



SPECTRUM

SHAPING PUBLIC HEALTH POLICIES
TO REDUCE INEQUALITIES AND HARM

The effect of alcohol marketing on dependent, hazardous and harmful drinkers: A rapid literature review - Update

University of Nottingham



Aim

To provide a comprehensive overview of the evidence on the impact of alcohol marketing on the following populations of interest:

- Those with alcohol dependence,
- Those in recovery from alcohol problems,
- Hazardous and harmful drinkers.

Methodology

A rapid literature review of peer-reviewed and grey literature



Definition of populations of interest

- Studies eligible if populations defined within the paper as being dependent, in recovery or hazardous or harmful drinkers
- Results on outcomes must be presented separately for at least one of these
- Where participants not defined as being dependent, in recovery or hazardous/harmful drinkers within studies, studies are included if the population met the NICE definition for alcohol dependence, or hazardous or harmful drinking and/or had an AUDIT score of 8 or more
- Studies of binge drinkers, where these did not also fit into the above populations are excluded.

Definition of marketing

- Promotion – full range of promotional tools, including marketing on traditional and digital media, and via sponsorship, celebrity/influencer endorsement, non-price promotions such as competitions and merchandise.
- Place – alcohol advertising and placement of alcohol within the off-trade retail environment (e.g. end-of-aisles, behind tills, etc.); adverts/promotions when shopping online (e.g. basket prompts, ‘other people have bought’ etc.); outdoor and public space advertising (e.g. billboards, on public transport).
- Product – packaging as a promotional tool.
- Price – price discounting as a form of price promotions. MUP and taxation were both out of scope.


Alcohol cues – eligible if marketing-based cues e.g. imagery containing branding

Out of scope: Alcohol outlet density and product labelling

Outcomes

- Any behavioural outcomes related to alcohol consumption.
- No set definitions were applied for psychological and neurological outcomes

Study designs

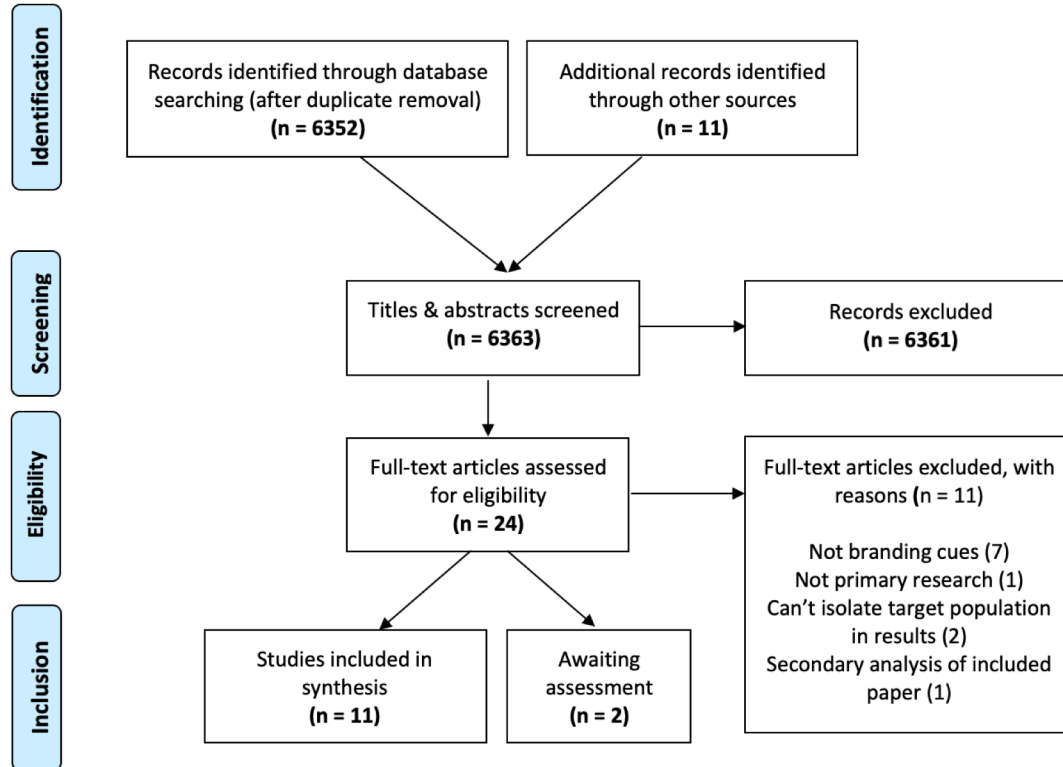
- Quantitative and qualitative studies
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Identification of relevant studies

- Peer-reviewed literature databases
- Forwards and backwards searching of included and related papers
- Expert opinion

- *Grey literature search to follow*

Literature searching and included studies to date



Drinkers in recovery (6 papers)

Authors	Title	Population	Criteria for heavy drinking	Study design	Country	Summary method	Summary results	Summary conclusion
Guillou Landreat et al 2020	Alcohol use disorders, beverage preferences and the influence of alcohol marketing: a preliminary study	91 patients with alcohol use disorder seeking treatment (80 with severe AUD, 11 with moderate AUD). Age 15-49	Audit score of 9 or above, confirmed by DSM-V criteria	cross sectional descriptive	France	Survey to define the types of marketing identified by treatment seeking individuals with alcohol use disorder and their drink preferences. Asked questions relating to alcohol marketing perception, personal and familial history and socio-demographic variables	72% of participants said they were not influenced by alcohol marketing, but 76% recalled an alcohol advertisement in the last 6 months.	Vulnerable patients with AUD in this study were widely exposed to alcohol marketing cues without being aware of this exposure.
Shortt et al 2017	Place and recovery from alcohol dependence: A journey through photovoice	9 subjects in alcohol dependence recovery (5 male 4 female). Age 31-52	Reported as in recovery from alcohol use, attending a 'recovery café'	Qualitative (focus groups and photovoice)	Scotland	Series of workshops followed by provision of a digital camera to pairs of participants to take pictures over a 2 week period to document the features of the environment that enable and/or hinder their journey of recovery	The biggest single element of risk to recovery identified was the retail environment, including both the sale and marketing of alcohol	The issue of the retail environment, including marketing, leads to questions over the commonness of alcohol in the environment and the specific challenges of treating as an everyday commodity
Laberg et al 1992	Effects of visual alcohol cues on alcoholics' autonomic arousal	82 detoxified males. Age 25-64	Detoxified in an addictions clinic	Experimental	Norway	Subjects were shown a series of alcohol (included branded alcohol bottles) and non-alcohol related slides. Participants completed the inventory of Reactions to Situations (IRS1); urge to drink was recorded after viewing the slides. Skin conductance was measured	In alcohol dependent subjects the number and height of stimulus elicited skin conductance responses were significantly higher to alcohol slides than control slides	Alcohol stimuli in themselves were sufficient to elicit arousal in alcoholics even when no alcohol was available
Witteman et al 2015	Cue reactivity and its relation to craving and relapse in alcohol dependence: a combined laboratory and field study	80 male alcoholics enrolled in detoxification treatment. Age 25-64	DSM-IV diagnosis of alcohol dependence for the 12 months leading up to admission to the addiction centre	Experimental	The Netherlands	Physiological reactivity and craving in response to experimental exposure to alcohol and soft drink advertisements were measured during detoxification treatment using heart rate variability and subjective rating of craving. Post discharge, patients measured exposure to alcohol advertisements and were assessed for relapse at 5 weeks and 3 months post discharge	No difference in heart rate variability following exposure to alcohol or soft drink advertisements. Significantly higher craving level after viewing an alcohol advertisement, though absolute values were relatively low. At follow up, participants reported substantial daily exposure to alcohol advertisements but no relationship with drinking behaviour was found	The presence of alcohol cues induces cue reactivity and craving in alcohol dependence through a conditioned appetitive response
Sobell et al 1993	Severely dependent alcohol abusers may be vulnerable to alcohol cues in television programs	96 alcohol abusers (54 outpatient, 42 detoxification). Mean 34.9 years outpatients, 38.2 years detoxification	Outpatients or inpatient at detoxification unit. Later divided according to scores on the Alcohol Dependence Scale (above and below 50th centile scores)	Experimental	Canada	Different versions of a popular prime time television programme (with and without alcohol scenes) crossed with three types of commercials (beer, non-alcoholic beverages, food)	Alcohol cues in a television programme affected some alcohol abusers' perceived ability to resist the urge to drink heavily. Those with higher alcohol dependence scores showed decreased confidence after viewing a television programme containing alcohol cues compared to subjects who watched the same programme but without the alcohol scenes.	For severely dependent drinkers, viewing alcohol-related cues in television programmes might make them more vulnerable to drinking, which could contribute to relapse
Treise et al 2008 (abstract only)	How Recovering Alcoholics Interpret Alcoholic-Beverage Advertising	20 recovering alcoholics		Qualitative (interviews)			Recovering alcoholics, particularly in the early stages of treatment, view alcohol advertising and the images and techniques used within such ads to be triggers to further drinking	

Heavy / hazardous drinkers
(5 papers)

Authors	Title	Population	Criteria for heavy drinking	Study design	Country	Summary method	Summary results	Summary conclusion
Petersen-Williams et al 2019	Alcohol Advertising, Affordability and Availability, and the Effect on Adult Heavy Drinking and Symptoms of Alcohol Problems: International Alcohol Control Study (South Africa)	445 non-heavy drinkers, 510 heavy drinkers. Age groups 18-19 to 55-65	Heavy drinking was defined as consuming at least 120ml for men and 90ml for women of absolute alcohol on one occasion at least monthly; symptoms of alcohol problems were measured using the Rapid Alcohol Problems Screen 4 (RAPS4)	cross sectional (household survey)	South Africa	Household survey using standard International Alcohol Control (IAC) questionnaire to assess patterns of alcohol consumption and the impact of alcohol control policy. Relevant questions relating to demographic factors, alcohol marketing/advertising, affordability and availability	A greater proportion of heavy drinkers have noticed brands being advertised on sponsoring sports, sponsoring music events, signs or posters, on clothing, special price offers on TV, famous people promoting it, in SMSs, on the radio, free offers when buying alcohol and magazines or newspapers as compared to their non-heavy drinking counterparts. Similar results were reported for those with symptoms of alcohol problems.	Various alcohol advertising mechanisms can be associated with the risk of alcohol-related problems
Stautz et al 2017	Impact of alcohol-promoting and alcohol-warning advertisements on alcohol consumption, affect, and implicit cognition in heavy-drinking young adults: A laboratory-based randomized controlled trial	204 heavy drinking young adults. Age 18-25	AUDIT-C scores above 5 (range 5-11)	Experimental (between participant RCT)	UK	Participants viewed a set of 10 advertisements (randomised to one condition) that included impact of alcohol advertisements either 1.branded alcohol-promoting advertisements; 2.alcohol-warning advertisements, or 3. only non-alcohol advertisements before completing the outcome measures. To assess possible dose-response effects of advertising exposure, participants in the alcohol- promoting and alcohol-warning advertisement conditions were further randomized to view between 5 and 10 condition-specific advertisements, with the remaining advertisements being non-alcohol filler advertisements	Participants exposed to alcohol-promoting advertisements showed increased positive affect and an increased approach/reduced avoidance bias towards alcohol relative to those exposed to non-alcohol advertisements	Restricting alcohol-promoting advertising could remove a potential influence on positive alcohol-related emotions and cognitions among heavy drinking young adults
Noel et al 2018	Perceptions of Alcohol Advertising among High Risk Drinkers	326 students, higher AUDIT scores considered to have history of excessive alcohol abuse. Age 18-79	Classified according to AUDIT zones. Categories II-IV considered heavy alcohol users (42.3%)	Secondary data analysis of experimental study	US	Participants viewed 5 unique branded alcohol advertisements-four TV and 1 print. After viewing each ad, participants completed a 48 -item questionnaire based on the US Beer Institute's Marketing and Advertising code	Individuals' alcohol use history was positively related to ad appeal, total perceived alcohol consumption (and perceived high levels of consumption as 'responsible')	Heavy alcohol users may be a vulnerable population and marketing codes should be revised to include protection for these individuals
de Sousa et al 2017	Brain reactivity to alcohol and cannabis marketing during sobriety and intoxication	20 heavy alcohol users (plus 21 regular cannabis users and 20 non-drug users). Age 18-28 (across all groups)	Defined as using on average 21-50 alcohol drinks a week for men, 15-35 alcoholic drinks a week for women during the last year	Mixed factorial experimental study	The Netherlands	*In alcohol groups: Heavy alcohol users were administered either alcohol or placebo, brain activation after exposure to alcohol marketing movies was measured using functional MRI and compared between groups while sober and with placebo while intoxicated. Implicit alcohol cognitions were assessed by means of a single category implicit associations test	Alcohol marketing significantly increased striatal BOLD activation across all groups when sober but decreased significantly after intoxication with alcohol.	Advertising of alcohol use elicits striatal activation in the brain's reward circuit. Reduction of marketing would reduce brain exposure to reward cues that motivate substance use
Kreusch et al 2013	Response inhibition toward alcohol-related cues using an alcohol go/no-go task in problem and non-problem drinkers according to cut off of 11 on AUDIT scores	75 undergraduate students (40F, 35M). 4 males excluded, 71 in sample.....16 female problem drinkers, 19 male problem drinkers. Mean age 21.1	AUDIT score of 11 or above	Experimental study (only experiment one relevant)	Belgium	36 non-problem drinkers and 35 problem drinker students completed a modified alcohol go/no-go task and neutral object pictures, with or without brand logos, as stimuli	All participants showed a cognitive bias toward alcohol cues evidenced by reduced reaction times and higher false alarms observed for alcohol cues. Problem drinkers showed faster reaction times for alcohol cues without brand logos; alcohol brand logos affect reaction times only in non-problem drinkers.	Stronger cognitive biases in the treatment of alcohol cues were observed on problem drinkers, although differences between problem and non-problem drinkers were relatively small scale and required specific experimental parameters to be uncovered

2 papers awaiting full text assessment:

- Alhabash et al 2016 “Saw it on Facebook, drank it at the bar! Effects of exposure to Facebook alcohol ads on alcohol-related behaviours”
- Sayette et al 1994 “The effects of cue exposure on reaction time in male alcoholics”

Next steps

Grey literature searches and screening

Finalise data extraction

Narrative synthesis of findings

Questions?

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