ads for food, travel and lifestyle advertisers which she felt fit with her interests and hobbies. However, throughout the study Ebony began noticing that alcohol often appeared in these ads. Ads for restaurants would show wine, tourism marketing promoted bars, and live music venues depicted people drinking alcohol during the show:

There's a pretty big portion of ads that are targeted to me about alcohol under the guise of a social event or this cool restaurant has opened. It's a food thing but all the pictures are of a bottle of wine at the dining table... It's advertising a restaurant. But all I'm seeing is like photos of booze or like that sort of thing. So I think that it's obviously targeting me a lot more than what I realized.

Ebony also began to notice alcohol ads more during the study and felt that most people probably were “seeing them without really paying attention” which contributes to the overall harm of alcohol advertising by normalising alcohol products as part of everyday life. She felt that the ubiquity of alcohol was one of the major barriers to reducing her drinking:

The more normalized it is, the more you're just not going to say no. Because why would you? Why wouldn't you just go along with what's there?

Ebony felt Facebook had an obligation to offer an option to opt-out of specific ad categories. For Ebony, the current opt-out features were insufficient because there is no accountability for the opt-out request to be honoured by Facebook:

You can hide this ad now, and you can write the reason of it's annoying. It's repetitive. I don't want to see this, but they're not forced to act on it. It'll sneak back in a week.

Government action to regulate alcohol advertising was critical to achieve harm reduction Ebony thought. She felt that increased transparency and explainability around platforms' data collection and sharing practices should be required, but also felt that social media platforms would not develop transparency measures “out of the goodness of their own heart”.

VisitSingapore
May 14

VisitSingapore Happy hour meets golden hour ✨
Looking for where to drink in Singapore? ••

Vinomofo
Sponsored

Lucky Dip - Reds edition
Treat yourself to 12 wicked reds for... See more

Lucky Dip

1 in 100 score a Penfolds Grange

12 Pk

\$149.00

vinomofo.com
Get it while it lasts

Learn more

Wine Selectors
Sponsored

Win tickets to the Good Food & Wine Show Brisbane!... See more

WIN

2 x tickets to **GOOD FOOD & WINE SHOW**

FORM
Enter now for a chance to win!

Learn more

Poppies
Sponsored

Welcome to Poppies, where our bar and restaurant is right by the river's edge... See more

Book now

Tagged with
9 alcohol advertising interests

- Bars
- Martini
- Wine
- Microbrewery
- Mixed drink
- Pub

Data uploaded for targeting by
40 alcohol companies

- Good Pair Days
- Vinomofo
- Penfolds
- Crooked River Winery
- Cellerbrations

Megan

→ **Woman in her 40s, current high-risk alcohol use, lives in Queensland**

Megan spends most of her free time looking after her horses. She described regularly having a few glasses of wine in the evening, as well as drinking a bit more on the weekend.

Megan's feeds on Facebook, Instagram and TikTok have been mostly taken over by horse videos, posts and ads. However, she recalled wine and wine-related products regularly appearing in her digital advertising:

I see wine glasses all the time. I see you know, all those subscription boxes that they want you to subscribe to that come like once a month. Those always pop up in my feed.

Megan felt the alcohol advertising that she saw while scrolling on Facebook made her “want to have a glass of wine.” She mentioned that she had purchased a few wine subscriptions in the past for the promotional, introductory offer but would cancel the subscription after the first shipment.

Megan captured 28 Facebook ads during her period of data collection which mostly showed horse supplies, but Laithwaites Wine appeared repeatedly.

The ad interests and list of advertisers attached to Megan's Facebook account also reflected her frequent consumption of wine. 13 of the 24 alcohol-related ad interests she was tagged with were oriented around wine, such as vineyard, Australian wine, wine festival and wine tasting. She had 95 alcohol-related advertisers targeting her account, including bars, wine companies, and alcohol retailers. When reflecting on the ad interests assembled about her, she felt that Facebook profiled her as an “alcoholic vegetarian”. She felt this resonated with her a little bit.

Whether Facebook shows ads for alcohol, gambling or other concerning themes, Megan recognised that the platform will target ads and posts that are anticipated to appeal to an individual. This algorithmic targeting has the potential to keep people in harmful patterns of behaviour.

What you look at determines what [Facebook will] show you, so you'll never get the full picture....

Megan felt that Facebook has an obligation to ensure ads for products that are known to be harmful are limited, but holding the platform accountable to this obligation would require policy reform. However, the underlying objective was simple to Megan:

Make it easier for people who are actively trying to change.

Laithwaites Aus
Sponsored

GOLDEN WINNERS

15 GOLD MEDAL WINES FOR JUST \$127.50

Laithwaites Aus Did someone say \$8.50 a bottle? You heard it right. Don't miss out on 15 Gold Medal Winning wines for just \$127.50 plus FREE delivery. This offer won't last long!

Get offer

Tagged with
24 alcohol advertising interests



- Drinking
- Wine
- Wine festival
- Wine tasting
- Cocktail
- Brewing

Data uploaded for targeting by
95 alcohol companies



- Vinomofo
- Penfolds
- The Australian Wine
- Good Pair Days
- BWS

Theodore

→ **Man in his 30s, current high-risk alcohol use, lives in Queensland**

Theodore is Polish and came to Australia less than a year ago. He had started drinking on his eighteenth birthday and has had heavy alcohol use since then. He was surprised that alcohol was legal in public spaces in Australia and surprised that gambling was so visible in Australian culture. Public advertising, like digital advertising, was persuasive according to Theodore who felt it should be prohibited:

I believe ads, especially from alcohol or even gambling, shouldn't be allowed in public spaces.

Theodore was interested in sports such as cycling and Formula one. He had considered gambling on Formula one in the past but couldn't be bothered creating an account and was worried that it was a slippery slope and may lead to more frequent gambling.

Theodore captured 256 Facebook ads during his period of data collection. These included ads for fast food, groceries, health supplements, homewares, luxury brands along with alcohol and gambling.

Theodore recounted how Dan Murphy's had recently started targeting him with advertising soon after setting up an account and felt that targeting is unfair and nonconsensual:

They should not do that, like I gave them my data so they can like use it only for things that I want to do with them. Like I understand they can send me an e-mail with deals, but yeah, selling or giving this data to another company [such as Facebook] doesn't seem right.

Targeted advertising felt like an invasion of Theodore's private space:

It doesn't seem fair because yeah, I create this account with the strict purpose of buying things or saving them to my cart on the website. And why do they use the data for other purposes like advertising. They should not do that.

Theodore is surprised to receive advertising from big alcohol and gambling companies such as BWS and TAB which he has no relationship to yet receives a constant flow of targeted ads from. BWS and Dan Murphy's are both brands of Endeavour Group. He also receives ads for more niche alcohol companies he had no relationship to.

Dan Murphy's
Sponsored

For seasonal sipping, don't miss th... see more

SEASONAL SIPPING (\$15 AND UNDER)

Shop now

BWS
Sponsored

Big Deals on your Footy Fav... see more

SCORE A GREAT DEAL

Shop now

Patrón Tequila
Sponsored

Patrón Tequila. Made by hand. Craft... see more

PATRÓN TEQUILA

PointsBet
Sponsored

Big Deals on your Footy Fav... see more

FOR THE BEST MARKET \$1.25 ISAAC HEENEY TO KICK IN GOALS TO KICK IN GOALS

Shop now

TAB
Sponsored

THE BEST TIME IN SPORT

TAB It's the Best Time in Sport, with the Best App in Sport

Learn more

Naked Wines
Sponsored

World-class wines. Tailored to your tastebuds.

\$215 \$79.99 for 12 wines

Naked Wines Drink wines you thought were out of your league. It's easier than you might think... 🍷

Learn more

Jack Daniel's
Sponsored

Make it Count with Jack

JACK DANIEL'S

PLEASE DRINK RESPONSIBLY

Shop now

Tagged with **2 alcohol and gambling advertising interests**

- Happy hour
- Slot machine

Data uploaded for targeting by **6 alcohol and 4 gambling companies**

- BWS
- The Lott
- Woodford Reserve
- InstantCasino

Lorenzo

→ **Man in his late 20s, current high-risk use of alcohol, lives in Northern Territory**

Lorenzo is in his late 20s and loves adventure sports such as surfing, rafting, paragliding. He lives in the Northern Territory for his job where he says the dominate social activities of his mates are going to the casino and hanging out drinking. Lorenzo described typically drinking with his friends several times per week and drinking more on a big night out or at a party. He says that he has decreased his alcohol use over the past few years compared to when he was younger and “really overdoing it [drinking excessively]”. Lorenzo felt that alcohol and gambling are pervasive in Australian culture.

Lorenzo captured 76 Facebook ads during his period of data collection. Along with gambling and alcohol ads, Lorenzo also saw ads for a range of food and outdoor equipment and recreational advertisers. He was targeted with alcohol ads for Dan Murphy’s and Jack Daniels, as well as gambling ads for Neds and PointsBet.

Lorenzo had 66 alcohol and 9 gambling companies upload data about him to the Facebook advertising algorithm.

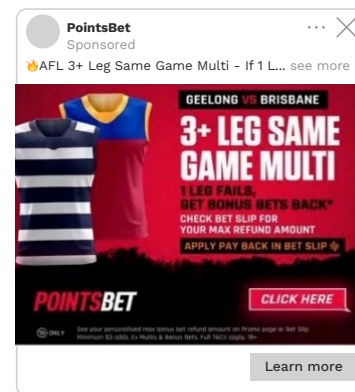
Lorenzo felt that digital advertising for alcohol and gambling was targeted at him based on his generic demographic information:

I’ll just assume that because sports betting seems to be such a huge part of Australian culture that it’s a huge part of social media advertising campaigns as well... I assume I’m in the prime demographic.

However, he reflected that the targeting practices did seem personalised once he looked closely at a sequence of four ads that appeared in ten minutes on a Friday night:

Dan Murphy’s, KFC, and sports betting goes together. Hanging out with the boys getting some KFC because you couldn’t be bothered cooking and want some fast food and then having some drinks as well. This is like a Friday night. You’re 20 to 30 years old, and you have nothing better to do. Do some sports betting, get some KFC, go to Dan Murphy’s and get some drinks.

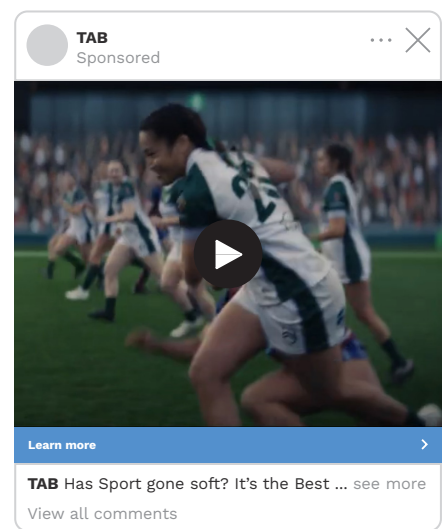
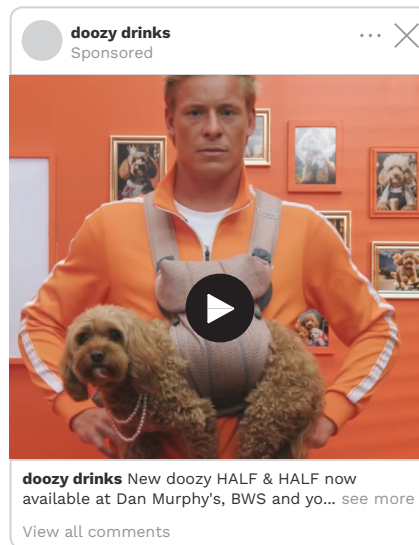
The four ads for alcohol, gambling and fast food both reflected and could shape a Friday night with friends. For Lorenzo, the ‘Friday night’ narrative illustrated how advertising “subconsciously” influences his behaviour rather than more explicitly prompting a purchase. Although Lorenzo thought that each unique alcohol or gambling ad might not be enough to convince him to buy the specific product, he felt that the continual exposure to advertising ‘subconsciously’ impacted his behaviour.



Lorenzo was aware of the large amount of personal information and data that Facebook compiled about him, from his Google searches, groups he had joined and people he followed. However, he was not previously familiar with Facebook’s features to access this data such as the Ad Preferences. Lorenzo felt that this data should be easily accessible to all users, but was sceptical about the reliability of the information that Facebook offered:

We have some information [about targeting], but I probably wouldn’t trust them... I assume I wouldn’t get as far with finding out what I wanted to know with [Facebook themselves]. I thought that they would frame it in a [certain] way or hide it on Facebook. They would make it hard to find or would be disingenuous.

When it comes to alcohol and gambling advertising, Lorenzo felt people should be able to control their exposure. This included being able to opt-out of certain kinds of advertising like alcohol or gambling and accessing the data that Facebook compiles about people.



Tagged with **6 alcohol and gambling advertising interests**

- Wine
- Nightclubs
- Gambling
- Pub
- Horse racing

Data uploaded for targeting by **66 alcohol and 9 gambling companies**

- BWS
- Canadian Club Aus
- Guinness
- Jimmy Brings
- Liquor Marketing Group
- The Lott
- TAB

Miles

→ **Man in his late 30s, >5 years recovering from alcohol use disorder, lives in Queensland**

Miles has been recovering from alcohol use disorder for over 5 years. He has a strong conviction that alcohol and gambling advertising is harmful and “should be treated the same as cigarettes and it should be banned”.

Miles identified as someone who is “susceptible to becoming addicted” and when he drank alcohol it would always be to extreme levels: “I’d absolutely wipe myself off the face of the earth and do incredibly stupid things”. Miles recalls the first time he met someone who did not drink in his 20s which caused him to realise “I’d never actually thought I don’t have to do this”.

Miles captured 33 Facebook ads during his period of data collection. These included ads for holidays in Queensland, film festivals, tiny homes, real estate and alcohol and gambling. He also had 1 alcohol company and 1 gambling company upload data about him to Facebook.

Miles was very concerned about the role of alcohol and gambling in Australian culture and described how people are very unaccustomed and uncomfortable with non-drinkers: “people trying to give me soft drink in a wine glass. I’m not like a child... people didn’t know how to handle it”. He felt he did have to try to fit in in with other men in social setting sometimes but was very strict about drinking zero (not low) alcohol products.

Miles described how he hated the way that digital advertising for alcohol and gambling was inescapable and normalised in all aspects of social and digital life:

I don’t want to go everywhere and have this stuff shoved in my face like it’s on bus stops. It’s on billboards. It’s like on my phone and there’s no option on Facebook to say I don’t want to see alcohol or gambling ads. You report what you can, but then it still just keeps appearing.

Miles believed that the proportion of advertising (including advertising of harmful products) on Facebook Marketplace was particularly high, and more ads were served at nighttime.

For Miles scratchies gave a “rush”, poker machines are “so bloody addictive” and sports betting is “particularly pervasive”. Yet given digital gambling was less visible, Miles felt it was more dangerous and easier. He felt that gambling advertising was cumulative, seeing it in many places it became more and more tempting, and he would imagine buying a nice house if he won.

Miles was particularly concerned by promotions of alcohol associated with “bottomless” events or deals of “buy one get one free” both of which he had first-hand accounts of regretful binge drinking experiences. He remembered being at university:

There was a sale to buy 2 bottles of wine, get one free. So I drank 3 bottles of wine and it was the most horrendous decision. Yeah, it just encourages, the consumption of more alcohol.

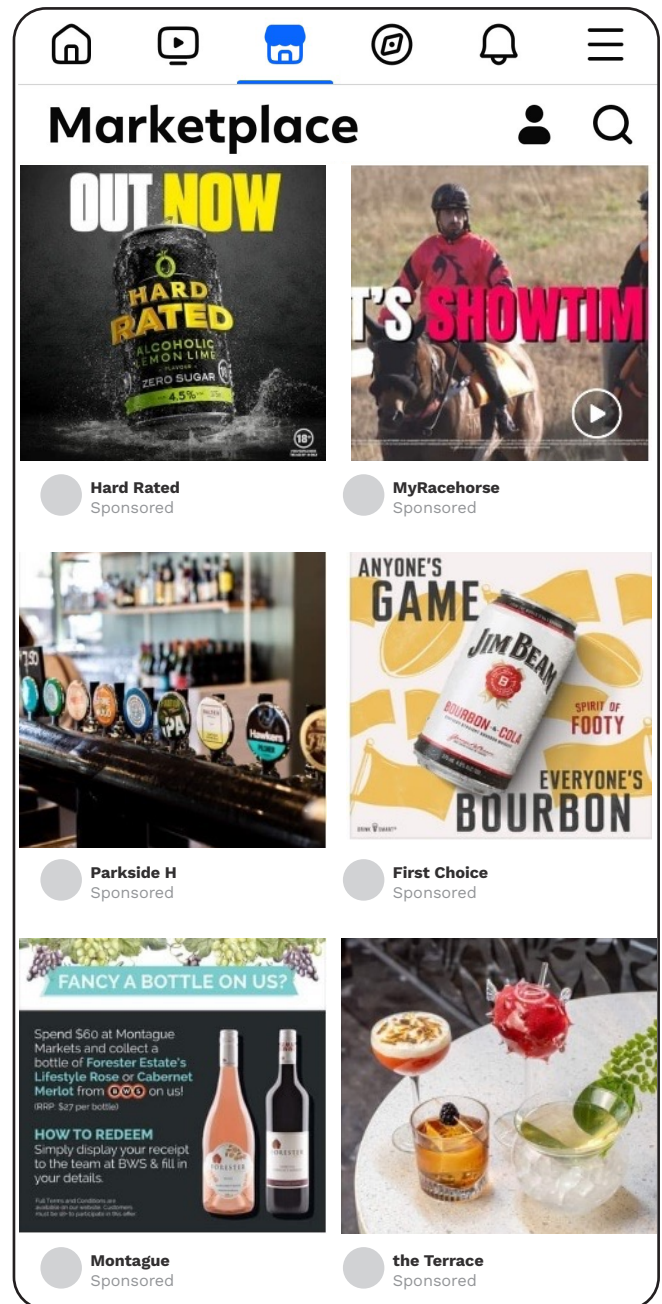
Alcohol was infused in advertising for a range of different products that Miles was targeted with, from restaurants to events. He was also disturbed by the positioning of harmful products like alcohol beside healthy products (e.g. free-range eggs) that functioned to normalise harmful commodities.

Miles felt that alcohol, gambling and sports practices were closely intertwined “it says Melbourne Cup, but then it just shows a bunch of dudes in a bar like, it definitely pushes on that association.”

Miles was infuriated by the lack of control he had over advertising “I don’t have the power to turn it off”. Despite constantly reporting ads, this made little difference, which he viewed as dangerous for vulnerable groups:

There are people with much bigger alcohol problems than I and it’s like they don’t have the opportunity to turn it off, which makes me feel frustrated... if it’s something specifically advertising alcohol then it’s like I don’t want it. I just don’t want to see it.

Miles previously reported billboard advertising for alcohol to local councils especially in areas near schools and wishes there were more effective mechanisms for reporting digital advertising.



Kate

→ **Woman in her 30s, trying to reduce high-risk alcohol use (for five months), and trying to reduce gambling (for two months), lives in Victoria**

Kate is a stay-at-home mum who drinks alcohol at home regularly. She described her drinking habits as a routine she had had 'for a long time'. Kate would regularly order alcohol on food delivery apps such as Menulog or Doordash for delivery and estimated that 70% of her food orders would include alcohol because of the deals and discounts offered.

In terms of gambling, Kate used to regularly use poker machines at pubs but went out to gamble less since having kids, at which time she switched to gambling via apps and websites. The feeling of constantly being pulled to check sports scores and gambling apps for Kate signified to herself that her betting was out of control.

In 2023, Kate enrolled in the BetStop self-exclusion register where gambling companies must stop selling products to people that have enrolled in the program. Kate said that after the six-month exclusion period passed, she decided to only gamble around major events like the Melbourne Cup. Kate recalled that gambling ads on social media platforms like Facebook decreased, but were still present during the exclusion, and at the time of her interview stated that while ads had not returned to the same extent as previously, they were still present.

For the study, Kate captured 60 Facebook ads. Alcohol and gambling ads were present, but many of these ads were for businesses and activities that she was looking for, especially things to do during the school holidays while the kids were at home. Kate reflected that TikTok seemed to have more gambling related ads than Facebook, and she noticed ads for the Dabble gambling app specifically.

Kate was targeted by 20 alcohol advertisers and 13 gambling advertisers. Kate was surprised by some of the brands on the list because they did not always reflect her behaviours and preferences. For example, she is not a wine drinker, but Jacob's Creek had included her information in a targeting list.

Kate recognised how digital advertising for gambling and alcohol could contribute to harm, especially if ads were clicked on or engaged with:

The more you're interacting with them, the more [ads] you're going to get. And of course, if you do have a problem with alcohol or gambling, it is going to become a big issue. It's going to be, you know, never leaving your mind sort of thing. It's all you're going to be seeing as you're scrolling.

Kate felt it should be possible to toggle off alcohol and gambling ads on Facebook, although she also notes that it shouldn't be left to the individual to turn it off. She feels companies should monitor and put restrictions on individuals with high consumption and have a duty of care towards daily users:

If the [companies] check my history they'd be able to see that I'm buying so much alcohol. I feel like they should be checking every 6 months, you know, 'Do you want to put a limit?' ... They can see everything that you're purchasing. They can see how many times I'm purchasing alcohol per week. There should be definitely measures in place to check up on people that are drinking every day.

Bottlemart
Sponsored

Get \$20 off click & collect all weekend... see more

CLICK & COLLECT

\$20 OFF

Bottlemart
There's more in store™

Learn more

Thirsty Camel Bottleshops
Sponsored

PLAY NOW
FOR YOUR CHANCE TO
WIN

THIRSTY CAMEL HUMP CLUB

Thirsty Camel Bottleshops Got skills and like \$\$\$
🍀... see more

View all comments

Penfolds
Sponsored

Learn more

Penfolds Recieve a complimentary Pen... see more

View all comments

Tagged with **19 alcohol and gambling advertising interests**



- Alcohol
- Beer
- Wine
- Cocktail
- Gin
- Gambling
- Casino

Data uploaded for targeting by **20 alcohol and 13 gambling companies**



- BWS
- Bottlemart
- Liquorland
- Jimmy Brings
- The Lott
- TAB
- BetEasy

Jennifer

→ **Woman in her late 40s, trying to reduce high-risk alcohol use (for six months), trying to reduce high-risk gambling (for two months), lives in New South Wales**

Jennifer is in her late 40s and is currently on long service leave for her job in a government department. She joined Facebook 15-20 years ago, Instagram a little later and TikTok more recently. Jennifer's drinking has increased in the last 10-15 years.

Jennifer explained how her introduction to gambling was through her father who was a 'bookie' in the local pubs. In her teenage years she would go with him to the TAB and buy tickets and from 18 she would go to the RSL and play the poker machines. Today, Jennifer gambles regularly on Lotto jackpots or at the casino where she plays on the machines with a glass of wine in hand which she finds relaxing. She also uses sportsbetting apps, and has recently discovered the Keno app which she reflected was not a healthy 'hobby'.

Jennifer hadn't played Keno for 10-15 years in a venue, but she recalled seeing the ad for the Keno app months earlier:

Here's this app where you just play numbers and potentially could win. They claim \$40 million. You know, every 3 minutes a game.

On the Keno app she recognised issues with the "instant gratification" effect and that she found herself often "just disappearing into it".

Jennifer reflected on how easy it was to lose track of time and how much she was spending on the Keno app because you were relaxing at home on the couch at the end of the day, drinking a glass of wine, and automatically transferring money through to the app, with the app not displaying how much has been spent:

I know it sounds stupid and it may to those that don't gamble but it and you sort of lose yourself in a way, and then you just go, oh, another 100 won't hurt... It was so easy because it was very quick. And as I said, you just watch these balls, which I know sounds boring... I'm quite educated, it's quite embarrassing to admit that I really succumbed to that.

Jennifer went through a period in which she felt she was betting too much. To limit the influence of companies on her gambling, she opted-out of promotional emails from Keno. She also found a six-month self-exclusion option in the Keno app. Her hope was that once the six months was up, she wouldn't be inclined to download and start using the app again.

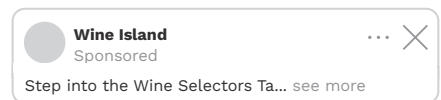
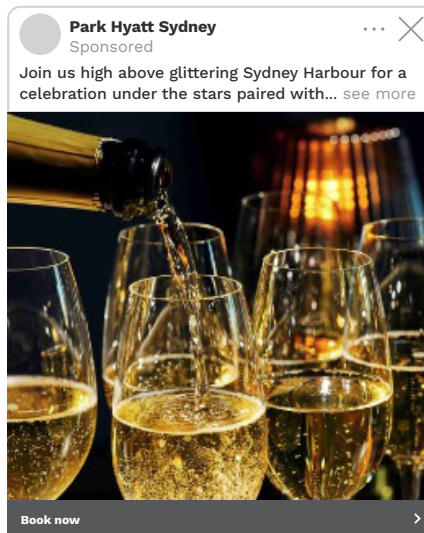
Jennifer captured 205 Facebook ads during the data collection period. Reflecting on advertising for gambling, Jennifer described how promotions encouraged her to gamble more, or gamble more impulsively.

Jennifer wanted to have more control over what she saw in terms of digital advertising. She suggested that ads could be pixelated or hazy for people who chose to opt-out of receiving advertising for harmful products. Jennifer recognised that for people particularly vulnerable to these products, seeing ads could risk sobriety or increase spending behaviours.

I understand and appreciate that if somebody were thinking, I don't want to have a drink and but there's this ad and it's, you know, a bottle of whatever you drink that's there and it looks refreshing and cold and then you think, "right, I'm gonna get out and go and get that" You should have the ability to be able to stop that [advertising].

Jennifer also described how gambling and alcohol ads glamorise these products and how that could be alluring for kids:

I don't think any of that [gambling and alcohol advertising] should be made available to children to make it look glamorous or good. And I think some ads for both of those things can look that way. Especially gambling ads. You know, it's about your mates, let's you know, get your mates together and share betting and go to the races and have this great time.



Tagged with **18 alcohol and gambling advertising interests**



- Alcohol
- Drinking
- Wine
- Gambling
- Casino
- Lottery
- Keno

Data uploaded for targeting by **24 alcohol and 14 gambling companies**



- TAB
- The Australian Wine
- Thirsty Camel Bottleshops
- BetEasy
- Bet365
- Heart of Vegas
- The Lott

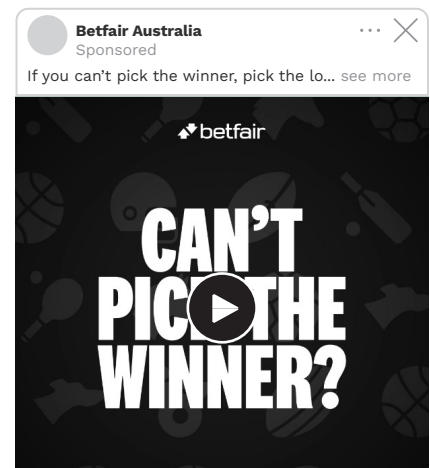
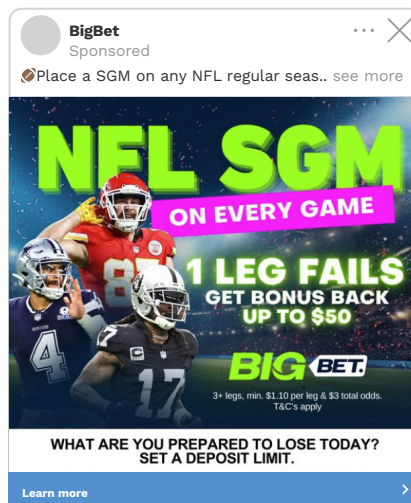
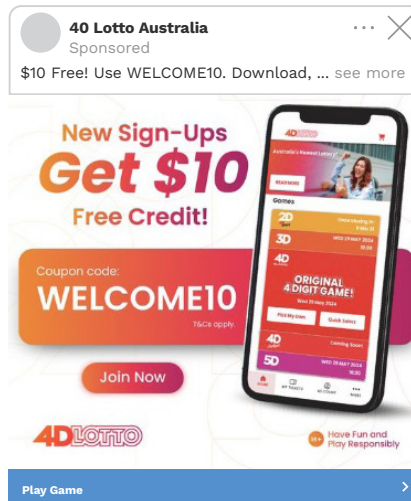
Tim

→ **Man in his early 20s, trying to reduce high-risk gambling (for 1 year), lives in Victoria**

Tim is in his mid-20s, currently not working, and feels that he gambles too much. Introduced to wagering by his brother, he is both an avid sports fan and a regular bettor. He is currently struggling with the amount he bets and was reluctant to go into the full details of his gambling although he was trying to cut back on the amount he gambled.

Tim described how when he bets too much and has big losses, he experiences significant frustration. Tim felt the only way he could shift his gambling was through setting firm limits with himself and withdrawing the wins he did have instead of ‘throwing (them) away’. He also thought that external controls such as setting deposit limits was largely ineffective, as he could just move to another website if he had reached his limit.

Tim captured 85 Facebook ads during his period of data collection, 53 of these ads were for gambling. In several sequences Tim saw more than 15 gambling ads in a row, such as the four gambling ads below that appeared in a 27-minute period. Targeting Tim’s love of sport, these ads were nearly always for different sportsbetting providers including BetFair, ChaseBet, PulseBet, TAB, PalmerBet, UniBet, BigBet and so on.



This extensive profiling and targeting of Tim for gambling advertising was similarly seen in his advertising data, with 52 gambling companies uploading data about him to the Facebook marketing algorithm and Facebook tagging him with 41 gambling related advertising interests to target him with marketing.

Tim described gambling advertising as inescapable, and was concerned that people experiencing problems with gambling are forced to sit through endless gambling ads if they want to consume sport. He feels particularly annoyed by gambling advertising that is integrated into the coverage:

The gambling ones [ads] they're very annoying, like even if you're watching Channel 7 or Fox Footy or the rugby league channel, the host goes 'Let's get a market update from Sportsbet'. That shouldn't be like that.

Tim was highly aware that one advertiser continually targeted him:

One of the ones that keep popping up probably for me is this 'Punt City'. I don't use it, haven't signed up or anything, but that seems to pop up a lot, like probably in the last 24 hours even I reckon.

Tim also noticed a number of ads on Facebook from smaller wagering companies. He feels that these types of ads are more likely to pop up for him given his use of gambling apps.

Tim believed it was problematic that exposing kids and young people to gambling advertising can lead them to think that gambling is normal and that young people might see gambling ads and end up betting as a result. In his words, 'the more people that bet, the more people that are going to have an addiction'. Tim also recognises that digital advertising could be problematic for people currently or at risk of experiencing problems with gambling when they are targeted by gambling advertising online.

Tim would like to see an end to gambling advertising both on TV and social media, yet he is not sure whether the government will enact a ban, given the influence the gambling industry wields over Australia's major sporting codes:

All [gambling advertising] should be kicked off the TV. But the thing is, they are effectively running all the competitions. The amount of money they put into the leagues like, they'll be paying that much money to get ads every 5 minutes during the games. I don't think any of the ads should be shown during the match...

PointsBet Sponsored

\$2 ODDS AFL BROWNLOW
HEENEY TO BEAT GULDEN
 MAX BET \$50

pulsebet

WHAT'S GAMBLING REALLY COSTING YOU?
 For free and confidential support call 1800 858 858 or visit gamblinghelpline.org.au

Noisy Sponsored

AFL BROWNLOW
\$6 ODDS BONTEMPELLI TO FINISH TOP 3
 MAX BET \$25

NOISY

WHAT'S GAMBLING REALLY COSTING YOU?
 For free and confidential support call 1800 858 858 or visit gamblinghelpline.org.au

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GRAND FINAL SWANS VS LIONS

FIRST GOAL SCORER SECOND CHANCE!
 Get paid as a winner if your player kicks the 1ST OR 2ND GOAL!

buddybet

WHAT ARE YOU REALLY GAMBLING WITH?
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Palmerbet Sponsored

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\$4.00*
 CRIPPS
 WIN BROWNLOW BY 2+ VOTES

JOIN NOW

WHAT ARE YOU REALLY GAMBLING WITH?
 For free and confidential support call 1800 858 858 or visit gamblinghelpline.org.au

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A comprehensive betting experience

DAILY PROMOS
 FIXED ODDS & TOTE
 CUSTOMER FOCUSED

WHAT ARE YOU REALLY GAMBLING WITH?
 For free and confidential support call 1800 858 858 or visit gamblinghelpline.org.au

Star Sports Australia Sponsored

STAR SPORTS

YOUR CHANCE TO EARN DEPOSIT MATCHES EVERYDAY
 WITH OUR STAR SPORTS
 CLICK TO WIN!

WIN

CHANCES ARE YOU'RE ABOUT TO LOSE

Tagged with **15 alcohol and 41 gambling advertising interests**



- Sportsbook
- Sportingbet
- Ladbrokers
- Bookmaker
- Gambling
- Blackjack

Data uploaded for targeting by **25 alcohol and 52 gambling companies**



- Betfair Australia
- Palmerbet
- Picklebet
- TABtouch
- Neds
- PuntCity
- Racenet

Brad

→ **Man in his 40s, >3 years recovering from gambling issues and harm, lives in Queensland**

Brad is passionate about his hobbies including gaming, cars, and gardening. He first started in some of these hobbies about four years ago when he stopped gambling. Brad shared that he was “pretty bad” with gambling and struggled with money. He used to go to the pub to use poker machines and gamble on horse races. Brad found support in Gamblers Anonymous and was able to self-exclude from the gambling areas of local pubs.

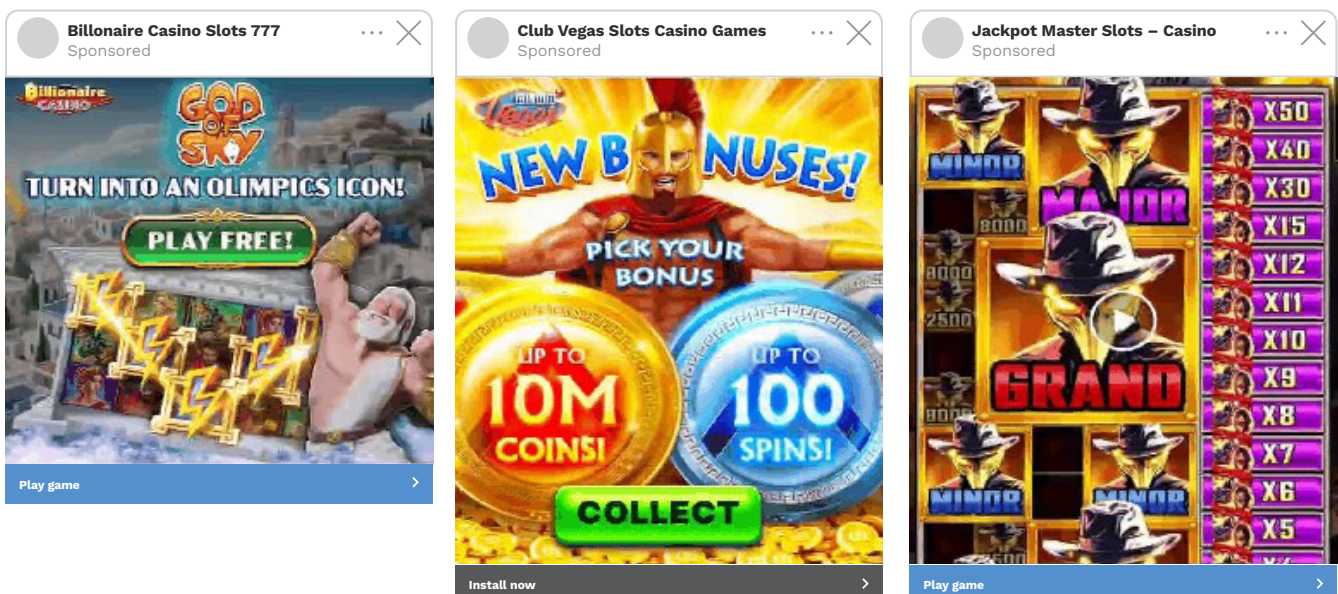
Of the 40 ads that Brad collected, 12 of them were for gambling. Every gambling ad appeared quite similarly and promoted poker machine-like mobile games. Although these games are not real money gambling, they use cartoon-like graphics, appeals for “free spins” and promises of “jackpots” to create the illusion of poker machines.

When Brad saw these ads in the past, he tried to ‘mute’ them from appearing:

You can go on that ad, and you click on the x, and you say you don’t want to see that ad again. It’ll stay away for maybe a couple of days. And all of a sudden, they’re back in your feed again... [So,] I get angry and then I just delete it again. At least I get a couple of days of not seeing it. It would be nice if when you’d done that, it was like a permanent thing. I don’t want to see this anymore and be done with it.

Brad felt strongly that Facebook should honour the request to stop ads from a particular advertiser or product indefinitely. Gambling-related advertising takes advantage of people who have addictions, which for him feels like “a disease”. Overall, Brad recognised an uncomfortable irony in the ways Facebook responded, or failed to respond, to his changing gambling behaviours:

[Facebook] figured out I was a gambler. They didn’t try to help me stop.



Chris

→ **Man in his mid-50s, >35 years recovering from gambling issues and harm, lives in Tasmania**

Chris is an accountant who spends his free time with family, watching sport or YouTube and reading personal development books. Chris started gambling in his late teens and later worked for the TAB. Chris described his work at the TAB as like an ‘alcoholic [working] at a bar’ – he was going to gamble anyway so he might as well get paid. After realising he could only gamble ‘compulsively’ he decided to stop gambling.

Chris discussed occasionally attending support meetings in recent years to help others at-risk of gambling harm. From his observations, he felt that shame and stigma were one of the biggest issues for people to overcome gambling harm. He also viewed the relationship between sport and gambling in Australia as particularly problematic, evidenced by Gillon McLachlan’s move from AFL executive to CEO of Tabcorp: “That’s just a conflict that continues to be acceptable in society.”

Chris captured 97 Facebook ads using the mobile app. Chris explained how digital platforms and mobile devices had changed gambling where online games and ‘spin the wheel’ type coupons provided the same dopamine rush as gambling:

I take my sobriety pretty seriously so I can’t even run the little wheel [on Temu] that says you’re going to get 50% off or a free gift. I don’t partake. But you can see how enticing that is and how quickly the mindset goes to: I had a win. It’s all creating the feeling of winning... and marketers spend a trillion dollars establishing that feeling.

Chris said he had noticed that gambling advertising and gambling-related posts circulated prolifically throughout social media and he felt that people should be able to turn off or opt-out of gambling advertising. Yet he also felt that people would find a way to gamble if they wanted to.


Many of Chris’ ad interests reflected his personal interests and there were none specifically related to gambling. However, he was shocked, to see that despite 35 years recovering from gambling (much longer than he had been active on social media), 12 gambling companies were targeting him on Facebook, including The Lott and Bett365. Chris felt strongly that gambling companies should not be able to target him and wanted to be able to block them.

Chris suspected that gambling companies shared and sold personal data about people’s gambling behaviour. In his view this was particularly predatory because he has known people who had lost money to gambling companies, have nothing left, and were then targeted by other gambling companies for other gambling products. Data privacy, transparency, and agency seem to be at the heart of the issue for Chris:

The more we know about someone, the more we can control their behaviour... but you know, give us a break. Give the people that are vulnerable the chance to not be taken advantage of.

Wrest Point Hobart
Sponsored

Overdue for a night out? Grab the lads and come to Wrest Point, we're dishing up fun ro.. [See more](#)



It's time for a night out
Steaks, beers, and play

[Learn more](#)

Tagged with
3 alcohol advertising interests



- Bars
- Beers
- Microbrewery

Data uploaded for targeting by
10 alcohol and 12 gambling companies



- The Lott
- TAB
- Crown Melbourne
- Punters

Discussion and Conclusions

In this study, we piloted a novel digital data donation method to collect ads that would otherwise be 'dark' and hidden from public view. The method enabled us to gather insights from eleven people who had experienced or were at risk of alcohol or gambling harm to observe alcohol, gambling and social media companies digital advertising targeting practices on Facebook.

Alcohol, gambling, and social media companies undermine people's efforts to reduce their alcohol use and gambling

We spoke to people who had identified that their alcohol use and/or gambling was causing them harm and were actively trying to reduce their drinking/gambling. Participants felt that alcohol, gambling and social media companies are working against their efforts – particularly evidenced by companies uploading their personal data to Facebook to profile and target them with advertising for these harmful and addictive products.

Collectively, 264 alcohol and gambling companies uploaded data about ten of the participants to the Facebook marketing algorithm and Facebook tagged them with 89 different alcohol and gambling related advertising interests to target them with advertising. Some participants were targeted with a disproportionately high amount of alcohol and gambling ads.

Participants did not want to be profiled and targeted in this way and expressed that it can be impossible to escape this advertising when they are on social media. They shared frustration that current platform options do not enable them to prevent this advertising from being targeted at them. This was further amplified by participants being exposed to different forms of advertising across media, including on television, through mobile applications for food delivery, and social media advertising beyond Facebook.

Alcohol and gambling advertising is 'tuned' to target the behaviours and affinities of people who are at high-risk of harm from these addictive products

Our findings reveal how each person is uniquely profiled and targeted by companies for digital advertising purposes. Participants had collectively been targeted by over 34,346 advertisers and were aware that their preferences, behaviours, and browsing history, could be used to target them with alcohol and gambling advertising at a high frequency. Participants were particularly alarmed to learn that alcohol and gambling companies shared their data with Facebook to target them.

The targeting of alcohol and gambling ads around particular social, cultural and leisure activities was seen to further ingrain these harmful products in Australian culture and intensify social pressures to drink and gamble. Participants noticed that alcohol and gambling-related imagery was often subtly included in the ads they were seeing for a range of products such as ads for tourism, events, venues, shopping and games. For Mariana, who was trying to reduce her alcohol use over the past year, advertising from alcohol companies attuned to her enjoyment of attending pubs and events to socialise was a constant reminder to drink. Similarly, Tim had been trying to reduce his gambling over the past year, but gambling companies continued their attempts to entice him to gamble more through targeting his love for sport, with Facebook sending him 15 gambling ads in a row on multiple occasions.

People want better measures to prevent them from being targeted with alcohol and gambling ads when they are online

It is evident that better measures are required to prevent people at risk of harm from alcohol and gambling being targeted with advertising for these products when they are online. Participants described wanting more control over the digital advertising for harmful products they received, particularly the ability to opt-out of and permanently block harmful advertising from their feeds. However, they felt that social media platforms would not create these measures without being required to do so by governments.

Participants also wanted to better understand how digital platforms work to target them, noting poor transparency in this regard by platforms. For example, participants were previously unaware they could access their ad preference data via their Facebook account and conveyed how difficult it was to access because it was both hidden and required several steps to obtain. As the ads they are targeted with disappear after they have been viewed, this also does not allow them to reflect on how they are being targeted by the content of advertisements across the sequence of ads they see on their feed.

Technology in development, such as the Australian Ad Observatory Mobile Toolkit, can provide ways to further understand dark marketing of harmful and addictive products that otherwise remain hidden from sight

The Australian Ad Observatory Mobile Toolkit provides the new ability to capture advertising that people are targeted with on social media platforms while using mobile devices. This can be used alongside advertising data provided by individuals to provide a more comprehensive overview of how they are targeted by advertising when using social media platforms. For example, when we interviewed participants, we shared a custom dashboard that displayed the ads collected from their Facebook feed together with the advertising interest tags Facebook had generated about them. The dashboard helped participants reflect on the data-driven nature of digital advertising that works to target them as they use digital platforms.

This small qualitative study was restricted in focus to the accounts of eleven Australians who had experienced or were at risk of harm from alcohol and gambling products. Through this pilot study we were able to identify the capabilities and limitations of the Australian Ad Observatory Mobile Toolkit to continue to refine how we capture data using the app. As part of the pilot study, participants collected a portion of the total ads observed during their social media engagement and it is likely that participants are exposed to more harmful advertising than the data reported here. In this phase of the app, ads were only captured on Facebook. However, it is likely that individuals are targeted by alcohol and gambling companies across platforms and such targeting practices may have a cumulative effect. There is significant scope to build on the methods developed in this study to observe broader patterns of how alcohol and gambling companies target Australians through digital advertising more broadly.

References

Australian Gambling Research Centre. (2023). Gambling participation and experience of harm in Australia. Melbourne: Australian Gambling Research Centre, Australian Institute of Family Studies.

Australian Institute of Health and Welfare. (2023). *Gambling in Australia*. <https://www.aihw.gov.au/reports/australias-welfare/gambling>.

Carah, N., Hayden, L., Brown, M.-G., Angus, D., Brownbill, A., Hawker, K., Tan, X. Y., Dobson, A., & Robards, B. (2024). Observing “tuned” advertising on digital platforms. *Internet Policy Review*, 13(2). <https://policyreview.info/articles/analysis/observing-tuned-advertising-digital-platforms>

Cook, M., Mojica-Perez, Y., & Callinan, S. (2022). *Distribution of alcohol use in Australia*. The Centre for Alcohol Policy Research.

De Castella, A., Bolding, P., Lee, A., Cosic, S., & Kulkarni, J. (2011). *Problem gambling in people presenting to a public mental health service*. Office of Gaming and Racing, Department of Justice.

Hawker, K., Carah, N., Angus, D., Brownbill, A., Tan, X. Y., Dobson, A., & Robards, B. (2022). *Advertisements on digital platforms: How transparent and observable are they?* Foundation for Alcohol Research and Education. <https://fare.org.au/transparency-report/>

Lensvelt, E., Gilmore, W., Liang, W., Sherk, A. and Chikritzhs, T. (2018). *Estimated alcohol-attributable deaths and hospitalisations in Australia 2004 to 2015*. National Alcohol Indicators, Bulletin 16. Perth: National Drug Research Institute, Curtin University.

Rehm J, Gmel GE, Gmel G, Hasan OSM, Imtiaz S, Popova S, Probst C, Roerecke M, Room R, Samokhvalov AV, Shield KD, Shuper PA. (2017). The relationship between different dimensions of alcohol use and the burden of disease—An update. *Addiction*, 112(6):968-1001. doi: 10.1111/add.13757

