

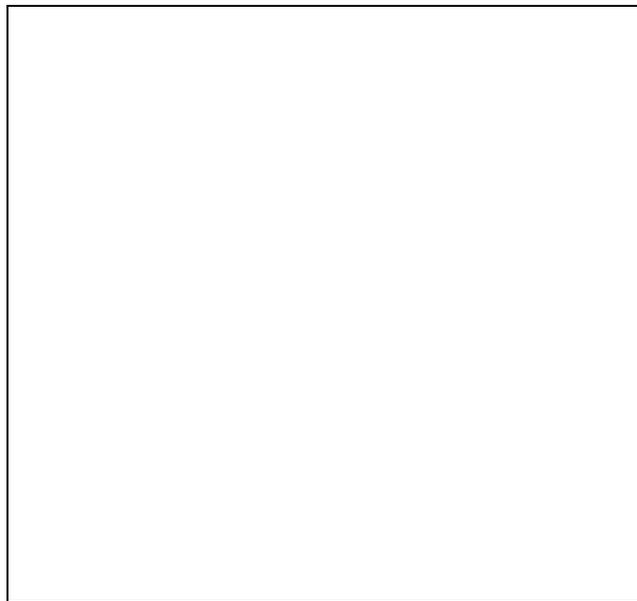
The impact of alcohol marketing

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Introduction

The manufacturers of alcoholic beverages market their products in various ways to encourage consumption of their products. The marketing of alcoholic beverages is a multifaceted, strategic and long-term endeavour which starts with product development and innovation and uses commercial communications to extol the benefits of, and remove barriers to, consumption (Fig.1).

Fig. 1. The multifaceted character of marketing



Source: [Hastings et al., 2010](#).

Research suggests that exposure to tobacco marketing increases smoking by adolescents ([Wellman et al., 2006](#); [DiFranza et al., 2006](#); [Paynter & Edwards, 2009](#); [Lovato et al., 2003](#)) and exposing young people to food marketing increases their food intake and the likelihood of obesity ([Hastings et al., 2003](#); [Harris et al., 2009](#); [Nestle, 2006](#)). It has been debated whether there is also a causal relationship between exposure to alcohol marketing and young people's drinking. In science there is a long discourse on this topic.

Population-based studies from the 1980s and 1990s mostly examined the relationship between United States data on changes in per capita consumption (generally measured by alcohol sales figures) and changes in levels of alcohol advertising (generally measured by data on advertising expenditure) ([Anderson & Baumberg, 2006](#)). The studies show mixed results: most show little or no effect of alcohol advertising on overall consumption. Later studies using similar approaches have found significant effects of alcohol advertising on the consumption of alcohol and on alcohol-related problems ([Saffer, 1991](#); [Saffer & Dave, 2004](#)).

A meta-analysis of 132 econometric studies found a small but significant positive association between alcohol advertising and alcohol consumption, although only for spirits advertising (Gallet, 2007). Looking at alcohol advertising expenditure data across the United States, Saffer & Dave (2006) found, when controlling for alcohol price, income and a number of sociodemographic variables, that advertising expenditure had an independent yet modest effect on the monthly number of adolescents drinking and binge-drinking. It was estimated that a 28% reduction in alcohol advertising would reduce the monthly share of adolescent drinkers from 25% to between 24% and 21%. For binge-drinking, the reduction would be from 12% to between 11% and 8%. Controlling for price, income and minimum legal drinking age across the United States, Nelson (2003) found that although total alcohol consumption was negatively related to a ban on the advertising of spirit prices (the ban led to less consumption, coefficient -0.009), it was positively related to a ban on billboards (which accounted for only 8% of total alcohol advertising) which led to more consumption, coefficient 0.054. In a more recent study, the effect of partial bans was reported not to have affected alcohol consumption in 17 countries over 26 years (Nelson, 2010). A systematic review of 10 studies concluded that variations in the use of advertising restrictions and the methodological challenges meant that findings were inclusive and any positive effects were likely to be modest at most (Booth et al., 2008).

Methodological challenges in econometric studies have been discussed by Anderson & Baumberg (2006). In most econometric studies, alcohol advertising expenditure is used as an approximate measure of the effectiveness of alcohol marketing. These expenditure data are often limited to traditional media spending and exclude significant components, such as “below the line” promotions, sponsorship or the use of viral advertising where consumers pass marketing messages to each other. As econometric studies measure the effectiveness of alcohol advertising only in terms of spending, they do not distinguish between less or more attractive content in the advertisements, although advertising essentially works by creating positive expectancies and beliefs about the product.

Another approach consists in studying the effects of exposure to alcohol advertising on drinking patterns. Small effects between exposure to alcohol advertising and the likelihood of adolescents drinking were found in early surveys, but owing to cross-sectional designs these studies were not able to establish causality (Anderson & Baumberg, 2006).

In 1998, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) funded three longitudinal studies that followed thousands of American adolescents for several years. Although mixed results were found on the impact of televised alcohol advertising, the studies generally suggest that exposure to alcohol marketing is a significant predictor of drinking behaviour among adolescents. Through their prospective design and the innovative approaches used to measure the exposure to alcohol marketing, these studies contributed significantly to the evidence base (Gordon, Hastings & Moodie, 2010).

More longitudinal studies have since been carried out (Box 1). For example, a study by Collins et al. (2007) found that 12-year-olds who are highly exposed to overall alcohol advertising are more likely to start drinking a year later, compared to 12-year-olds who are only slightly exposed to alcohol advertising. A longitudinal study by Pasch et al. (2007) found that the exposure of sixth graders (aged 10–12 years) to outdoor alcohol advertisements was associated with subsequent intentions to drink alcohol.

Advertising for alcoholic beverages in the mass media may be the most noticeable form of alcohol marketing but it represents only part of the big picture (Fig. 1). “Below the line”

Box 1. Some examples from longitudinal studies of long-term effects of exposure to alcohol advertising on drinking behaviour.

- 12-year-olds who are highly exposed to overall alcohol advertising (75th percentile) are 50% more likely to start drinking a year later compared to 12-year-olds who are slightly exposed to alcohol advertising (25th percentile) (Collins et al., 2007).
- Youngsters who watch 60% more alcohol advertisements on television than average are 44% more likely to have ever used beer, 34% more likely to have ever used wine/hard liquor and 26% more likely to have ever drunk three or more drinks on one occasion (Stacy et al., 2004).
- In non-drinking 13-year-olds, exposure to in-store beer displays predicts the age of onset of drinking (Ellickson et al., 2005).
- Non-drinking 12-year-olds who possess a promotional item from an alcohol producer, or would like to have one, have a 77% higher chance of drinking one year later compared to children who do not possess a promotional item and do not have a favourite alcohol brand (McClure et al., 2009).
- Teenage boys who own an alcohol-branded promotional item are 1.78 times more likely to start using alcohol than boys who do not own such items. For girls, the figure was 1.74 (Fisher et al., 2007).
- Teenagers who are highly exposed to alcohol advertising will drink more alcohol when they are in their twenties. In youngsters who have been slightly exposed to alcohol advertising, alcohol consumption stabilizes in the early twenties (Snyder et al., 2006).

marketing, such as point-of-sale promotions or merchandising, the use of other products connected with alcohol brands, sponsorship, or alcohol advertising in online media have only recently received research attention.

Hurtz et al. (2007) found in a cross-sectional study that youngsters aged 11–14 years who were regularly exposed to point-of-sale alcohol advertising in grocery stores were more likely to start drinking than those not so exposed.

Fisher et al. (2007) and McClure et al. (2006; 2009) found that ownership of alcohol-branded promotional items influenced young people's drinking behaviour. Controlling for a broad range of confounding variables, both the possession of a promotional item and an attitudinal susceptibility towards alcohol brands predicted the age of onset of drinking as well as binge-drinking among 10–14-year-olds (McClure et al., 2006; McClure et al., 2009). Henriksen et al. (2008) found that non-drinking 12-year-olds who possess an alcohol-branded promotional item, or would like to have one, have a 77% higher chance of drinking one year later compared to children who are not similarly sensitive to alcohol marketing.

The impact of sports sponsorship by alcohol manufacturers is largely unexplored. O'Brien et al. (2011) examined the relationship between direct alcohol sponsorship and drinking in adult sports people in Australia. Hazardous drinking (as measured by the Alcohol Use Disorders Identification Test) was more common among those receiving some form of alcohol-related support than among those who reported no alcohol sponsorship.

Gordon et al. (2010) and Gordon, MacKintosh & Moodie (2011) in the UK examined the influence of exposure of 12–14-year-olds to a wide range of alcohol marketing, including marketing in the new media. After controlling for confounding variables, involvement with alcohol marketing at baseline was predictive of both uptake of drinking and increased frequency of drinking at follow-up two years later (Gordon, MacKintosh & Moodie, 2011).

The impact of product placement, for example in broadcast entertainment programming, is another un-researched area. The portrayal of alcohol is, however, common in television programming and films, with or without linkage to product placement, and such portrayals

provide a programming context which may influence drinking behaviour as such or may interact with embedded alcohol commercials.

Sargent et al. (2006) examined the impact of exposure to alcohol portrayal in films over time, a method copied by Hanewinkel et al. (2009) and Morgenstern et al. (2011). The prospective studies conducted in Germany and the United States drew similar conclusions: the start of alcohol use was positively related to baseline exposure to alcohol advertising.

Immediate effects

Experimental studies have been conducted to examine the short-term effects of alcohol advertising on drinking behaviour (see Box 2). The findings indicate that seeing alcohol cues on the screen (either in films or commercials) directly influences the actual drinking behaviour of adolescents (Engels et al., 2009). It is hypothesized that this has to do with the more or less unconscious process of imitation of what is seen on the screen: if the main character in a film is portrayed drinking alcohol, the viewer unconsciously “imitates” and takes a sip as well (Koordeman et al., 2011a; Koordeman et al., 2011b). An imitation effect was not consistently found among all experimental groups but it was visible among those who were already familiar with drinking larger quantities of alcohol. More research is needed to provide greater insight into the short-term effects of alcohol on different groups, for example women versus men or light drinkers versus heavy drinkers.

Box 2. Examples of experimental study findings on short-term effects of exposure to alcohol advertising

- Young men who watched a film which included many portrayals of alcohol (*American Pie 2*), interrupted by alcohol commercials, consumed twice as much alcohol during the viewing than young men who saw a more “neutral” film (*40 days and 40 nights*) interrupted by neutral commercials (Engels et al., 2009).
- Young men who watched the original version of the film *What happens in Vegas*, including alcohol, drank almost twice as much alcohol as men who watch a censored version of the same film, in which the alcohol slots had been removed (Koordeman et al., 2011a).
- Regular alcohol users (>7 glasses per week) drank 2.5 times more alcohol in the cinema after seeing several alcohol commercials preceding the film (*Watchmen*) compared with regular alcohol users who saw several neutral commercials (Koordeman, Anschutz & Engels, 2009). This effect was not found for the participants with a relatively low alcohol use (<7 glasses per week).

The long-term and immediate effects of alcohol marketing are summarized in Table 1.

Conclusions for policy and practice

Since the publication of the report *Alcohol in Europe* (Anderson & Baumberg, 2006), the evidence base relating to the impact of alcohol marketing has grown considerably, supporting the conclusion that alcohol marketing affects young people’s drinking behaviour. It has been found that exposure to alcohol marketing increases the likelihood that young people start to drink alcohol, and that among young people who have started to use alcohol, such exposure increases

Table 1. Summary of evidence on the impact of alcohol marketing published since 2006

Effects	Key studies	Key findings
Long-term effect of alcohol advertising in mass media	Anderson et al. (2009) ; Babor et al. (2010) ; Smith & Foxcroft (2009) ; WHO (2009) .	Although studies of the impact of televised alcohol advertising on adolescents' drinking behaviour show mixed results, longitudinal studies show a general impact of alcohol advertising in the mass media on adolescents' drinking behaviour.
Long-term effects of non-media alcohol marketing	McClure et al. (2006) ; McClure et al. (2009) ; Gordon, MacKintosh & Moodie (2011) ; Hanewinkel & Sargent (2009) , Morgenstern et al. (2011) , Sargent et al. (2006) .	The impact of sponsorship, viral marketing and marketing in digital media is an understudied area. Longitudinal studies of non-media alcohol marketing show an impact of alcohol marketing on drinking behaviour.
Immediate effect of alcohol advertising	Engels et al. (2009) ; Koordeman, Anschutz & Engels (2009) ; Koordeman et al. (2011a) ; Koordeman et al. (2011b) .	First experimental studies suggest a direct effect of exposure to alcohol marketing cues (in films and/or television commercials) on the drinking behaviour of adolescents. More research is needed to give insight on differences in effects in sub-groups (for example, gender, or light versus heavy drinkers).

the frequency of drinking and the amount of alcohol consumed. The size of the effect demonstrated in the studies, while statistically significant, tends to be relatively small. The studies measuring exposure to alcohol marketing usually focus on selected channels and forms of marketing, and do not grasp the cumulative nature of overall marketing influences (see Fig. 1).

The impact of alcohol marketing through non-media channels, or through new channels such as the internet, has only recently begun to be addressed in research. Together with experimental studies and longitudinal studies carried out in Europe, such studies will shed further light on the cumulative effects of exposure to alcohol advertising through multiple marketing channels, and on mechanisms that explain the impact of alcohol marketing.

In view of the impact of alcohol marketing on the drinking behaviour of young people, effective regulation of alcohol marketing can contribute substantially to reducing alcohol-related harm by delaying the onset of drinking and by lessening the incentives to drink more. Regulations can be mandated by law, established by a sector or by individual companies through voluntary codes of responsible conduct, or set by a combination where legislation creates the framework for self-regulation. Irrespective of the approach, the key issue is to establish a regulatory framework that incorporates monitoring and enforcement and is able to tackle the cross-national nature of alcohol marketing ([Babor et al., 2010](#)).

In 2009, the [Science Group of the European Alcohol and Health Forum](#) concluded:

Based on the consistency of findings across the studies, the confounders controlled for, the dose response relationships, as well as the theoretical plausibility and experimental findings regarding the impact of media exposure and commercial communications, it can be concluded from the studies reviewed that alcohol marketing increases the likelihood that adolescents will start to use alcohol, and to drink more if they are already using alcohol.

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