

headspace

Alcohol promotion and hazardous drinking

Much drug research is conducted and interpreted in a contentious environment. For example, research into the impact of alcohol promotion is often published and interpreted along partisan lines. There are those who claim that advertising does not contribute much to drinking behaviour – it might influence brand preference, but it does not influence decisions such as whether to drink, or when and how much might be drunk on any given occasion by individuals or groups. Interestingly, some of these same people endorse mass education and marketing campaigns as preferred methods to prevent and reduce alcohol related harm. Alternatively, many of those who reasonably interpret the available evidence to indicate that mass media campaigns do little to prevent or reduce alcohol problems will argue that alcohol advertising and promotions contribute to hazardous drinking. Observers who are unfamiliar with the field might justifiably be somewhat confused.

As Winter and Donovan indicate in *Issuing Forth* in this issue of *CentreLines*, one of the problems is that assessing the impact of alcohol advertising and other promotions is no easy task. Such promotions occur in a highly complex and changing environment where there are myriad influences on drinking behaviours. Unfortunately, many investigations are not capable of answering

the sophisticated questions of how advertising might have an impact on the whole population or on subgroups such as young people.

Alcohol advertising and other promotions are part of the fabric of Australian media, sport, leisure and entertainment (witness the number of times that alcohol advertisements are identified as the most popular/most recalled/most amusing). Concern about the possible impact of these promotions has resulted in a number of countries controlling when they can be shown (eg not to be broadcast when children are likely to comprise a large proportion of the audience) and controlling their nature (eg alcohol consumption should not be associated with business or sexual success).

In Australia, many commentators have complained that voluntary codes of conduct are variously interpreted and/or sometimes ignored. There have been some spectacular examples of the latter, including a relatively recent campaign by a well-known brewer, promoting their homebrew kits, who invited us to 'drink her pretty for less than \$10.00'. If we are concerned about such breaches, a large proportion of the population appears to be unaware of the complaints procedure. When complaints have been made, the adjudication process is often slow and many campaigns are



likely to be over by the time a determination is reached. It appears that while some members of the relevant industries comply with the voluntary codes, others simply ignore them, or interpret them in a manner that is, at best, subjective.

The extent and costs of alcohol related problems, and the pervasiveness of alcohol advertising and other promotions, demand that we have informed debate about the impact of the various promotions. Winter and Donovan highlight some of the methodological challenges we must meet to ensure that we develop a quality evidence base. However, it should not just be an imperative for those in public health to demonstrate that alcohol promotion contributes to undesirable drinking behaviour – the alcohol and advertising industries have a responsibility to ensure that, through their promotions, they do not contribute to hazardous drinking.

Steve Allsop

issuing forth

Does alcohol advertising impact on young people's drinking? A review of the alcohol industry's case

Does alcohol advertising increase alcohol consumption amongst adolescents? The alcohol industry maintains that advertising has no influence on alcohol consumption amongst youth. It bases its stance largely on the findings of a substantial number of studies that use market-response models and econometric techniques to determine the impact of variations in aggregate alcohol advertising expenditure on aggregate alcohol sales over time. However, a review of this body of research has identified a number of flaws that collectively raise serious doubts as to the worth of the alcohol industry's evidence.

Why decreasing alcohol consumption levels amongst teenagers and young adults is so important

The harms associated with alcohol consumption amongst youth are well-established, widely recognised, and have been described as an "an international public health crisis"¹. Alcohol abuse is the leading illegal drug problem amongst youth in the Western world and one of the leading causes of premature death amongst adolescents, with the economic costs associated with underage drinking in the USA being estimated at \$53 billion annually.

The extent of the harms associated with alcohol abuse amongst youth is sobering. Alcohol's causal role in a range of physical, mental and social harms to adolescents has been clearly established. In the shorter term, alcohol consumption has been found to directly relate to elevated risk of adolescent mortality and morbidity from violence, depression, suicide, homicide, eating disorders, substance abuse, "date-rape", health-related problems relating to risky and unplanned sexual behaviours, and reckless driving. Additionally, alcohol consumption amongst adolescents has been directly linked to increased social harms including property damage, unplanned pregnancies, increased criminal behaviour, increased conflict with parents, poorer academic performance, strained personal relationships, as well as harm to related parties such as those in other vehicles involved in motor vehicle accidents, victims of violence and family and friends of the drinker. In the longer term, adolescents have a greater risk of physiological harm from alcohol abuse than do mature adults, with virtually no organ within the body immune to its harm. For example, adolescents have a greater risk of memory loss and decreased bone growth, neurological damage, and alcohol addiction developing later in life.



Matthew Winter



Rob Donovan

Does alcohol advertising influence alcohol consumption amongst adolescents?

Given the levels of harm from alcohol consumption experienced by youth and the societies in which they live, substantial research has been conducted to identify the key factors influencing levels of alcohol consumption. The influence of alcohol advertising has been particularly well researched, perhaps because of its ongoing prominence in the mass media. In the ongoing debate about the influence of alcohol advertising on alcohol consumption amongst youth, findings that alcohol advertising positively influences alcohol consumption and related attitudes, intentions and knowledge, have principally been based on studies with individuals that utilise an experimental design. Conversely, the alcohol industry and related stakeholders have relied primarily on the results of a number of market-level studies based on industry-level market data.

Market-response models

Market-response studies adopt an econometric approach to determine the effect an independent variable (eg advertising expenditure) has on a dependent variable (eg alcohol consumption) over time, whilst controlling for other independent variables (eg price, consumer income, distribution, restrictions and other factors).

Different econometric approaches have been used to estimate the effect of alcohol advertising on total alcohol consumption, with the majority of such studies failing to find any significant relationship between alcohol advertising and alcohol consumption. More than a dozen of these market-response studies have used aggregate / industry-level advertising expenditure data and aggregate-level data on total alcohol sales. They have repeatedly found that variations in total advertising expenditure have an insignificant effect on total alcohol consumption, and have subsequently concluded that no relationship exists between alcohol advertising and alcohol demand.

However a small number of market-response studies have yielded contrasting results, based on data from much smaller geographic areas. Utilising cross-sectional measures of levels of alcohol advertising within specific geographic locations, three studies found that increases in advertising expenditure in a particular geographic location did result in corresponding (and relatively immediate) increases in overall alcohol consumption within that area.

The impact of the findings of the market-level studies

The elusiveness of consistent market-level findings in demonstrating that alcohol advertising increases alcohol consumption has been used by alcohol advertisers and related stakeholders to reject suggestions that alcohol advertising can increase alcohol consumption amongst youth. Instead they maintain that alcohol advertising's principal role is to increase brand equity and maintain or increase market share against rivals. Findings of the aggregate-level market response studies have subsequently been used to support the industry's view that there are no conclusive findings relating to alcohol advertising contributing to increased consumption amongst children and adolescents, and other vulnerable consumer groups.

The alcohol industry has further claimed that much policy relating to the regulation of alcohol advertising has been formulated in the absence of any scientific basis for linking advertising to the consumption of alcohol, and have used the findings of the industry-level market response studies to influence policy conclusions and media commentary in various countries around the world. (For example: the Health Minister in the United Kingdom publicly stated in 2003 that "there is no evidence to suggest that there is a clear link between the advertising and promotion of alcoholic drinks and alcohol consumption or misuse"; a spokesperson for the Beer Institute in Washington DC commented that "ads help drive brand preference among adults, but the evidence

shows that they do not have any deleterious effect on youth."; and a journalist in an alcohol industry magazine wrote that "alcohol ads maintain or increase market share against rival drink brands, rather than increasing overall consumption. It's a simple business truth, but one that some evidently still need to hear.")

Methodological and theoretical flaws associated with the use of market-response models

However, whilst the aggregate level market-response studies provide the alcohol industry with 'ammunition' to use in the debate on the impact of alcohol advertising on alcohol consumption amongst youth, the validity of using aggregate market-response models to establish the impact of alcohol advertising on alcohol consumption has repeatedly been questioned. From a methodological perspective, the confounding effects of variations in social, cultural and economic influences between and within the data used, as well as the considerable variation in how individual researchers decide how to handle missing or imperfect data at the aggregate level, increase the complexity of such modelling and necessitates assumptions being made that decrease the generalisability of any findings. Variations in the content, execution and media mix utilised within alcohol advertising are ignored (ie all ads are assumed to have the same effect), as is the subsequent impact of any advertising restrictions or price competition within the industry (ie alcohol advertising restrictions have been found to result in increased price competition, with lower prices in turn resulting in increased demand.). Market response models also ignore research demonstrating consumers are actively involved in the communication process, and ignore complications such as advertising wear-out and feedback (ie advertising's impact increases to a certain level of frequency of exposure, after which it has little additional effect, so variation in advertising expenditure after this point will have little or no impact on demand.)

Saffer² identified perhaps the major flaw associated with the use of aggregate-level national advertising expenditures that have been used in most market-response studies. Data used for these studies are almost exclusively from mature markets, hence there is relatively little variation in expenditure over time as a proportion of the total. What variation there is occurs in the area of diminishing marginal returns on advertising spend, where each additional dollar spent is generating less and less impact on the target audience. Such data are widely considered inappropriate for use in regression analysis because of the lack of statistically meaningful variation within the data, and so cannot reliably be used to determine the impact of alcohol advertising on total alcohol consumption within a given population.

The theoretical basis for using aggregate-level market response models to determine the impact of advertising in general (as opposed to alcohol advertising specifically) has been questioned by a number of researchers, based on the consistently low advertising elasticities generated

and observed industry practice. If advertising expenditures generate relatively low increases in sales - advertising elasticities identified by such studies are generally in the range of 0.0 to 0.20 - then advertising expenditure would decrease over time as marketers diverted these resources into more productive marketing initiatives rather than advertising which generated insufficient sales to recover the costs of that advertising. Instead, advertising expenditures continue to rise in the long-term, providing evidence that such models fail to adequately describe the relationship between advertising and sales.

Another flaw in the use of market-response models to make conclusions about the influence of alcohol advertising on adolescents (or other vulnerable groups of consumers) is that market-level findings cannot be generalised across all individuals and sub-groups of individuals within a market. There is no basis to an assumption of homogeneity within the market for alcohol. Hastings et al (p298)³ state: "Arguably the slight and inconsistent influence of alcohol advertising on population level consumption reported in many econometric studies actually reflects an averaging of minimal influences on older, established drinkers and larger effects on immature younger drinkers". Research findings support this, with Dunn and Yniguez⁴ establishing that alcohol advertising's greatest impact is specifically on younger, inexperienced drinkers who use the content of alcohol advertising as a key influence on their alcohol-related decisions. Alcohol advertising's influence on levels of consumption subsequently decreases as consumers' own experiences play a greater role in consumption decisions.

The deductive reasoning advanced by alcohol companies and related stakeholders, that, because there is no significant relationship between aggregate alcohol advertising and aggregate alcohol consumption, there is therefore no significant relationship between alcohol advertising and alcohol consumption amongst youth, appears fallacious. Additionally, the assumption underpinning the industry's argument, that individual consumers of alcohol within a market are homogenous in terms of response to alcohol advertising, directly contradicts the alcohol industry's own standard marketing practices associated with target marketing and market segmentation.

Conclusions and recommendations

Until disaggregated market data specific to youth become available, the use of market-response models to determine the impact of alcohol advertising on adolescents (and other vulnerable consumer groups) appears inappropriate. However, few authors acknowledge the methodological and theoretical limitations associated with this approach. It is suggested that inherent flaws in this approach should be acknowledged by researchers to a far greater extent than has been the case to date.

Furthermore, a more appropriate approach appears to lie in the use of consumer-based research designs exploring the impact of

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exposure to alcohol advertising on the individual – an approach highly consistent with the methodology adopted by alcohol marketers themselves when evaluating and seeking to maximise the impact and effectiveness of their own advertising campaigns.

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A more comprehensive version of this paper is available by emailing L.Fielder@curtin.edu.au

NDRI news

20th Anniversary International Research Symposium



Day 1 speakers (from left): **Tim Stockwell, Margaret Hamilton, Sally Casswell, Neal Blewett, Kate Graham and Eric Single**

In September, to mark the 20th year of its operation, the National Drug Research Institute hosted a 2-day international research symposium in Perth. The event, *"Responding to drug problems: Lessons from the past, future challenges and opportunities"*, was supported by the Australian Government Department of Health and Ageing, the WA Drug and Alcohol Office and the Alcohol Education and Rehabilitation Foundation.

The symposium brought together 150 participants including leading academics, prevention specialists, law enforcers, and policy makers. Delegates listened to an eminent collection of speakers from across Australia, New Zealand, Canada, the USA and the Philippines talk on drug and alcohol policy, prevention and harm minimisation.

Keynote speakers reflected on the aims of the national drug strategy, the achievements of the drug and alcohol research sector in Australia and examined current challenges and future directions for the field.

Papers from the meeting will be available on the NDRI website at www.ndri.curtin.edu.au and there are also plans to publish a special issue of *Drug and Alcohol Review* based upon selected symposium presentations.

NDRI team wins top university award for practical solutions to Indigenous alcohol and drug issues



Indigenous Research Team with Curtin VC **Jeanette Hackett** (far right)

NDRI's Indigenous Research Team has won a Curtin University of Technology Vice-Chancellor's 2006 Award for Excellence for its work addressing the prevention of alcohol and other drug misuse in Indigenous communities. Curtin Vice-Chancellor Professor Jeanette Hackett said the Awards for Excellence recognise and reward outstanding contributions to the University and the wider community.

"The work of NDRI's Indigenous Research Team is widely recognised as having a practical impact in addressing Indigenous drug and alcohol drug issues in this country," Professor Hackett said. "Particularly impressive is the team's willingness and ability to work with Indigenous communities to help build their capacity to address such issues themselves."

The VC's award follows recognition of the Indigenous Research Team for Excellence in Research at the National Drug and Alcohol Awards in June. The team comprises Associate Professor Gray, Professor Sherry Siggers (also Director of the Centre for Social Research at Edith Cowan University), Anna Stearne, Donna Campbell, Jane Ulrik, Violet Bacon and Ed Garrison.

NDRI researcher wins APSAD peer award



Tanya Chikritzhs

Tanya Chikritzhs, a Senior Research Fellow at NDRI, has won a coveted Australasian professional award voted on by her peers. Dr Chikritzhs was awarded the Australasian Professional Society on Alcohol and other Drugs (APSAD) Early Career Award at the recent APSAD conference in Cairns.

The award recognises an outstanding contribution to reducing the harms associated with alcohol and other drug use in the region. Dr Chikritzhs won the award for producing research that has had significant influence on alcohol policy and practice. Her work includes the National Alcohol Indicators Project, which measures the harm caused by alcohol in Australia.

In accepting the award, Dr Chikritzhs said: "It's a great honour to have your work recognised by your peers. It's very important to me that our research makes a real difference in the community by informing the way we minimise and respond to the harm caused by our favourite drug, alcohol."