

Document tendered by  
*Professor Sandra Jones*  
Received by  
*[Signature]*  
Date: **informa** / 2013  
healthcare  
Resolved to publish Yes / ?

*Journal of Substance Use*, December 2009; 14(6): 335–352

ORIGINAL ARTICLE

## Adolescent and young adult perceptions of Australian alcohol advertisements

SANDRA C. JONES<sup>1</sup>, PARRI GREGORY<sup>1</sup>, & GEOFFREY MUNRO<sup>2</sup>

<sup>1</sup>Centre for Health Initiatives, University of Wollongong, Wollongong, Australia, and <sup>2</sup>Australian Drug Foundation, Melbourne, Australia

### Abstract

There is substantial evidence that children and youth are exposed to and recall alcohol advertising, and increasing evidence of associations between liking alcohol advertisements and under-age drinking. Alcohol advertising in Australia, as in many industrialized countries, is subject to a self-regulatory code developed and administered by the alcohol industry. The purpose of the current study was to investigate young people's perceptions of the messages in recent alcohol advertisements and whether these perceptions support the industry view that self-regulation is effective in protecting young people from inappropriate messages about alcohol. Six print and six television advertisements were selected for the study, and 287 respondents aged 15–24 years viewed two alcohol advertisements (one print and one television) and completed a questionnaire immediately after viewing each advertisement. The respondents perceived messages in the advertisements regarding several social benefits of consuming alcohol, including that the advertised product would make them more sociable and outgoing, help them have a great time, help them fit in, help them feel more confident, help them feel less nervous, and help them succeed with the opposite sex. All of these messages transgress the terms of the self-regulatory code for alcohol advertising. There was also a strong association between emotional responses to the advertisements and stated intentions to try the advertised products.

**Keywords:** *Alcohol, policy, advertising, adolescents, perceptions.*

### Introduction

#### *Adolescent exposure to alcohol advertising*

There is an ongoing debate, in the literature as well as in policy circles, as to the relationship between advertising and alcohol consumption. Some econometric studies have reported no association between advertising bans and alcohol consumption or abuse (e.g. Nelson, 2001), whereas others have argued that bans on alcohol advertising result in lower *per capita* alcohol consumption and lower alcohol-related vehicle fatality rates (e.g. Saffer, 1991). Similarly, there is ongoing debate as to whether alcohol advertising targets under-age drinkers; with

Correspondence: Prof Sandra C. Jones, Director, Centre for Health Initiatives, University of Wollongong, NSW, Australia.  
Tel: +61 2 4221 5106. Fax: +61 2 4221 3370. E-mail: sandraj@uow.edu.au

ISSN 1465-9891 print/ISSN 1475-9942 online © 2009 Informa UK Ltd.  
DOI: 10.3109/14659890802654524

RIGHTLINK

some arguing that the content of alcohol advertisements is often designed deliberately to appeal to those under the legal drinking age (e.g. Garfield, Chung, & Rathouz, 2003) and others that alcohol advertisements do not intentionally target under-age drinkers (e.g. Slater, Rouner, Beauvais, Murphy, Domenech-Rodríguez, & Van Leuven, 1996).

In a study of alcohol advertising in major US magazines between 1997 and 2001 (Garfield et al., 2003), it was reported that as the proportion of adolescent (12–19 years) readership increased there was a substantial increase in advertisements for beer and distilled liquor. Similarly, in their analysis of exposure to alcohol advertising in the United States between 2001 and 2003, Jernigan, Ostroff, & Ross (2005) concluded that young people aged 12–20 were more likely to be exposed to alcohol advertising than were people over the age of 21. However, these studies have been criticized by Nelson (2005), who conducted an econometric analysis of cumulative advert placements for alcoholic beverages in 35 US magazines for the period 1997–2001, and concluded that beer and spirits producers advertise in magazines with a large young adult (20–24 years) audience and wine producers in magazines with a predominantly older (age 25 plus) readership. Nelson (2005) argues that these advertisers do not deliberately target adolescent readers, but that adolescent readership tends to co-vary with young adult readership and that adolescent readership in itself does not predict alcohol advertising placement.

Whether intended or not, there is increasing evidence that children and youth are exposed to and recall alcohol advertising (e.g. Lieberman & Orlandi, 1987; Snyder, Milici, Slater, Sun, & Strizhakova, 2006) and like alcohol advertising (e.g. Grube, 1993; Waiters, Treno, & Grube, 2001). Furthermore, there is also increasing evidence of associations between liking advertisements and under-age drinking (e.g. Austin & Nach-Ferguson, 1995; Austin, Chen, & Grube, 2006); between exposure and alcohol expectancies (e.g. Lipsitz, Brake, Vincent, & Winters, 1993; Grube, 1995; Stacy, Zogg, Unger, & Dent, 2004); between exposure and drinking intentions (e.g. Austin and Meili, 1994; Kelly & Edwards, 1998; Stacy et al., 2004); and even between exposure and current or future drinking (e.g. Casswell & Zhang, 1998; Wyllie, Zhang, & Casswell, 1998; Stacy et al., 2004; Ellickson, Collins, Hambarsoomians, & McCaffrey, 2005).

#### *Regulation of alcohol advertising in Australia*

The Alcohol & Public Policy Group report that countries with greater restrictions on advertising have fewer alcohol-related problems (International Centre for Alcohol Policies, 2001). Furthermore, they conclude that industry self-regulation tends to be largely ineffective, and that an effective system requires an independent body with the power to veto advertisements, rule on complaints, and impose sanctions (International Centre for Alcohol Policies, 2001). Of 119 countries surveyed in 1996, seven have a complete ban on alcohol advertising (e.g. Bahrain, Belarus, Egypt, Senegal, Ukraine); 45 restrict alcohol advertising by statutory legislation (e.g. Canada, China, India, France, Russia); 21 combine statutory legislation with self-regulation (e.g. Brazil, Indonesia, Japan, Spain, USA); 17 are solely self-regulated (e.g. Argentina, Australia, Germany, South Africa, UK); and the remainder (primarily developing countries, such as Benin, Guyana, Malawi, Moldova, Tajikistan) have no or limited controls (International Centre for Alcohol Policies, 2001).

In Australia, two industry self-regulation codes apply to alcohol advertisements. Following the demise of the Advertising Standards Council in 1996, the major industry body, the Australian Association of National Advertisers (AANA), developed the Advertiser Code of Ethics, which applies to all forms of advertising and covers issues, such as taste and

decency, and established the Advertising Standards Board (ASB) and the Advertising Claims Board (ACB) to deal with complaints and breaches of the code. The AANA additionally allowed the alcohol industry to separately develop its own code, the Alcoholic Beverages Advertising Code (ABAC), see Table I, and its own complaints management system, the Alcohol Beverages Advertising Code Complaints Adjudication Panel.

Both the ABAC and the complaints management system operate under the structure developed by the AANA. However, in recent years the effectiveness of the regulatory system has been questioned (Jones & Donovan, 2001, 2002) and there have been increasing public calls for an overhaul of the regulatory system (Ligerakis, 2003; Ryan, 2003).

#### *Consumer awareness of ABAC and perceptions of Australian alcohol advertising*

In 2005, the Australian Commonwealth Department of Health and Ageing conducted a survey on consumer perceptions of alcohol advertising and the ABAC with a random sample of 1000 Australian adults, ranging from 18 to 84 years of age (King, Taylor, & Carroll, 2005). Key findings from this study included that 60% of respondents stated that alcohol advertising should be either more restricted or entirely prohibited; and that 69% believed that alcohol advertising encourages under-age people to drink alcohol and 52% that it encourages under-age people to drink too much alcohol. Importantly, only 28% reported being aware of any restrictions or regulations regarding the advertising of alcohol and only 2% aware of any restrictions in relation to Internet advertising of alcohol; only 16% could

Table I. The alcohol beverages advertising code

- 
- (a) Must present a mature, balanced and responsible approach to the consumption of alcohol beverages and, accordingly:
    - (i) must not encourage excessive consumption or abuse of alcohol
    - (ii) must not encourage under-age drinking
    - (iii) must not promote offensive behaviour, or the excessive consumption, misuse or abuse of alcohol beverages
    - (iv) must only depict the responsible and moderate consumption of alcohol beverages
  - (b) Must not have a strong or evident appeal to children or adolescents and, accordingly:
    - (i) adults appearing in advertisements must be over 25 years of age and be clearly depicted as adults
    - (ii) children and adolescents may only appear in advertisements in natural situations (e.g. family barbecue, licensed family restaurant) and where there is no implication that the depicted children and adolescents will consume or serve alcohol beverages
    - (iii) adults under the age of 25 years may only appear as part of a natural crowd or background scene
  - (c) Must not suggest that the consumption or presence of alcohol beverages may create or contribute to a significant change in mood or environment and accordingly:
    - (i) must not depict the consumption or presence of alcohol beverages as a cause of, or contributing to the achievement of personal, business, social, sporting, sexual, or other success
    - (ii) if alcohol beverages are depicted as part of a celebration, must not imply or suggest that the beverage was a cause of or contributed to success or achievement
    - (iii) must not suggest that the consumption of alcohol beverages offers any therapeutic benefit or is a necessary aid to relaxation
  - (d) Must not depict any direct association between the consumption of alcohol beverages, other than low-alcohol beverages, and the operation of a motor vehicle, boat or aircraft or the engagement in any sport (including swimming and water sports) or potentially hazardous activity and, accordingly:
    - (i) any depiction of the consumption of alcohol beverages in connection with the above activities must not be represented as having taken place before or during engagement of the activity in question and must in all cases portray safe practices
    - (ii) any claim concerning safe consumption of low-alcohol beverages must be demonstrably accurate
  - (e) Must not challenge or dare people to drink or sample a particular alcohol beverage, other than low-alcohol beverages, and must not contain any inducement to prefer an alcohol beverage because of its higher alcohol content
-

name one of the two correct organizations to whom they could make complaints (ASB and ABAC); and, although 14% agreed that they had heard of the ABAC code, only 3% of the sample could correctly identify what was covered by the code.

#### *Purpose of the study*

The present study was the second and final component of a project designed to examine whether the introduction of the revised ABAC code in 2004, and the stated industry position, resulted in improvements in the degree to which the self-regulatory system protects young people from offensive or inappropriate alcohol advertisements. In the first study, 14 complaints against alcohol advertisements were lodged with the self-regulatory board, and an independent expert panel was recruited to assess the same advertisements and complaints (Jones, Hall & Munro, 2008). In eight of the 14 cases a majority of the six judges perceived the advertisement to be in breach of one or more clauses of the code, and in no cases did a majority perceive no breach. Conversely, however, none of the complaints were upheld by the Advertising Standards Board (ASB) and only one by the ABAC Panel.

Previous research in this area has only addressed expert opinions and thus industry has argued that these findings do not accurately represent the way these messages are perceived by lay people. Therefore, providing evidence of young people's interpretations of the messages in Australian alcohol advertising is an essential step in moving towards a more effective regulatory system. The present study sought to examine young people's perceptions of these advertisements, including their attitudinal responses and behavioural intentions, and their perceptions of the messages in the advertisements.

## **Method**

### *Stimuli*

From May 2004 until March 2005, television and magazine advertising campaigns (national and regional) were monitored for alcohol products. The television advertisements were monitored via a media monitoring service and the magazine advertisements were monitored by a research assistant manually examining all issues of the top 20 magazines in Australia. This top 20 group of magazines was based on audited circulation data (calculated from average net paid sales of publications, quarterly), excluding magazines targeted primarily at children and teenagers. These 20 magazines included weekly ( $n = 8$ ), monthly ( $n = 11$ ), and quarterly ( $n = 1$ ) magazines with a range of target audiences including both genders and all age groups (above 18 years). In total, 433 magazines were monitored over this period.

The research assistant was trained in the provisions of the codes and the assessment of advertisements, and produced monthly reports which included any advertisements, which could possibly be in breach of either the ABAC or the AANA Code of Ethics. These reports were provided to two of the authors (SJ and GM) who individually assessed which advertisements appeared to be in breach, with disagreements discussed to reach consensus. A total of 14 advertisements were considered in breach of the codes during the monitoring period, consisting of eight television commercials and six magazine advertisements. Twelve of these advertisements were the stimuli for the present study, as each participant was shown one print and one television advertisement, six of the eight television commercials were selected at random to form a set of six television and six magazine advertisements (listed in Table II below, with the clause(s) perceived to be breached).

Table II. Description of the advertisements, number of participants viewing each advertisement, and experts' views of clauses breached

Type	Product	Title	Description	Freq	%	Breach
Television	Toohays New	Cane toads	Three young men approach the Queensland border (from New South Wales) and use golf clubs to hit cane toads back over the border	63	11.0	ABAC A(iii) and AANA 2.2
Magazine	Kahlua	Alluring Kahlua	A competition to win Kahlua product merchandise by explaining in 25 words or less 'why Kahlua helps you to pick up chicks.'	43	7.5	ABAC C(ii)
Television	XXXX	Boat on the Beach	A group of males are on a moored boat drinking beer and invite a male passerby and his girlfriend (an attractive bikini clad backpacker) to join and them. When they are told that the girl does not speak any English one of the males asks why he would go out with her if she can't speak English - in response to which one of his friends pushes him off the boat	51	8.9	ABAC C(i) and AANA 2.3
Magazine	St Agnes Brandy	Give it your best shot	A man is standing against the wall with a woman standing in front of him holding a shot glass of St Agnes Brandy. The text talks about knowing you want 'it' and the tag line is 'Interested? Give it your best shot.'	59	10.3	ABAC C(i)
Magazine	Frangelico	Suits me at the Weekend	An attractive young woman dressed in revealing clothing along with the text 'The dress, smouldering make-up and sexy bed hair will have you looking ready to party, but to truly get in the mood unwind with the heavenly taste of a Frangelico cocktail.'	38	6.6	ABAC B(i) and C(i-iii)
Television	Victoria Bitter	Kebab	A group of males are in a pub drinking Victoria Bitter (with the voiceover stating 'another beer and another beer'). They finish the night by eating lamb kebabs and end up in hospital.	51	8.9	ABAC A(i-iv) and C(iii)
Magazine	Frangelico	Make it a Habit	Two women are drinking cocktails in an outdoor setting standing behind a table with a bottle of the product on it. The ad includes recipes for different cocktails and the tagline reads 'make it a habit'.	43	7.5	ABAC A(i), (iv), and C(iii)
Magazine	Galliano Sambucca	Ralph Promotion	This promotion shows a series of photographs, one of which portrays a group of young men who appear to be underage (the Famous Five) who won a promotion which includes a party 'where they will enjoy themselves alongside plenty of babes'	43	7.5	ABAC B(i) and B(iii)

(Continued)

Table II. (Continued)

Type	Product	Title	Description	Freq	%	Breach
Television	Victoria Bitter	Spectator Sport	Two men walk into a living room while the voiceover explains that the remote control is the greatest sporting apparatus ever invented and that it goes hand in hand with the 'best cold beer'. The men then sit down on the couch and cycle through the range of sporting events on the television returning repeatedly to the channel showing women in an aerobics class.	47	8.2	AANA 2
Television	Carlton Midstrength	Funeral	At the closing stage of a funeral, the pall bearers raise the coffin to their shoulders and leave the church. They then start to run with the coffin still on their shoulders and the final scene shows them sitting down to enjoy a beer while the song 'stay just a little bit longer' plays in the background.	40	7.0	ABAC A(iii)
Television	Carlton Midstrength	Removalist	A removal van is backing into an elderly couple's driveway and the removal men raise the hydraulics on the truck causing the couple's possessions to be strewn across the driveway. While the couple looks on in shock, the van drives away with more possessions falling from the back. The song 'stay just a little bit longer' plays in the background and the final scene shows the removal men enjoying a beer.	33	5.8	AANA 2.2 ABAC and A(iii)
Magazine	Tiger Beer	Easy Tiger	A promotion outlining in cartoon form how to modify a vehicle, stock the modified van with alcohol and drive it to a place as a 'ready made party'. It then offers readers the chance to have a 'Kombi packed to the gunnels with Tiger ...' (beer) turn up to their back yard for a ready made party complete with a 'troupe of delightful lady-folk to come and serve the party'	52	9.1	ABAC D i)
<b>Total</b>				<b>564</b>	<b>100.0</b>	

While a concerted effort was made to ensure that equal numbers of participants were exposed to each advertisement, this was limited by the nature of the participant recruitment and data collection process, where groups of respondents were randomized to advertisements. Thus, the number of participants who saw each advertisement ranged from 33 for the Carlton Midstrength 'removalist' to 63 for the Tooheys New 'cane toads' advertisement.

The Project was approved by the Human Research Ethics Committee of the Victorian Department of Human Services (DHS), the Office of Learning and Teaching in the Department of Education and Training (DEAT) and the Catholic Education Office (CEO) in the Archdiocese of Melbourne. Each participant was required to sign a consent form and in the case of school students, a parent (or equivalent) was also required to give written approval. Each respondent independently completed two questionnaires, one for a print advertisement and one for a TV advertisement, under supervision of project staff.

#### *Survey development and data analysis*

A 4-page survey was developed, which asked both open- and closed-ended questions relating to the advertisement just viewed. Also, demographic questions were asked, as well as questions to determine past alcohol consumption behaviours. This survey tool was pilot tested by 12 young people from within the target group and changes were made based on feedback where necessary. Once the data were entered, all statistical analyses were conducted using SPSS Version 13.0. Frequencies and proportions were calculated, and comparisons between advertisements, and between responses and respondent characteristics (e.g. gender, student/employment status, and age group) were performed using chi-squared tests ( $\chi^2$ ). The level of significance was set at 5%.

#### *Participants*

A convenience sample of 110 secondary school students aged 15–18 years (106 aged under 18) was recruited from secondary schools in the Melbourne metropolitan area. In order to ensure respondents were drawn from a spread of socio-economic backgrounds, project staff recruited schools from each of the eastern, western, northern, and southern metropolitan regions of Melbourne. A total of five secondary schools participated in the study (two government schools, one Catholic school, and two independent schools) after 11 were initially approached (six schools declined participation citing lack of time, previous commitments or administrative difficulties). Based on internal criteria (including the time of year and current demands on students) each school selected one or more classes in one year level (years 9 or 10 or 11) and invited students in those classes to participate.

A convenience sample of tertiary students aged 18–24 years was recruited from three tertiary education campuses: two university campuses ( $n = 110$ ) and one Technical and Further Education (TAFE) college ( $n = 33$ ). Tertiary education student participants received a payment of \$20 (this amount was deemed sufficient to reimburse them for their time without being large enough to coerce participation, and was approved by the respective ethics committees).

A convenience sample of 34 employed young people aged 18–24 years was recruited from a variety of 'white collar' and 'blue-collar' workplaces. After workplaces where young people work were identified, contacted, and agreed to participate, managers distributed the explanatory letter and consent form to eligible members of their workforce (only those

aged 18–24 years) and arranged times for the project staff to attend the workplace to carry out the survey. A total of five workplaces participated in the study, and workplace participants also received a payment of \$20.

There were 287 respondents in total and, as each participant completed two surveys (one for a print advert and one for a TV advert), a total of 572 completed surveys were returned. For 11 of the surveys, it was not known which advertisement had been viewed and these were therefore excluded from further analysis. Just under one-third (30.2%) of the respondents were male and 68.2% were female (gender was not reported for the remaining 1.6%). The mean age of respondents was 18.9 years (SD 2.58, range 15–24), with 37.2% aged under 18 years (the legal age for purchasing alcohol in Australia). As stated above, the respondents were from a range of educational and workplace settings: 38.3% high school students; 38.3% university students; 11.9% employed; and 11.5% TAFE students.

## Results

The results are presented by topic for all respondents combined. All significant differences by gender or age group (under 18 years versus 18 and over) are also reported.

### *Drinking patterns*

Only 3.5% ( $n = 10$ ) of respondents reported never having consumed an alcoholic drink; six of these were aged under 18, reflecting the high prevalence of under-age drinking in Australia. The majority of respondents (79.2%) had consumed more than 10 drinks in their life, 8% had consumed less than 10 drinks in their life, and 9.3% had just a few sips of alcohol. As would be expected, a significantly smaller proportion of high school students (57.5%) had consumed more than 10 drinks in their lives compared with tertiary students (90.9%) and employed respondents (100%) ( $\chi^2 = 107$ ;  $p < 0.001$ ).

Of all respondents, 76% had consumed an alcoholic drink in the previous 4 weeks. A slightly higher percentage of males than females had consumed an alcoholic drink in the previous 4 weeks (79.8% compared with 73.8%). Similarly, males were more likely to have consumed more than 10 drinks in their life, with 87.3% stating that they had done so, compared with 75.4% of females. Comparing those over and under the legal alcohol purchasing age, 59.2% of participants under the age of 18 reported having consumed more than 10 drinks, compared with 90.8% of those over 18 ( $\chi^2 = 84.0$ ;  $p < 0.001$ ); and 58.8% of those under the age of 18 had consumed an alcoholic drink within the previous 4 weeks, compared with 86.1% of those 18 and over who had done so ( $\chi^2 = 54.3$ ;  $p < 0.001$ ).

There was also extensive evidence of heavy episodic drinking, with 68.8% of all male participants (i.e. including those under age) reporting having consumed more than 10 standard drinks in one night and 72.6% of all female participants reporting having consumed more than 6 standard drinks in one night. While significantly fewer under age drinkers had ever consumed more than 10 or 6 standard drinks (for males and females respectively) than adult drinkers ( $\chi^2 = 23.5$ ;  $p < 0.001$  for males and  $\chi^2 = 72.8$ ;  $p < 0.001$  for females), there were still a large number of under age drinkers who reported participating in heavy episodic drinking; 48.6 and 47.9% of under age males and females, respectively, had consumed more than 10 or 6 drinks on one occasion, compared with 82.1 and 87.4% of those over the legal alcohol purchasing age.



*Responses to the advertisements*

Across all 12 advertisements in this study combined, respondents reported feeling interested when viewing the advertisement (71.0% of the 572 advertisements viewed), not bored with the advertisement (83.7%), not annoyed with the advertisement (76.6%), and amused by the advertisement (58.7%). These results indicate generally positive attitudes towards the alcohol advertisements, regardless of advertisement type. However, three-quarters (75.7%) of respondents stated that they did not feel that they would like to be like the person/people in the advertisement, and more than half (56.8%) said that they did not 'feel good' about the product advertised, demonstrating a difference between feelings regarding the advertisement and feelings regarding the product.

Using the Pearson chi-square test of independence, several significant associations between gender and responses to questions on reactions to the advertisements were found. Females (27.7%) were more likely than males (14.5%) to have stated that they felt 'annoyed' with the advertisement ( $\chi^2 = 11.6$ ;  $p = 0.001$ ). Also, males were more likely to be report being amused by the advertisement ( $\chi^2 = 7.6$ ;  $p = 0.006$ ), feeling good about the product ( $\chi^2 = 8.0$ ;  $p = 0.046$ ), and were more likely to state that they 'would like to be like that' ( $\chi^2 = 5.4$ ;  $p = 0.020$ ). There were no significant differences between under-age drinkers and adult drinkers on these measures.

*Purchase intentions*

Across the advertisements as a whole, less than half of the respondents (47.6%) reported that they were likely (i.e. 'very likely', 'quite likely' or 'a little likely') to try the product. This is not surprising, given that the advertisements were for a range of products that may not have been appealing to the participants (for example, eight of the advertisements were for beer, which is predominantly consumed by males, whereas two-thirds of our participants were female). This is consistent with the finding that, across all of the advertisements, females were less likely to try the product, with only 4.4% stating that they are 'very likely' to try the product, compared with 13.3% of males and, correspondingly, 59.5% stating that they were 'not very' or 'not at all' likely to try the product, compared with only 37.6% of males.

There was a relationship between legal alcohol purchasing status and likelihood of trying the product advertised ( $\chi^2 = 15.6$ ;  $p = 0.004$ ). Importantly, a greater percentage of under-age participants than those over the legal alcohol purchasing age stated that they were 'very likely' to try the product (11.8% compared with 3.9%), and correspondingly, 55.2% of those over the age of 18 reported that they were 'not at all' or 'not very' likely to try the product advertised, compared with 48.4% of the under age participants.

*Perceived messages in the advertisements*

There were some strong indications that respondents perceived messages in the advertisements regarding social benefits of consuming alcohol. Across all advertisements, 74% believed that the advertisement suggested the advertised product would make them more sociable and outgoing, 89.9% that it would help them have a great time; 69.8% that it would help them fit in; 64.9% that it would help them feel more confident; 58.9% that it would help them feel less nervous; 46.5% it would help them succeed with the opposite sex; and 42% that it would make them feel more attractive.

In general, there were no significant differences between males and females in response to this series of questions. However, females (67.9%) were more likely than males (58.4%) to believe that the advertisement conveyed the message that drinking the product would make them feel more confident ( $\chi^2 = 4.8$ ;  $p = 0.028$ ).

On only one of the social benefit-related questions was there a difference between those over and under the age of 18: under-age drinkers were more likely to report that the advertisement suggested the product will help them have a great time than were those over the age of 18 (93.4% compared with 87.7%,  $\chi^2 = 4.6$ ;  $p = 0.032$ ).

#### *Interactions between attitudes to the advertisement and purchase intentions*

There was a clear relationship between respondents' perceptions of and attitude towards an advertisement and their reported likelihood of trying that product (see Table III). Participants who stated that they were likely to try the product were also more likely to have felt interested in and amused by the advertisement, not bored or annoyed with the advertisement, and generally to feel good about the product. They were also much more likely to state that they would like to be 'like that' person (in the advertisement) than those who were not likely to try the product.

#### *Interactions between drinking status and responses to the advertisements*

Across all of the advertisements, there was an association between participants reporting that they had consumed an alcoholic drink in the past four weeks and reported intentions to try the product for which they saw an advertisement ( $\chi^2 = 19.5$ ;  $p = 0.001$ ). Recent drinkers were more likely to report feeling interested in the advertisement than non-recent drinkers ( $\chi^2 = 4.0$ ;  $p = 0.046$ ), and were more likely to be amused with the advertisement ( $\chi^2 = 12.1$ ;  $p = 0.001$ ). They were also more likely to state that they feel good about the product ( $\chi^2 = 11.7$ ;  $p = 0.008$ ), and less likely to report being annoyed with the advertisement ( $\chi^2 = 11.9$ ;  $p = 0.001$ ). Finally, recent drinkers were more likely to state a desire to be like the individuals in the advertisement ( $\chi^2 = 4.5$ ;  $p = 0.034$ ), and to intend to drink the product ( $\chi^2 = 19.6$ ;  $p = 0.001$ ).

#### *Responses to individual advertisements*

There were significant differences between the distributions of responses for almost every question, when comparing responses by alcohol advertisement seen. This was to be expected, since it is extremely unlikely that for all 12 advertisements, the same proportion

Table III. Feelings about advertisement and likelihood of trying product

	Very likely (%)	Quite likely (%)	A little likely (%)	Not very likely (%)	Not at all likely (%)	$\chi^2$ (p-value)
Feel good about (0.000) product	94.7	72.9	54.5	32.1	9.6	165
Interested with product	87.5	93.1	81.4	64.2	48.9	69.2 (0.000)
Amused with product	75.0	64.4	66.9	57.0	43.7	22.3 (0.000)
I'd like to be like that	77.5	48.3	28.3	11.5	4.4	133.6 (0.000)
Annoyed with product	7.5	11.5	11.7	29.7	40.7	49.8 (0.000)
Bored with product	2.5	5.7	12.4	18.8	28.1	29.0 (0.000)

said 'yes' and 'no' to each of the questions. Thus, the following section summarizes only the most notable findings.

#### *Emotional responses*

The five advertisements that respondents were most likely to report being interested in were all for beer and all used humour: Carlton Midstrength 'funeral', Victoria Bitter, XXXX – a beer brand known as 'four X', Tooheys New, and Frangelico 'make it a habit'. The three advertisements that were perceived as boring by more than one quarter of respondents were all magazine advertisements; two for liqueurs (Galliano Sambucca and Frangelico) and one for Tiger Beer.

There were six advertisements that more than one quarter of the respondents described as annoying. Five of these (Kahlua, St Agnes Brandy, XXXX, Tiger Beer and Frangelico 'suits me') use sexual or sexist appeals and the sixth (Tooheys New) displays violence to animals. Females were significantly more likely to state that they were annoyed with these advertisements than males (35.0% compared with 20.2%,  $\chi^2 = 6.9$ ,  $p = 0.009$ ). For these same six advertisements, females were significantly *less* likely to state that they feel good about the product advertised than males (31.7% compared with 52.6%,  $\chi^2 = 14.4$ ,  $p = 0.002$ ).

The two advertisements for which the highest proportion of respondents reported that they would 'like to be like that' were the two Frangelico advertisements (one which shows an attractive woman in a sexually suggestive pose, and one which shows two attractive women enjoying a social function); with females more likely to report that they wanted to be like the people in these advertisement than males (45.0% compared with 14.3%,  $\chi^2 = 6.3$ ;  $p = 0.012$ ). The advertisement receiving the lowest response for this question, by a considerable margin, was the Carlton Midstrength 'funeral' advertisement (which shows a group of pallbearers running out of a church so they can go to the pub).

Interestingly, females were more likely than males to report being annoyed with the two Frangelico advertisements mentioned above (28.3% compared with 4.8%,  $\chi^2 = 5.0$ ,  $p = 0.025$ ). Across *all* of the beer ads, females were significantly more likely to report being annoyed with the advertisement (27.1% compared with 14.5%,  $\chi^2 = 6.5$ ,  $p = 0.011$ ), less likely to report feeling good about the product (38.4% compared with 57.8%,  $\chi^2 = 11.7$ ,  $p = 0.008$ ), less likely to report feeling amused with the product (69.3% compared with 81.8%,  $\chi^2 = 5.9$ ,  $p = 0.015$ ), and less likely to report wanting to 'be like that' (13.3% compared with 34.5%,  $\chi^2 = 20.3$ ,  $p < 0.001$ ).

#### *Perceived target audience*

Across the sample as a whole, advertisements that were perceived by more than half of the sample to be aimed at people of 'their age' include Frangelico 'suits me', Tiger Beer, Tooheys New, Galliano Sambucca, and Kahlua. In contrast, the ads for Victoria Bitter, Carlton Midstrength, XXXX, Frangelico 'make it a habit', and St Agnes Brandy were perceived by the majority of respondents as being aimed at people older than themselves.

#### *Purchase intentions*

As shown in Table IV, the groups that demonstrated the highest likelihood of trying the advertised product were those who were exposed to the Frangelico 'make it a habit'

Table IV. Likelihood of trying product by advertisement seen

	Very likely (%)	Quite likely (%)	A little likely (%)	Not very likely (%)	Not at all likely (%)	Total (%)
Galliano Sambucca	4.7	23.3	25.6	20.9	25.6	100.0
Frangelico 'make it a habit'	9.3	32.6	37.2	16.3	4.7	100.0
Kahlua	7.0	18.6	20.9	37.2	16.3	100.0
St Agnes Brandy	3.4	11.9	37.3	25.4	22.0	100.0
XXXX	5.9	7.8	21.6	29.4	35.3	100.0
VB 'sport'	4.3	21.3	19.1	31.9	23.4	100.0
VB 'kebab'	5.9	21.6	21.6	33.3	17.6	100.0
Carlton Draught 'removalist'	6.1	6.1	21.2	39.4	27.3	100.0
Carlton Draught 'funeral'	5.0	5.0	25.0	25.0	40.0	100.0
Tiger Beer	9.6	13.5	26.9	30.8	19.2	100.0
Tooheys New 'cane toads'	11.1	14.3	15.9	25.4	33.3	100.0
Galliano Sambucca	13.2	7.9	34.2	28.9	15.8	100.0

advertisement (41.9% 'very likely' or 'quite likely' to try the product), then Galliano Sambucca (28.0%), Victoria Bitter 'kebab' (27.5%), and 'sport' (25.6%), and Kahlua (25.6%); suggesting that this group are likely to try Victoria Bitter in particular (although it is unclear whether this is a result of seeing their advertisements). Those which the majority reported that they were 'not very' or 'not at all' likely to try the product were Carlton Midstrength 'removalist' and 'funeral', XXXX, and Tooheys New.

#### *Perceived messages*

As shown in Table V, for all but two of the advertisements over two-thirds of the participants believed that the advertisements suggested that consuming the product would make them more sociable and outgoing, with the exceptions being VB 'sport' and Carlton Midstrength 'funeral'.

Across all of the advertisements, over two-thirds of the participants perceived that the advertisements suggested that consuming the product would help them have a great time, with over 90% of participants agreeing for seven of the 12 advertisements and over 80% for an additional four, again confirming the association between alcohol consumption and having fun.

There was a dichotomy in relation to the advertisements perceived to be depicting that consumption of the product would help them succeed with the opposite sex. Over two-thirds of respondents replied in the affirmative for four of the advertisements (St Agnes Brandy, Kahlua, Frangelico 'suits me', and Tiger Beer). Conversely, there were six advertisements for which less than one-third believed this to be the case, with less than 10% in the affirmative for Tooheys New 'cane toads' and Carlton Midstrength 'removalist'. The dichotomy was also evident in responses to whether the advertisement suggested the product would help to make an individual feel more attractive, with the same groups of advertisements falling into the high agreement and low agreement categories.

There was a consistent perception across all but three of the advertisements that the advertisement suggested that consumption of the product would help them feel more confident, with the exceptions being VB 'sport', VB 'kebab', and Carlton Midstrength 'funeral'.

Table V. Social outcomes by advertisement

	Make me more sociable and outgoing (%)	Help me have a great time (%)	Help me succeed with the opposite sex (%)	Help me feel more confident (%)	Help me feel more attractive (%)	Help me feel less nervous (%)	Help me fit in (%)
Galliano Sambucca	81.4	97.7	39.5	72.1	53.5	65.1	79.1
Frangelico 'make it a habit'	90.7	90.7	32.6	67.4	55.8	48.8	69.8
Kahlua	83.7	95.3	90.7	65.1	65.1	58.1	65.1
St Agnes Brandy	84.7	86.4	96.6	91.5	81.5	76.3	57.6
XXXX	86.3	98.0	56.9	74.5	41.2	62.7	80.4
VB 'sport'	25.5	83.0	27.7	34.0	8.5	36.2	63.8
VB 'kebab'	72.5	92.2	19.6	49.0	17.6	56.9	78.4
Carlton Draught 'removalist'	75.8	87.9	3.0	57.6	0.0	42.4	63.6
Carlton Draught 'funeral'	50.0	87.5	12.5	40.0	15.0	60.0	70.0
Tiger Beer	88.5	96.2	76.9	69.2	63.5	61.5	78.8
Toothys New 'cane toads'	73.0	90.5	7.9	63.5	6.3	63.5	61.9
Frangelico 'suits me'	68.4	71.1	78.9	84.2	89.5	60.5	65.8

The perception that the advertisement conveyed the message that 'drinking this product helps me feel less nervous' was reported by over half of the respondents for all ads except for Frangelico 'make it a habit', Carlton Midstrength 'removalist', and VB 'sport'. Similarly, over 60% of respondents perceived that the advertisement conveyed the message that 'drinking this product helps me fit in' for all of the advertisements tested except St Agnes Brandy.

## Discussion

Given findings relating to alcohol consumption, our sample appears to be similar to the general Australian population in terms of their drinking patterns. For example, a 2005 national secondary school survey reported that 47% of 16–17-year-olds surveyed had consumed alcohol in the week prior to the survey (White & Hayman, 2006); the National University Drug & Alcohol Survey reported that 49.2% of students reported heavy episodic drinking in the two weeks previous to the survey (NSW Health, 2001); and the 2004 National Drug Strategy Household Survey that approximately 64.8% of males aged between 20 and 29 years consumed seven or more alcoholic beverages on at least one occasion in the 12 months prior to the survey (Australian Institute of Health and Welfare, 2005).

It was evident that respondents perceived messages in the advertisements regarding several social benefits of consuming alcohol. For example, more than half of respondents indicated that consuming the product would make them more sociable and outgoing for all, but two advertisements, both of which show the actors (all males) behaving in ways that may be perceived to be socially inappropriate. These results are particularly concerning, given that the Alcohol Beverages Advertising Code states that alcohol advertisements 'must not suggest that the consumption or presence of alcohol beverages may create or contribute to a significant change in mood or environment' (clause C), 'must not depict the consumption or presence of alcohol beverages as a cause of or contributing to the achievement of personal, business, social, sporting, sexual or other success' (clause Ci), and 'must not suggest that the consumption of alcohol beverages offers any therapeutic benefit or is a necessary aid to relaxation' (clause Ciii).

Those advertisements that used overt or implicit sexual appeals (St Agnes Brandy, Kahlua, Tiger Beer, and Frangelico 'suits me') were the most likely to be perceived by respondents to imply that consuming the product would help them feel more attractive and help them succeed with the opposite sex. Those that showed offensive or non-interactive behaviour received a very low level of affirmative responses on perceptions that the advertisement suggested they would help them feel more attractive and succeed with the opposite sex (Carlton Midstrength 'funeral', VB 'sports', Tooheys New 'cane toads', and Carlton Midstrength 'removalist').

However, we did not find a significant association between perceived social or psychological benefits of drinking the product and purchase intentions. A possible explanation for this is that most alcohol advertising, along with most other mass media messages about alcohol, conveys the message that alcohol consumption that leads to social benefits (such as success with the opposite sex, fitting in with crowds, having more confidence and so on), so these beliefs are not related to likelihood of trying a specific product. Rather, it seems likely that beliefs about such social benefits are related to consuming alcohol in general. For example, an individual may see a beer advertisement, but state that they are 'not at all likely' to try the product because they do not like the taste of beer – however, they may still

recognize (or perceive) the general message that drinking alcohol would lead to social benefits.

There was one exception to this, which was that the belief that the advertisement conveyed that the product makes you feel more attractive was related to likelihood of trying the specific product. This is consistent with previous research which has shown that some alcohol products are perceived to convey messages about attractiveness or social status, such as female-targeted ready-to-drink beverages (e.g. Jones & Rossiter, 2003).

It is clear from this study that young people find current alcohol advertisements to be interesting and amusing, and hold generally positive attitudes towards these advertisements. Respondents were consistently more likely to report being interested in and amused, and less likely to be bored by advertisements that used humour. Not surprisingly, given both the fact that the majority of the advertisements were for male-targeted products and the apparent sexist nature of the advertising, males were more likely to report being amused by the advertisement, feeling good about the product, and wanting to be like the people in the advertisement, while females were more likely to report being annoyed by the advertisement.

Five of the six advertisements that more than one-quarter of the respondents described as annoying used sexual or sexist appeals; and females were significantly more likely to state that they were annoyed with these advertisements than males, and significantly less likely to state that they feel good about the product advertised than males. Several of these have been the subject of complaints to the Advertising Standards Board, including the St Agnes Brandy magazine advertisement against which a complaint was upheld by the ABAC complaints panel.

Interestingly, and contrary to reported annoyance with the advertisement, the two advertisements which the highest proportion of respondents reported that they would 'like to be like that' were the two Frangelico ads (one which shows an attractive woman in a sexually suggestive pose, and one which shows two attractive women enjoying a social function). It is possible that this represents a conflict between young women's perceptions that such images are inappropriate and their social conditioning which makes them wish to be more like these 'role models'; consistent with the finding that females were more likely than males to report being annoyed with the advertisements, but equally likely to report that they wanted to be like the people in the advertisement. The advertisement receiving at the lowest response for this question, by a considerable margin, was the Carlton Midstrength 'funeral' advertisement (which shows a group of pallbearers running out of a church so they can go to the pub); we note that this advertisement received such a high volume of complaints from the general public that it was voluntarily withdrawn by the advertiser. A number of the other beer advertisements received fairly low agreement on this question, and it is possible that this is due to the fact that many of these advertisements show men behaving in ways that could be seen as socially undesirable or unacceptable (for example, being extremely sexist or unnecessarily violent); however, given the high proportion of females in our sample it is also possible that this is purely due to the fact that main actors in the beer advertisements were all male and in spirit and liqueur advertisements were all female, with one exception (St Agnes Brandy).

As suggested by previous research, we found a clear relationship between respondents' attitude towards an advertisement and their reported likelihood of trying the advertised product. Of particular concern in this study was the positive relationship between wanting to be 'like that' person (in the advertisement) and reported likelihood of trying the product.

### *Limitations*

The limitations of the study need to be acknowledged. First, the use of a convenience sample, and the fact that the study was conducted in an Australian capital city, means that the results may not be generalizable to people in different regions or countries; although collecting the data through a range of educational institutions and workplaces increases the likelihood that the sample was representative of young people in this region. Secondly, as more than two-thirds of the sample was female, the results may under-represent the views of males in this age group. However, analyses were conducted by gender and significant differences were reported where these were found. Also, as with any study relying on self-report data from volunteer participants there is the potential for bias due to respondent or demand characteristics; however, the consistency between the reported alcohol consumption rates of the respondents and those of the same-aged population suggests that the sample was acceptably representative of the target group. Thirdly, we used a sample of only 12 advertisements, and each participant viewed and commented only two advertisements, which means that for individual advertisements numbers are small, and also we cannot directly compare the effect of different advertisement types on a specific individual's purchase intentions or interpretations of the advertisement's message. Fourthly, as discussed in the method section, our ability to ensure that equal numbers of participants were exposed to each advertisement was limited by the nature of the participant recruitment and data collection process, resulting in different respondent numbers for individual advertisements. Finally, the advertisements were shown to participants in a somewhat artificial 'forced' exposure manner, possibly inflating the amount of reflection or impact of advertisements. In real-world exposure, the advertisements are typically embedded within TV programme or magazine editorial material, and often viewed within a distracting environment; future research could incorporate a more naturalistic context.

### **Conclusions**

The results of this study suggest the current self-regulatory codes are ineffective in protecting young people from messages that alcohol consumption leads to social and other success, increases confidence and attractiveness, and other messages that the self-regulatory code was designed to prevent. Furthermore, it demonstrates that decisions made by the ASB and ABAC are inconsistent with their own codes and adds support to previous findings that expert judges do not support the decisions made by the ASB and ABAC (Jones, Hall & Munro, 2008). A key contribution of the current study is that it addresses the industry argument that previous studies in which experts found that current alcohol advertisements were in breach of the self-regulatory codes suffered from an 'elitist' bias and did not accurately represent the way these messages are perceived by lay people. This study with young people – the target audience of many of these advertisements, and the demographic the codes are primarily designed to protect – demonstrates that this lay audience clearly perceives these inappropriate messages to be present in current Australian alcohol advertisements. Finally, it appears that the revisions to the ABAC code and associated processes have not reduced the problems associated with alcohol advertising in Australia.

The inverse relationship between respondent's age and reported likelihood of trying the product advertised suggests that young people may be more influenced by alcohol advertising messages than those of legal alcohol purchasing age and, while this effect was small, it warrants further investigation in future studies. This is consistent with previous studies



which have found that young people are particularly influenced by alcohol messages (e.g. Austin & Nach-Ferguson, 1995; Austin et al., 2006).

However, as this is a cross-sectional study, it cannot be stated conclusively that liking the advertisement predicts consumption intention, as it is possible that those who consume the product are pre-disposed to like its advertising. There is clearly a need for further research into the long-term effects of messages in alcohol advertising, which associate consumption of alcohol with positive emotional and social outcomes. This would require longitudinal research, ideally with a broader and nationally representative sample of young people.

### Acknowledgement

This research was funded by a grant from the Victorian Health Promotion Foundation (VicHealth).

### Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

### References

- Austin, E. W., Chen, M., & Grube, J. W. (2006). How does alcohol advertising influence underage drinking? The role of desirability, identification and skepticism. *Journal of Adolescent Health, 38*, 376–385.
- Austin, E. W., & Meili, H. K. (1994). Effects of interpretations of televised alcohol portrayals on children's alcohol beliefs. *Journal of Broadcasting and Electronic Media, 38*, 417–435.
- Austin, E. W., & Nach-Ferguson, B. (1995). Sources and influences of young school-age children's knowledge about alcohol. *Health Communication, 7*, 1–20.
- Casswell, S., & Zhang, J. F. (1998). Impact of liking for advertising and brand allegiance on drinking and alcohol-related aggression: A longitudinal study. *Addiction, 93*, 1209–1217.
- Ellickson, P. L., Collins, R. L., Hambarsoomians, K., & McCaffrey, D. F. (2005). Does alcohol advertising promote adolescent drinking? Results from a longitudinal assessment. *Addiction, 100*, 235–246.
- Garfield, C. F., Chung, P. J., & Rathouz, P. J. (2003). Alcohol advertising in magazines and adolescent readership. *Journal of the American Medical Association, 289*, 2424–2429.
- Grube, J. (1993). Alcohol portrayals and alcohol advertising on television: Content and effects on children and adolescents. *Alcohol Health and Research World, 17*, 61–66.
- Grube, J. (1995). Television alcohol portrayals, alcohol advertising, and alcohol expectancies among children and adolescents. In: Martin, S. E., Mail, P. (Eds), *Effects of the mass media on the use and abuse of alcohol*, NIAAA Research Monograph no 28. National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD, pp. 105–121.
- Grube, J. & Wallack, L. (1994). Television beer advertising and drinking knowledge, beliefs, and intentions among schoolchildren. *American Journal of Public Health, 84*, 254–260.
- International Centre for Alcohol Policies. (2001). *Self-regulation of beverage alcohol advertising*, ICAP Reports. ICAP, Washington, DC.
- Jernigan, D. H., Ostroff, J., & Ross, C. (2005). Alcohol advertising and youth: A measured approach. *Journal of Public Health Policy, 26*, 312–325.
- Jones, S., & Rossiter, J. (2003). Personality characteristics ascribed to young women who drink alcohol. *Drug and Alcohol Review, 22*, 117–123.
- Jones, S. C. & Donovan, R. J. (2001). Messages in alcohol advertising targeted to youth. *Australian & New Zealand Journal of Public Health, 25*, 126–131.
- Jones, S. C., & Donovan, R. J. (2002). Self-regulation of alcohol advertising: is it working for Australia? *Journal of Public Affairs, 2/3*, 153–165.
- Jones, S. C., Hall, D. V., & Munro, G. (2008). How effective is the revised regulatory code for alcohol advertising in Australia? *Drug and Alcohol Review, 27*, 29–38.

- Kelly, K. J., & Edwards, R. W. (1998). Image advertisements for alcohol products: Is their appeal associated with adolescents' intention to consume alcohol? *Adolescence*, 33, 47-59.
- King, E., Taylor, J., & Carroll, T. (2005). *Consumer perceptions of alcohol advertising and the revised Alcohol Beverages Advertising Code*. Department of Health and Ageing, Sydney.
- Lieberman, L. R., & Orlandi, M. A. (1987). Alcohol advertising and adolescent drinking. *Alcohol Health and Research World*, 12, 30-33.
- Ligerakis, M. (2003). Alcohol ads raise drug concerns. *B&T Weekly*, April 11, 6.
- Lipsitz, A., Brake, G., Vincent, E. J., & Winters, M. (1993). Another round for the brewers: Television ads and children's alcohol expectancies. *Journal of Applied Social Psychology*, 23, 439-450.
- Nelson, J. P. (2001). *Alcohol advertising and advertising bans: A survey of research methods, results, and policy implications*, Advances in Applied Microeconomics, 10: Advertising and Differentiated Products. JAI & Elsevier Science, Amsterdam.
- Nelson, J. P. (2005). Advertising, alcohol, and youth. *Regulation*, 28, 40-47.
- NSW Health, University Drug and Alcohol Survey 2001: Initial Report. 2001, NSW Health. Australian Institute of Health and Welfare 2005. 2004 National Drug Strategy Household Survey: State and territory supplement. AIHW cat. no. PHE 61. Canberra: AIHW.
- Ryan, R. (2003). Alcohol ad code stirs up heated industry debate. *B&T Weekly*, May 9, 3.
- Saffer, H. (1991). Alcohol advertising bans and alcohol abuse: An international perspective. *Journal of Health Economics*, 10, 65-79.
- Slater, M. D., Rouner, D., Beauvais, F., Murphy, K., Domenech-Rodríguez, M. M., & Van Leuven, J. (1996). Adolescent perceptions of underage drinkers in TV beer ads. *Journal of Alcohol and Drug Education*, 42, 43-56.
- Snyder, L. B., Milici, F. F., Slater, M., Sun, H., & Strizhakova, Y. (2006). Effects of alcohol advertising exposure on drinking among youth. *Archives of Pediatrics & Adolescent Medicine*, 160, 18-24.
- Stacy, A. W., Zogg, J. B., Unger J. B., & Dent, C. W. (2004). Exposure to televised alcohol ads and subsequent adolescent alcohol use. *American Journal of Health Behavior*, 28(6), 498-509.
- Waiters, E. D., Treno, A. J., & Grube, J. W. (2001). Alcohol advertising and youth: a focus group analysis of what young people find appealing in alcohol advertising. *Contemporary Drug Problems*, 28, 695-718.
- White, V., & Hayman, J. (2006). *Australian secondary school students' use of alcohol in 2005*. The Cancer Council Victoria, Melbourne, Australia.
- Wyllie, A., Zhang, J. F., & Casswell, S. (1998). Responses to televised alcohol advertisements associated with drinking behaviour of 10 to 17 year olds. *Addiction*, 93, 361-371.