

FACT SHEET

The effects of online marketing on drinking behaviors of young people.

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Key Points

- This fact sheet gives a comprehensive overview of scientific studies measuring the effect of online alcohol marketing on the drinking of young people.
- Two studies which did not specifically identify online alcohol marketing exposure, found positive associations with drinking, despite their broad scope.
- Three studies, in which online alcohol marketing is part of a cumulative exposure measure, show a positive association between exposure to alcohol marketing and young people's drinking behaviour.
- Three studies directly measured exposure to online alcohol marketing and showed strong positive associations.
- In these last three studies, effects ranged from advancing the onset of alcohol consumption, increasing the amount consumed, as well as the frequency of consumption.
- A strong association has also been found between assuming an 'alcohol identity' on social network sites and harmful drinking behaviour

Introduction

Research suggests that exposure to alcohol advertising affects the drinking behaviour of young people. Empirical- and review studies supporting this have been published in peer reviewed journals [1-4] and by the Science Group of the Alcohol and Health Forum of the European Commission [5]. However, in these articles the main focus lies on traditional media (magazines, newspapers, TV, radio and movies). Less is known about the effects of alcohol marketing in digital media (through online websites, social media and smart phone applications). It is presumable that if traditional media have an effect on the drinking behaviour of young people, that this relation will also hold true for digital media. But it seems to be unclear how strong this effect is and how it relates to other factors (such as marketing in traditional media). This fact sheet provides a non-systematic overview of the currently available literature on the effects of alcohol marketing through digital media, and attempts to answer these questions.

Effects on drinking

Firstly, there are a number of studies which have measured the effect of online alcohol marketing on youths' drinking behaviour indirectly. These studies asked questions about exposure to online alcohol marketing but did not use this information on itself in their analysis, instead adding this information to a general exposure measure [6, 7]. Therefore, their conclusions don't say anything specifically about online alcohol marketing. Gordon et al. in 2009 found a cumulative effect of alcohol marketing on drinking [7]. They questioned 920 Scottish teens about their exposure to alcohol marketing and the initiation, frequency and amount of drinking and followed up this questionnaire two years later. The study found that the more children knew and interacted with alcohol marketing, the probability increased that they would start to drink and drink more frequently [7]. This effect included exposure to and interaction with digital alcohol marketing.



Figure 1. An example of a Facebook page of a popular American beer brand.

In 2010 Pinsky et al. [6] made a comparable observation, they too measured exposure to alcohol marketing, which included alcohol promotion on the internet. They did so by interviewing 3.007 Brazilian adolescents. The researchers conclude that: "Participating in alcohol promotions in pubs, restaurants or the internet was reported by 10.7% of the adolescents and was significantly associated with patterns of high intensity drinking [6]."

This year a study by Tucker et al. found that alcohol or drug (AOD) related media effects

on drinking behaviour have a reciprocal effect on media selection and may thus play a role in escalating adolescent alcohol use over time [8]. Their analysis of survey results of 2.321 students showed that greater AOD-related media exposure in 7th grade was significantly associated with a higher probability of alcohol use in 8th grade. However this study too measured exposure to online alcohol indirectly and focussed more on exposure to alcohol portrayals and alcohol themed messages [8].

Epstein et al. found in 2011 that when adolescents use computers for their recreation, their lifetime drinking was marginally related to hours spent on the computer [9]. Additionally, past month drinking was significantly related to hours spent on the computer [9]. This suggests again, a strong relationship between drinking and recreational computer use. A 2011 US survey of teens' and parents' attitudes on substance abuse, also found that the 70% of the respondents who were daily users of social network sites, were three times more likely to use alcohol than others [10].

A 2012 New Zealand study, in which 2.538 13 and 14 year olds were interviewed, actually compares the strength of the effect of web-based alcohol marketing and traditional alcohol marketing [11]. Lin et al. find that engagement with web-based marketing increased the odds of being a drinker by 98%, while engagement with traditional marketing increased the odds by 51% [11]. The researchers further show that young people exclusively engaged in web-based marketing drank 36% less alcohol on a typical occasion, while those who engaged in both traditional and web-based marketing consumed 31% more alcohol on a typical occasion [11]. This goes to show how complicated the influencing effects are: There is robust evidence that online alcohol marketing may be a stronger predictor of drinking initiation than traditional alcohol marketing; however it takes combined exposure to digital and traditional advertising to increase consumption.

Another strong relation between exposure to online alcohol marketing and drinking behaviour was found by Jones and Magee, in Australia [12]. Their cross-sectional study among of 1.113 Australian adolescents aged 12–17 years showed that: (1) Exposure to internet advertising was associated with regular alcohol consumption among males aged 12–15 years; (2) alcohol advertising in pubs/bars was associated with regular consumption in the previous 12 months; while combined exposure to magazine,

Internet and pub/bar advertising was associated with consumption in the past 4 weeks; (3) exposure to advertising through the Internet and magazines was associated with recent alcohol consumption among young males [12].

In 2012, EUCAM researcher De Bruijn published preliminary findings from a study in which over nine thousand adolescents in Germany, Italy, the Netherlands and Poland were questioned [13]. De Bruijn's findings indicate a dose-response effect on consumption: the association with binge drinking becomes stronger with high levels of exposure to online alcohol marketing. This effect is described as robust and consistent in various national contexts [13]. De Bruijn is expected to publish final conclusions later this year, in which the analysis will be put in a longitudinal context.

Also in 2012, the UK's Institute of Alcohol Studies [14] found a relation between alcohol branded online content and drinking behaviors. This explorative study however, was not able to show causality [14]. Instead it described the triangular associations between online content, drinking behavior and implicit attitudes to alcohol [14].

Recently, the study of McClure et al. [1] found no association between drinking behaviours and time spent on the internet. The researchers themselves explain that this may be caused by the 'poor specification' of this exposure measure [1].

User Generated Content

The studies described have all concentrated on commercially produced online content. However, there is also a considerable amount of content that was not created by alcohol producers or advertisers. This user generated content often consists of messages, pictures and/or movies containing positive views on brands and products as well as describing or depicting acts of excessive consumption and drunkenness. An Australian study shows that assuming an 'alcohol-identity' on social network sites is predictive of risky alcohol behaviour [15]. Furthermore the authors warn that much of this user generated content contributes to the normalisation of binge drinking among young people [15]. The findings are strengthened by similar results in a US study, in which users' Facebook posts about intoxication were positively related to problematic drinking [16]. Additionally this study found high rates of such posts were related to a greater likelihood of reporting alcohol-related injury [16].

Conclusions

Three of the discussed studies show a positive association between exposure to alcohol marketing and young people's drinking behaviour [6-8]. However, exposure to online marketing in these studies is measured as part of a larger exposure measure, so it remains unclear how much of this effect comes from exposure to online marketing and how much comes from other factors.

We also identified three studies which did not specifically identify alcohol marketing exposure, but instead used more general variables [1, 9, 10]. Two of these found positive associations with drinking, despite their broad scope [9, 10]. The other found no association, for which the authors suggest that the 'poorly specified' exposure measure was responsible [1].

Lastly we also identified three studies which directly measured exposure to online alcohol marketing and its effects [11-13]. Of these, all three showed strong positive associations. We can conclude that exposure to online marketing of young people all over the world, not only associates with the onset of alcohol consumption [7, 11], but also with the amount consumed [6, 11, 13] and the frequency of consumption [7, 12]. One study even suggests an association with binge drinking [13].

It's also important to point out that besides commercial content, the internet is also full of alcohol branded content that is generated by users themselves. This seems especially the case on social network sites and studies show that giving one's self an 'alcohol identity' on social network sites is strongly associated with harmful drinking behaviour in young people [15, 16]. Since such content is user generated, it's difficult to regulate. However, one step in the right direction has been made in Australia where the Advertising Standards Board (ASB) decided that all comments on commercial Facebook pages, including comments posted by members of the public, are regarded as advertisements for the brand on the page. As such, the page's administrator is responsible for the content, which is subject to the self-regulated Alcohol Beverages Advertising Code [19]. Ideally, such rules would be incorporated into statutory regulations, to ensure optimal and independent enforcement.

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