

# FACT SHEET

## The impact of alcohol marketing exposure on the drinking behaviour of young people

Latest revision 25 August 2011

### Introduction

The effects of alcohol advertising and marketing on drinking behavior of young people has been more and more extensively studied over the past few years. Evidence has grown stronger that especially exposure to large *volumes* of alcohol advertising has an undesirable impact on the drinking behavior of youngsters. These effects of alcohol advertising on drinking behavior have been found on the *long term* (longitudinal studies) as well as on the *short term* (experimental studies). Both types of research (findings) will be discussed below in this fact sheet.

### Effects of the volume of alcohol marketing exposure

#### Long term effects

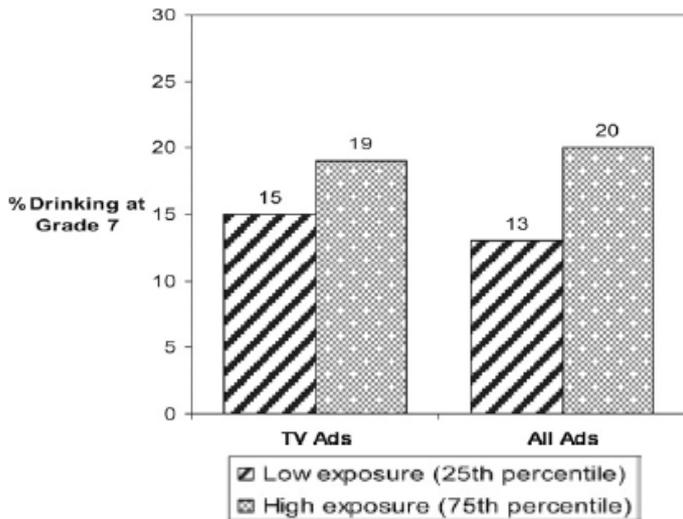
An increasing amount of scientific studies has been conducted on the impact of exposure to alcohol marketing on young people's drinking behavior. Recent longitudinal studies found convincing evidence of a causal relationship between the exposure to alcohol marketing practices and the drinking behavior of young people (2, 3).

Anderson et al. (2009) reviewed thirteen longitudinal studies, mostly conducted in New Zealand, Australia and the United States, in which a total of over 38.000 youngsters aged 10-21 were followed over time. The studies estimated the exposure to alcohol advertising and promotion in various ways, including estimates of the volume exposure of media and alcohol advertising, ownership of alcohol branded merchandise, recall and receptivity, and expenditures on alcohol advertisements. Twelve of the thirteen studies found an impact of exposure to alcohol marketing practices on subsequent alcohol use, including initiation of drinking and heavier drinking amongst existing drinkers. The thirteenth study found a positive effect on the intention to drink alcohol (4). The strength of the impact differed between the studies, but the review showed that there is conclusive evidence that exposure to alcohol marketing is associated with the initiation of alcohol use and with increased drinking among those who already drink.

To illustrate some of the findings of the

longitudinal studies, some examples are provided below:

- 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 lightly exposed to alcohol advertising (25th percentile) (1).
- 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 used 3 or more drinks during 1 occasion (5).
- Exposure to 'in-store beer displays' such as refrigerators and beer displays predicts the age of onset of drinking in non-drinking 13 year olds (6).
- Every additional alcohol advertisement seen by youngsters increases the alcohol consumption with 1% (7).
- Youngsters who are highly exposed to alcohol commercials will drink more alcohol when they are in their twenties. However, the alcohol consumption stabilizes for youngsters who have been lightly exposed to alcohol commercials (7).
- Possession of a 'promotional item' such as caps, t-shirts or posters of an alcohol producer is a strong predictor of both drinking intention as well as alcohol consumption of 12-year olds (1).
- Non-drinking 12 year olds who possess a promotional item of an alcohol producer or would like to have one, have a 77% higher chance of drinking one year later compared to children who are not sensitive to alcohol marketing (do not possess a promotional item and do not have a favorite alcohol brand) (8).
- Controlling for a broad range of confounding variables, it was shown that both the possession of a promotional item as well as an attitudinal susceptibility towards alcohol, predict the age of onset of drinking amongst 10-14 year olds. Also binge drinking could be predicted by these two variables. As such, alcohol branded merchandise ownership becomes a causal factor in the initiation of (binge) drinking (9).



**Figure 1:** Probabilities of grade 7 drinking by level of advertising exposure at grade 6, controlled for confounders (1).

### Short term effects

Besides the above mentioned longitudinal studies that consistently find effects of exposure to alcohol marketing on drinking behavior on the longer term, several experimental (lab) studies have been conducted that show the effect of alcohol advertising on drinking behavior on the *short term*. In these studies, conducted at the Radboud University of Nijmegen in the Netherlands, several direct effects of exposure to alcohol cues in movies and alcohol commercials were found on the drinking behavior of adolescents. Typically, in these kind of studies adolescents in their early twenties are invited to the lab in pairs to watch a movie. They have free access to a fridge with beer, wine and sodas. The participants watch a movie interrupted by commercial breaks and do not know that their alcohol use and 'sipping behavior' are being registered as main dependent variables.

The findings of these type of studies indicate that seeing alcohol cues on the screen (either in movies or in commercials) directly influences the actual drinking behavior (10). 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 movie is portrayed drinking alcohol, the participant unconsciously 'imitates' this behavior and takes a sip as well (11). This behavior might very well be influenced by so called 'mirror neurons' in the brain. The effects seem to be stronger in men – who usually drink more in the first place (11, 12) and in heavier drinkers (13).

Some examples of short term effects of exposure to alcohol (advertising) on drinking behavior, found in experimental studies:

- Young men who watch a movie in which a lot of alcohol is displayed ('American Pie 2'), interrupted by commercial breaks with alcohol advertising drink twice as much alcohol during this period compared to men who see a more 'neutral' movie ('40 days and 40 nights') interrupted by neutral commercial breaks (10). This sipping behavior seems to occur relatively 'unconsciously' (an imitation effect).
- Young men who watch the original 'alcohol' version of the movie 'What happens in Vegas', drink almost twice as much alcohol as men who watch a 'censored' version of the same movie, in which the alcohol slots had been removed (12). For women, no significant effect was found. Subsequent analysis on the 'sipping behavior' revealed that exposure to actors who were sipping in the movie, had an immediate impact on the drinking behavior of the (male) viewers, through the mechanism of imitation (11).
- Regular alcohol users (> 7 glasses per week) drink 2,5 times more alcohol in the cinema after having seen several alcohol commercials preceding the movie ('Watchmen') compared with regular alcohol users who saw several neutral commercials (13). This effect was not found for the participants with a relatively low alcohol use (< 7 glasses per week).

### Effects of the content of alcohol marketing

Usually, alcohol marketing practices do not solely show the promoted product itself, but portray this product in a certain context. Advanced branding strategies concentrate on linking the product to attractive lifestyles and activities in hopes of targeting the desired audience.

Alcohol marketing is found to influence consumption indirectly by an affective response to the exposure to advertising practices (14). Desirable images showed in alcohol advertising are related positively to the wish to imitate the portrayed (14, 15). Exposure to alcohol marketing practices that are perceived as appealing is associated with an increased alcohol consumption among young people (16). Adolescents intention to purchase alcohol can be predicted by how appealing they find the advertisement (16). The level of appeal can be increased by the use of humour, celebrities and animals, while advertisements only showing the product itself are linked

with a lower intention to purchase alcohol (17).

Children from quite a young age are capable of understanding the persuasive intent of advertising practices (18) but until reaching adulthood, young people are very susceptible to advertising due to a late maturing of the brain system (19). The impulsivity and self-consciousness of youngsters make them more vulnerable for advertising, more eager to purchase heavily promoted products and to choose products which are associated with a desired image (20). By promoting alcohol as an appealing product that provides immediate satisfaction and/or is associated with a desired lifestyle, adolescents are tempted to purchase this product (20, 21).

### Conclusion

Taken together, both longitudinal studies (long term effects) as well as experimental studies (short term effects) indicate that exposure to the amount of alcohol advertising and promotion affects youth drinking behavior. This conclusion is supported by several empirical- and review studies, published in peer reviewed journals (Smith and Foxcroft, 2009) and by the Science Group of the Alcohol and Health Forum of the European Commission (2009). These effects show the need to limit the volume (and content) of alcohol marketing through comprehensive legislation.

For more information please contact:

Avalon de Bruijn ([adebruijn@eucam.info](mailto:adebruijn@eucam.info))

### European Centre for Monitoring Alcohol Marketing

P.O. box 9769

3506 GT Utrecht, the Netherlands

T + 31 (0) 30 65 65 041

F + 31 (0) 30 65 65 043

Email: [eucam@eucam.info](mailto:eucam@eucam.info)

The content of this Fact Sheet was partly based on Wildenberg, van den, E., *The volume of alcohol advertising on television in The Netherlands*. Report of the AMMIE project (2011).

### References

1. Collins RL, Ellickson PL, McCaffrey D, Hambarsoomians K. Early adolescent exposure to alcohol advertising and its relationship to underage drinking. *J Adolesc Health*. 2007 Jun;40(6):527-34.
2. Anderson P, de Bruijn A, Angus K, Gordon R, Hastings G. Impact of alcohol advertising and media exposure on adolescent alcohol use: a systematic review of longitudinal studies. *Alcohol Alcohol*. 2009 May-Jun;44(3):229-43.

3. Smith LA, Foxcroft DR. The effect of alcohol advertising, marketing and portrayal on drinking behaviour in young people: systematic review of prospective cohort studies. *BMC Public Health*. 2009;9:51.
4. Pasch KE, Komro KA, Perry CL, Hearst MO, Farbaksh K. Outdoor alcohol advertising near schools: what does it advertise and how is it related to intentions and use of alcohol among young adolescents? *J Stud Alcohol Drugs*. 2007 Jul;68(4):587-96.
5. Stacy A, Pearce S, Zogg J, Unger J, Dent C. A nonverbal test of naturalistic memory for alcohol commercials. *Psychology and Marketing*. 2004;21(4):295-322.
6. Ellickson PL, Collins RL, Hambarsoomians K, McCaffrey DF. Does alcohol advertising promote adolescent drinking? Results from a longitudinal assessment. *Addiction*. 2005 Feb;100(2):235-46.
7. Snyder LB, Milici FF, Slater M, Sun H, Strizhakova Y. Effects of alcohol advertising exposure on drinking among youth. *Arch Pediatr Adolesc Med*. 2006 Jan;160(1):18-24.
8. Henriksen L, Feighery EC, Schleicher NC, Fortmann SP. Receptivity to alcohol marketing predicts initiation of alcohol use. *J Adolesc Health*. 2008 Jan;42(1):28-35.
9. McClure AC, Stoolmiller M, Tanski SE, Worth KA, Sargent JD. Alcohol-branded merchandise and its association with drinking attitudes and outcomes in US adolescents. *Arch Pediatr Adolesc Med*. 2009 Mar;163(3):211-7.
10. Engels R, Hermans R, van Baaren R, Hollenstein T, Bot S. Alcohol Portrayal on Television Affects Actual Drinking Behaviour. *Alcohol and Alcoholism*. 2009.
11. Koordeman R, Kuntsche E, Anschutz DJ, van Baaren RB, Engels RCME. Do We Act upon What We See? Direct Effects of Alcohol Cues in Movies on Young Adults' Alcohol Drinking. *Alcohol and Alcoholism*. 2011;46(4):393.
12. Koordeman R, Anschutz DJ, Van Baaren RB, Engels RCME. Effects of alcohol portrayals in movies on actual alcohol consumption: an observational experimental study. *Addiction*. 2011.
13. Koordeman R, Anschutz DJ, Engels RCME. Exposure to alcohol commercials in movie theaters affects actual alcohol consumption in young adult high weekly drinkers: an experimental study. *The American Journal on Addictions*. 2009.
14. Austin EW, Chen MJ, Grube JW. How does alcohol advertising influence underage drinking? The role of desirability, identification and skepticism. *J Adolesc Health*. 2006 Apr;38(4):376-84.
15. Austin EW, Knaus C. Predicting the potential for risky behavior among those "too young" to drink as the result of appealing advertising. *J Health Commun*. 2000 Jan-Mar;5(1):13-27.
16. Casswell S, Zhang JF. Impact of liking for advertising and brand allegiance on drinking and alcohol-related aggression: a longitudinal study. *Addiction*. 1998 Aug;93(8):1209-17.
17. Chen MJ, Grube JW, Bersamin M, Waiters E, Keefe DB. Alcohol advertising: what makes it attractive to youth? *J Health Commun*. 2005 Sep;10(6):553-65.
18. Moses L, Baldwin D. What can the study of cognitive development reveal about children's ability to appreciate and cope with advertising?

Journal of Public Policy & Marketing. 2005;24(2):186-201.

19. EUCAM. Fact sheet: Why are young people in particular vulnerable to alcohol advertising and promotion? 2009.

20. Pechmann C, Levine L, Loughlin S, Frances L. Impulsive and self-conscious: Adolescents' vulnerability to advertising and promotion. Journal of Public Policy & Marketing. 2005 2005;24(2):202-221.

21. Kelly KJ, Edwards RW. Image advertisements for alcohol products: is their appeal associated with adolescents' intention to consume alcohol? Adolescence. 1998 Spring;33(129):47-59.